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

ALPHA PHI ALPHA FRATERNITY, INC., a nonprofit organization on behalf of members residing in Georgia, et al.,

Plaintiffs,

CASE NO. 1:21-CV-05337-SCJ

vs.

BRAD RAFFENSPERGER, in his official capacity as Secretary of State of Georgia,

Defendant.

VIDEOTAPED DEPOSITION OF JOHN R. ALFORD, Ph.D.
APPEARING REMOTE FROM
ATLANTA, GEORGIA

FEBRUARY 27, 2023
10:01 A.M. EASTERN

Reported By:
Judith L. Leitz Moran
RPR, RSA, CCR-B-2312
APPEARING REMOTELY

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* CASEY SMITH
* MIKE BAKER, VIRTUAL VIDEO TECHNICIAN

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WITNESS APPEARED REMOTELY FROM ATLANTA, GEORGIA
FEBRUARY 27, 2023 - 10:01 A.M. EASTERN

VIDEO TECHNICIAN: We're on the record. The date, February the 27th, 2023. Time on the video monitor is 10:01 a.m.

Starts the beginning Video 1 of the deposition of John Alford, Ph.D., in the matter of Alpha Phi Alpha Fraternity, Incorporated, versus Brad Raffenspergers.

My name is Mike Brown representing Veritext Legal Solutions, I'm the videographer. Our court reporter is Judi Leitz.

Counsel, please state your name for the record and whom you represent.

MR. MILLER: I'm Alex Miller from WilmerHale I represent the Plaintiffs.

MR. JACOUTOT: And Bryan Jacoutot from Taylor English representing the Defendant and on behalf of the Deponent.

VIDEO TECHNICIAN: Will the court reporter please swear in the witness.

THE COURT REPORTER: Mr. -- or Dr. Alford, please raise your right hand.

Thank you.

JOHN R. ALFORD, Ph.D.,
being first duly sworn, was examined as follows:
DR. ALFORD: I do.
THE COURT REPORTER: Thank you.
EXAMINATION
BY MR. MILLER:
Q Okay. My name is Alex Miller, I'm an attorney with the law firm WilmerHale.
I represent the Plaintiffs in this matter, the Alpha Phi Alpha Fraternity, the Sixth District of the African Methodist Episcopal Church, Eric T. Woods, Katie Bailey Glenn, Phil Brown, and Janice Stewart.
Would you please state your full name for the record spelling your last name.
A It's John Alford, A-L-F-O-R-D.
Q And what's your current business address?
A I'm at Rice University, [redacted] Houston, Texas.
Q Okay. Dr. Alford, thank you very much for taking the time to be here today. I know there's been a number of depositions in the recent weeks.
And I -- I just want to go over a few ground rules briefly. You'll be very familiar with

all of these. I just want to make sure that we're on the same page.

So first, as you heard, your answers will be under oath. And that means that you're swearing to their truthfulness and their accuracy.

The oath you took today has the same effect as if you were testifying in court.

Do you understand that?

A Yes, I do.

Q Okay. And as you can see, this deposition is being transcribed by a court reporter.

It's important that you answer audibly because the court reporter will not be able to record your answers if you nod or shake your head.

And to make it easier for the court reporter I'll wait until you're finished with your answer until -- before I start speaking.

And if you can do the same, we can avoid speaking over each other which will be particularly important because we're on a video call where there can be some delay with the audio.

Does that work?

A Yes.

Q Okay. And I'm going to be asking

1 questions, you're going to be providing answers.
2 You must answer my questions unless your attorney
3 instructs you not to answer and you choose to
4 follow that instruction.
5 So do you understand that you have to
6 answer my questions unless your attorney instructs
7 you not to answer?
8 A Yes.
9 Q Okay. And it's important in this process
10 that you and I understand one another. If I ask
11 you a question, and you do not understand my
12 question, just tell me and I'll rephrase it.
13 Unless you tell me though that you do not
14 understand a question, I'll assume that you do.
15 Is that a fair way to proceed?
16 A Yes, it is.
17 Q Okay. And if you need to take a break at
18 any time just ask and we'll do so. The only thing
19 that I would ask is that we don't take a break
20 while a question is pending, if that's okay?
21 A That's fine.
22 Q Okay. And if you realize at any time
23 during the deposition that your answer to a
24 previous question was not accurate or complete,
25 just let me know and we can get it correct on the

1 record today.
2 Do you understand that?
3 A Yes.
4 Q Okay. Do you have any questions about
5 those instructions?
6 A No.
7 Q Is there any reason that you cannot
8 provide complete and accurate testimony here today?
9 A No.
10 Q Okay. And then just to go through a
11 couple of questions that we ask everybody.
12 Are you taking any medications or other
13 drugs that might impact your ability to give
14 complete and accurate testimony?
15 A No.
16 Q Have you ever been arrested before?
17 A And I don't think so. I was -- I was
18 picked up by the police when I was a teenager and
19 taken home, but I don't think that counts as
20 actually arrested.
21 So, no, I don't believe I've -- I don't
22 believe I've ever been officially arrested.
23 Q For our purposes we'll count that as not
24 having been -- not having been arrested.
25 Although, it sounds like it would have

been a great story.

Have you ever been convicted of a crime? I presume not, given that you haven't been arrested?

A No.

Q Okay. And have you ever been a plaintiff or a defendant in a lawsuit before?

A Yes.

Q Okay. When were you a plaintiff in a lawsuit?

A Both a plaintiff and a defendant in some legal actions about a 15-year dispute about my father's estate.

Q Okay. So nothing related to voting or redistricting or anything that would have anything to do with the subject of this case?

A Yes, nothing to do with this.

Q Okay. All right. So then I'm going to ask my colleague to pull up the first document in Exhibit Share which we'll mark as Exhibit 1 and publish for the witness.

(Deposition Exhibit 1 marked.)

MR. MILLER: And if the court reporter can just let me know when -- when that's gone through. I've actually not used Exhibit Share

before so I'm not sure when it pops up.
A I'm seeing it.
BY MR. MILLER:
Q Okay, great.
Have you seen document before? It's okay if you haven't, but...
MR. JACOUTOT: Alex, I'm sorry to interrupt. I just noticed that the -- the sticker's, it's possibly over some words. I don't know if you guys want to change that or something. It just kind of -- I don't know if it's obscuring anything on the document.
MR. MILLER: I see.
MR. JACOUTOT: Probably doesn't matter much for this one but, I guess, also for --
MR. MILLER: Yeah.
MR. JACOUTOT: -- some of the other ones.
MR. MILLER: Yeah. I mean, this is -- I'm not sure if the court reporter -- can we go off record for one second.
VIDEO TECHNICIAN: Off the record 10:07.
(Off the record.)
VIDEO TECHNICIAN: Back on the record.
BY MR. MILLER:
Q Okay. And so, Dr. Alford, have you seen

this document before?
A Yes, I have.
Q Okay. And this is the notice for today's deposition, correct?
A Correct.
Q Okay. And just for some housekeeping. You're aware that there are several cases pending that involve Georgia's most recent round of redistricting, right?
A Correct.
Q Okay. And you gave a deposition in two of those cases last week, right?
A Correct.
Q All right. And Dr. Palmer was the Plaintiff's racially polarized voting expert in the cases that you were deposed for last week, right?
A That is correct.
Q Okay. And then this case is brought by the Alpha Phi Alpha Fraternity, among others, and Dr. Lisa Handley is the Plaintiff's racially polarized voting expert, right?
A That's my understanding, yes.
Q Okay. And I'll do my best to be clear, but when I refer to this case, I'll generally be referring to the case brought by the Alpha Phi

1 Alpha Fraternity in which Dr. Handley submitted her
2 report, just to distinguish, if that works.
3 A That works. Thank you.
4 Q Okay. And how did you first hear about
5 this case, meaning, the case involving
6 Dr. Handley's report?
7 A I -- I don't know. I have worked for
8 State of Georgia previously the end of the last
9 decade, as well as for Gwinnett County.
10 And then at some point I was contacted
11 about -- about this set of cases, about
12 availability initially, and given some information
13 about the schedule.
14 But I don't know exactly -- I think that
15 would have been maybe toward the end of 2021 or
16 sometime -- somewhere maybe in the fall, but I'm
17 really not sure because it was a, basically,
18 ongoing contract with the state that was already
19 existing from the previous round.
20 But that's my recollection, it was maybe
21 sometime fall of 2021.
22 Q So you've been working for the State of
23 Georgia in advance of your engagement for this
24 matter?
25 A I worked in the previous -- there were

1 some cases toward the end of the last decade where
2 I worked for -- for the state and -- I believe for
3 the state as well as for Gwinnett County, although,
4 it may have just been for Gwinnett County. Cases
5 in Georgia where I was involved in working with
6 this same law firm.
7 Q Okay. And so, have you worked with
8 Taylor English then in a number of different
9 redistricting cases?
10 A Yes, a number of different cases. But
11 as -- but, you know, like three of them are right
12 here.
13 So, yeah, they were different cases,
14 different points, but I don't think I worked with
15 them on anything outside of the -- these Georgia
16 issues over the last, you know, four or five years.
17 Q Okay. Do you recall when you first began
18 to work with Taylor English on redistricting cases
19 in Georgia?
20 A Sometime toward the end of the last
21 decade maybe 2016, '17, '18, somewhere in there, I
22 just am not sure.
23 Q Okay. And during that time, have you
24 done any other work for groups or individuals in
25 the State of Georgia related to redistricting?

A I don't think so.
Q And then moving a little bit sort of nearer in time.
Do you recall when you learned that you were going to give a deposition today?
A I think we started talking about scheduling maybe three weeks ago or so. Somewhere in that range. A month or three weeks. Had a initial discussion about dates I might be available and then as those started to fill in, you know, the sort of the explicit schedule, you know, maybe two weeks ago, week and a half, something like that.
Q Okay. And then without going into the substance of any conversations with your attorneys here, who -- what did you do to prepare for your deposition today?
A I reread my reports in the case. And I reread the -- Dr. Handley's reports. I think that's it, just looking back over the reports.
Q Okay. And did you meet or speak with the lawyers for the Secretary of State?
A I did.
Q Okay. How many times did you meet with the lawyers for the Secretary of State to prepare for today's deposition?

A For today's deposition, we spoke this morning when I got here. I think that's -- there may have been some earlier. Obviously, the -- when we were working through scheduling, sort of the this will be, you know, which one goes on which date.

There may be some -- earlier on some general discussion about, you know, sort of what -- what the individual pieces were in terms of who was associated with what expert.

So maybe one brief earlier conversation and a brief conversation this morning.

Q Okay. And were there additional meetings associated with your depositions last week beyond those couple that we just talked about?

A No.

Q Okay. With your best guess, about how long in total would you say you spent meeting with the secretary's lawyers to prepare for the deposition today?

A Maybe spent an hour or less than an hour.

Q Okay. And beyond the reports that you referenced, did you review any other documents to prepare for today's deposition?

A No.

Q Okay. So you haven't reviewed the legal filings in this case other than the expert report from Dr. Handley, your expert report and presumably Dr. Palmer's reports as well?

A For this dep, yes. And there's another, you know, an additional report beyond Schneer (ph) that I've looked at that's obviously related to the same topic. But that's -- that's what I looked at for this deposition. I haven't looked at anything beyond the reports either mine or -- or the experts.

Q What was the other report that you're referring to?

A There's a third report, it came in later, I think it's Schneer. Dr. Schneer.

Q Okay. And are you -- do you know if that's in one of these cases or in another Georgia redistricting case?

A All I know is I have a deposition on Thursday related to that report and it's also concerned with Gingles 2 and 3.

Q Okay.

MR. MILLER: All right. So then I think we can pull up the Document 2 in Exhibit Share, Schuyler, which I'll ask to be marked as Exhibit 2,

I think in the upper right corner, and then we can publish that for Dr. Alford, if you don't mind.

(Deposition Exhibit 2 marked.)

BY MR. MILLER:

Q And Dr. Alford, just let me know when that's in front of you.

A Okay. It's popped up, I'm looking at it.

Q Okay. And you've seen this before, I presume?

A Yes, I have.

Q What is it?

A It is my rebuttal report in this matter.

Q And, you know, to your best, you know, your best estimate, how long did you spend writing this rebuttal report?

A I have no idea.

Q More than 10 hours?

A Yeah, I would think so.

Q Okay. You know, more than -- more than 40 hours? Just an estimate?

A I -- I'm sure it was more than -- it was more than 10 hours. I'm a slow typist, but -- and sometimes a slow thinker, but I -- beyond that I really have no idea.

Q Okay. Any estimate on how long you spent

working on this case in total given that there were a prior round up proceedings?

A I have no idea.

Q Okay.

A More than 10 hours again, I'm sure, but...

Q Sure, sure. And so, do you have an idea about your total billings in this matter so far?

A I think, I could be completely wrong because there -- I guess, I don't really -- I'm not certain. There are a lot of other cases going on as well.

And so, I haven't -- I could guess, but that -- I don't know for certain what the billing has been or, you know, I don't think I billed in the last couple of months so there's, obviously, some -- be some time pending.

I've been paid for some -- for work earlier in the year, but I think may have been something around the hundred hours, somewhere in that range.

But again, I could be mistaken about that, but that's -- that's -- my recollection is that that's associated with this case.

Q Okay. Yeah, no, totally understand the

number of -- number of moving parts in these litigations right now.

Did you work with anyone else on the rebuttal report that you submitted in this case?

A Yes.

MR. JACOUTOT: Object to the extent it calls for attorney/client privilege information.

A So, yes, I worked with a colleague of mine at the Rice University, Randy Stevenson. And we collaborate on the programming and execution of the -- of our code for the EI analysis.

BY MR. MILLER:

Q And could you just describe a little bit more the nature of that collaboration?

A We've been working together on EI estimation for Gingles 2 and 3 purposes for, I don't know, maybe 15 years or so. And so, we've developed a set of programs. He has substantial experience in this area including in our programming.

And so, we've developed an approach to the estimation and set of R programs that help some degree automate that process in the sense of being able to sort of point the program toward different datasets and produce the analysis that -- that I'm

1 looking for.
2 So those are -- that sort of programming
3 approach is something that was -- he developed at
4 my direction. And he actually executes the code
5 and then produces the estimates that are in the
6 report.
7 Q Okay. And did he write any portion of
8 the report?
9 A No, he does not write any portion of the
10 report.
11 Q Okay. Did anyone write any portion of
12 this report other than you?
13 A No.
14 Q And did you work with anyone other than
15 Dr. Stevenson on this report?
16 A Obviously, the -- you know, the
17 attorneys who I --
18 Q Yeah.
19 A -- sent the report to.
20 But, no, other than Dr. Stevenson, and
21 again, his role is just providing the -- at my
22 direction the information that goes into the table.
23 But nobody else is involved in the -- in
24 the writing or the preparation for the report.
25 Q Okay. And did you feel as though you had

enough time to complete any analysis that you believed was necessary to respond to Dr. Handley's opinions in this case?

A There's never -- there's never enough time, so. But -- there's never enough time to do everything that you would like to do. But I think there's -- there was enough time to -- to make an appropriate response.

I think the report and the response outlines what I think are the key -- the key factors. But if -- you know -- it is what it is. It's a time frame and everybody works within some sort of time frame.

Ideally, I would like to have four or five years but, you know, I think the main -- the main points are covered and the time is sufficient to focus on the things that I think are the -- are likely to be substantively important.

Q Did you ask for more time to work on this report?

A I don't believe so. Though I -- you know, sometimes with scheduling things, something that was going to be a Friday turns into a Monday or something, but I don't think that was the case on this report. If it was it was just a matter of

1 shifting something by a day or two.
2 Q Okay. So you don't recall having asked
3 for additional time to turn in the report beyond
4 those sorts of minor logistical questions?
5 A Correct.
6 Q Okay. And are there any things that
7 sitting here today you would have responded to that
8 you didn't have time to do?
9 A Not anything that I think is necessary in
10 terms of conclusions that I reached about
11 Dr. Handley's report.
12 Again, there -- you know, there are a lot
13 of other kinds of things you can look at, but I
14 think what I -- that what I was able to do is
15 sufficient to back up the conclusions I reached and
16 I'm comfortable with that.
17 Q All right. So there wasn't additional
18 analysis that you needed time to complete to
19 support the conclusions that you offered in this
20 report, right?
21 A Correct.
22 Q Okay. And you have confidence in the
23 conclusions in this report?
24 A I do.
25 Q All right. Anything that you'd like to

1 change in your report before we get started with
2 more specific questions?
3 A No.
4 Q All right. And this report includes all
5 of your opinions in this case, right?
6 A I don't think so.
7 Q Okay. This report includes all of the
8 opinions that you described as necessary to respond
9 to Dr. Handley's report, right?
10 A What I think this focuses on are what I
11 think are the key opinions but -- or my
12 conclusions, but there's a broad range of other --
13 I've been doing this for a long time, there are
14 lots of things that might be related to this.
15 I mean, you might ask me a question and
16 to respond to that I might -- I might be drawing on
17 something that's outside of this report.
18 I don't -- I just don't think any report
19 could contain all of my thoughts or conclusions in
20 this area given the sort of breadth of things that
21 are inside my head about this particular topic. I
22 mean, this can't be reduced to 10 pages, so.
23 I guess, my -- you know, there's nothing
24 that I want to add to the report, but if I was
25 asked a question by a judge or, you know, during

trial I might well, you know, about something that wasn't directly covered in the report, I'd probably have an opinion about it, so.

Q So if I can maybe separate that out.

So I understand that you have additional opinions about issues that are present in this case, but the opinions that you offered in this case are all contained within the report?

A Yes. And again, obviously, if I'm, you know, asked a question by you or by, you know, the -- any of the attorneys, you know, at trial or by a judge at trial, if it's on an area that goes beyond what's in the report I'll have an opinion about it or I won't have an opinion about it.

But I put in the report what I thought was necessary. I think the report is sufficient to express my opinions and conclusions about Dr. Handley's work.

Q Okay. And then when we were talking a moment ago, there weren't any -- there weren't any other opinions that sitting here today you thought -- let me rephrase that.

So there aren't any other opinions that you have identified that you wanted to offer in response to Dr. Handley's report that you have not

included in this report, right?
A Correct.
Q Okay. All right. So let's turn to your CV which I think is Appendix 1 of this. And let me know when you're there.
A I'm there.
Q Okay. Is this the most current version of your CV?
A It is.
Q And so, nothing to update since the version that was provided with your rebuttal report?
A Let me check real quickly.
I think this is -- in terms of what I -- where I've testified or filed a report I think this is up-to-date.
I've been just recently retained in a case involving Galveston County on behalf of the county, but there hasn't been a report or any testimony yet.
Q Okay. And is that a redistricting case?
A It is.
Q Okay. And you were retained by the defendants in that redistricting case?
A Yes.

Q Okay. Could you walk me through your educational background, please.

A I have a bachelor of science degree in political science.

At that time I think the first bachelor of science in political science from the University of Houston is usually a bachelor of arts.

I have a master's in public administration also from the University of Houston.

Then went to University of Iowa. And my master's and Ph.D. in political science are from the University of Iowa.

Q When you were obtaining your degrees, did you do course work in statistics?

A Yes.

Q What sort of --

A I'm sorry.

Q I'm sorry.

A One of -- so you're examined in three fields, at least when I was at Iowa, and one of the three fields that I was examined in for my Ph.D. was methods.

Q And did those methods include the statistical methods that you and Dr. Stevenson used to analyze voter behavior in this case?

A The King's EI didn't exist at that point, but certainly the -- its precursor, Goodman's regression was, let's say, the central focus of my methods training, so.

Q And at the time were you using that to evaluate voter behavior?

A Yes.

Q Were you using that to evaluate voter behavior by race?

A So in -- race in a kind of multiple regression equation, but not -- not as the primary purpose of the analysis.

So I was at that point not -- you know, not doing any consulting and not doing research specifically on the impact of race, say on voting behavior, but sort of any general equation that looks at American voting behavior would typically in the demographic variables would have things like age, gender, race, ethnicity.

Q So race wasn't the focus of that course work?

A Correct.

Q What was the focus of that course work?

A So we're talking about course work in graduate school?

Q Yes.
A Or -- yes. So it would have been general -- general voting behavior. Most of my focus at that time was on U.S. congressional elections.
Additional work on sort of general voting behavior both in the U.S. and elsewhere. Work on political parties and political party identification and its influence on voting behavior.
Variety of other things related to voting behavior in congressional elections, party -- which was the focus of my dissertation -- but also incumbency, economic conditions of their effect on congressional elections.
Q Okay. And did your academic training include training in programming languages like R that is used to conduct statistical analysis?
A R did not exist at that time. So like EI, R was not -- it was not even in someone's imagination yet.
So my -- my programming at that time was in a statistical package called SAS or S-A-S out of North Carolina.
So it has a fairly extensive -- in addition to being a statistical package -- it also

has a fairly extensive data programming language, unlike SPSS, which was the other big statistical package at that time.

So both my training and my -- most of my early work was in some combination of SPSS and data programming SAS.

Q Okay. And then after you obtained your Ph.D., can you walk me through your -- your employment history at a high level?

A My first job was a tenure track position at Oakland University in Rochester, Michigan. I was there for a year and was stolen away by the University of Georgia.

So I came down to University of Georgia as an assistant professor. And taught there and ran the social science data lab, political science data lab at Georgia.

And then was lured away to Rice University as an associate professor and I've been at Rice ever since.

Q Okay. Are there any jobs that you've held after you obtained your graduate degree that are not listed on your CV?

A I don't think so.

Q And have you done any non-academic work

1 since receiving your graduate degree other than
2 serving as an expert witness?
3 A I've been involved in some -- you know, I
4 serve on a board of -- an institute that's directed
5 towards civility and politics and government. It's
6 not a paid position.
7 I don't think I've -- other than, you
8 know, sort of volunteer kinds of work I don't think
9 anything that -- any kind of paid employment, I
10 don't believe, other than things related to the --
11 you know, beyond redistricting I've done other
12 kinds of consulting work related to surveys, survey
13 samplings, just general statistical -- statistical
14 issues.
15 So early on a kind of mix of different
16 things related to statistical work. And then later
17 things more directly involved either in drawing
18 districts or in lawsuits around districts.
19 Q Okay. And then since you started working
20 as an expert witness in redistricting cases, has
21 most of that work been for defendants?
22 A Yes, I'd say the bulk of the work has
23 been for -- for government entities as defendants.
24 I've also -- you know, I also draw
25 districts for government entities. So I draw

1 districts for school districts or cities in which
2 case they're not a defendant, they're -- they're
3 just a district that wants somebody to come in and
4 help draw districts.
5 But in terms of legal lawsuit work it's
6 primarily for, you know, government entity
7 defendants.
8 Q And when you say primarily, do you have
9 an estimate of the share, I mean, you know,
10 90 percent, 95 percent for defendants, something
11 like that?
12 A I'd say at least 90 percent. That's -- I
13 mean, I don't go out -- I've never actually sought
14 a job related to consulting at any point in my
15 career.
16 So it's sort of who comes -- who comes to
17 you and that tends to sort itself fairly quickly
18 apparently. I -- you know, my friends who
19 primarily or exclusively work for plaintiffs and --
20 and counsel similarly.
21 But, you know, this is the -- like I have
22 -- I do occasionally and a couple times more
23 recently been asked to do work for the -- it's not
24 for the entity itself, but it's for either a
25 plaintiff or some kind of intervenor.

But by and large I'm hired by government entities to -- either to draw their districts or to defend them.

Q And -- and you mentioned that those government entities who are defendants in redistricting cases have actually sought you out to do expert work for them in redistricting cases, right?

A Yeah, either the -- either the -- either itself through the, you know, attorney general or private attorneys working for those government entities.

So, yes, I don't -- I've never contacted anybody and said, you know, this looks interesting I'd like to work for you.

So I just -- people contact me. If I've got time I take a look at it, think about it, whatever, so it's very much driven by outside demand.

Q Okay. And that's -- that's outside demand by defendants in redistricting cases?

A And occasionally plaintiffs and, you know, which I'd be perfectly happy to do, you know.

I'm agnostic about this. I like working. In terms of drawing districts, obviously, that's

1 primarily an activity of government entities.
2 And with both being a political science,
3 but more particularly having gotten a degree in
4 public administration, I care a lot about sort of
5 the quality of government entities. I think it's a
6 crucial part of our system.
7 And so, I am always happy to -- to, you
8 know, to work for government entities, but I'd also
9 -- I'm also would be perfectly fine working for
10 plaintiffs.
11 It doesn't -- I mean, this is just
12 empirical analysis that doesn't -- doesn't really
13 change, it is what it is.
14 I'd -- I mean, I'd be perfectly happy if
15 they'd do away with all of this and just have a --
16 some sort of special master service somewhere that
17 just provides everybody with just a stock table
18 because that's pretty much what we come down to and
19 then -- and then they'll let everybody cut it up
20 any way they want, so.
21 I'm not a -- I'm not an advocate of any
22 particular position. I'm -- I see -- well, I
23 guess, I'm an advocate of -- of taking the
24 empirical side of this seriously and being clear
25 about what the empirical facts are and how they're

arrived at.

But beyond that I'm not a -- I don't see my role as being a -- an advocate one way or another in this process.

Q So I understand that that's how you see your role. But earlier you just said that, you know, upwards of 90 percent of your engagements are by defendants.

And so, just speaking as a factual matter, when people are coming to you to engage your expert services in redistricting cases it's almost always defendants, right?

A Yes, so it's -- the -- the first case I was involved in was a case in Alabama working for a defendant. And that was a colleague of mine at the University of Georgia, Professor Chuck Bullock, had recommended me for that.

I think they contacted him, he recommended me, and that was the -- my first time as a testifying expert on -- related to anything.

And that then -- I think what follows from that is very much a path dependent process.

If that -- if that by chance that first job had been for plaintiffs my guess is 95 percent of my work today would be for plaintiffs.

But as it happened that happened to be working for a defendant and then that, again, is path dependent here, you're more likely then to be contacted by another defendant and then over time that's -- that's the -- how that -- how that tends to work.

So in my experience, you know, the experts that I'm familiar with and the discipline by and large are plaintiffs experts and in -- so that I assume -- I assume again that -- well, with a few exceptions, I think, they don't -- they're not the ones who are kind of generating the cases, they're just the ones who are being hired to work the cases.

And they get hired -- you know, they get hired to work for who they get hired to work for and I get hired to work for who I get hired to work for, so.

Q Okay. Are you generally aware of the party affiliation of the persons engaging your expert services?

MR. JACOUTOT: Object to form.

A Certainly -- let me -- so, you know, when I started working for Texas I was -- when I was hired to work for Texas I was hired to work for --

by a law firm that was a prominent Democratic leading law firm.

The lawyer I was working with was the lawyer, for example, for the Obama campaign in Texas. And -- but they also did a lot of work for the state.

So I think in the end I was working for John Cornyn, who was the attorney general at the time, and I was certainly aware that John Cornyn was a Republican.

So yeah, I mean, I'm aware that the state government in Texas has switched from being dominated by Democrats to dominated by -- dominated by Republicans.

As far as the lawyers I typically -- sometimes in the context of the, you know, conversations you become aware of a party leading a particular attorney, but that's not -- typically not something that's going -- that are discussed or I think -- I usually try to make an attempt to let the people I work for understand what my party affiliation is so that there's not any sort of surprise about, you know, where -- where I fall in that.

So, and that was my first conversation

with John Cornyn, was explaining that, you know, that I was not a Republican, so.

Again, this is not -- you know, I'm not an advocate in this area, I'm just an analyst, so.

BY MR. MILLER:

Q So in -- setting aside the party affiliation with the lawyers who worked on cases with you, would you say that in recent years the defendants who have engaged your services have generally been affiliated with the Republican party?

A I'd say yes.

Q Okay.

A I think that's -- yes, so there -- so, obviously, early on, you know, before I got involved in this, I'd say the majority of defendants would have been associated with the Democratic parties or that was true in Texas, but I think currently -- yeah, currently, I'd say probably it's mostly Republican.

Q Okay. And what kind of analysis -- moving on to some more sort of substantive topics.

What kind of analysis are you typically asked to provide in redistricting cases?

MR. JACOUTOT: Object to form.

A Let's -- I'd say a variety -- more of a variety in previous decades. So I -- as I said, I draw districts as well as defend districts.

So earlier on I might have been involved -- more likely to be involved in things related just broadly to the process to -- to the Gingles factors, totality of circumstances, pretty much everything.

And then over time as things have gotten busier I started turning down any work related to -- for the most part related to Gingles 1 or 2 totality beyond polarization.

And so this round, the last four or five years, I'd say it's almost exclusively work related to Gingles 2 and 3 and racial polarization in voting.

BY MR. MILLER:

Q Okay. So you're typically asked to do an analysis of racial polarization in voting; is that fair to -- to say?

A That's -- yeah, in terms of what sort of analytic content that's where it's most likely to -- to focus on.

Typically, I'd be approached by, you know, by lawyers either working for the government

1 entity directly or contracted to them about some
2 case that has been filed.
3 And they would say this is what the case
4 is, you know, we'd like -- you know, what can you
5 -- what could you do analysis on.
6 And I usually indicate that I can do
7 analysis related to, you know, to voter
8 polarization and kind of acquaint them with what
9 that looks like. And they either engage me to do
10 it or they don't.
11 It's -- but it's -- typically -- analysis
12 is also typically responsive in the sense that
13 there -- there's, you know, sort of some obvious
14 parameters that that's going to follow, but it's
15 very much, like I said, within that area of --
16 somewhere in that substantive area I'm hired
17 specifically to be responsive to that -- to the
18 plaintiff's experts' reports in that area of
19 Gingles 2 -- 2 and 3 and racially polarized voting.
20 Q Okay. And is that what you were engaged
21 to do in this case?
22 A Yes.
23 Q Were you asked to reach any particular
24 conclusions in this case?
25 A No.

Q All right. Have you ever written an expert report that concluded that racially polarized voting existed in an area you were analyzing?

A I -- I mean, I don't recall. Obviously, going back in time there may have been something like that, but I would say I don't believe so, not -- certainly not any time recently.

Q All right. And then sort of pre-report, have you ever analyzed an election contest or election contest in a given jurisdiction and concluded that there was racially polarized voting?

A I've certainly done that analysis and concluded that there was, you know, preliminary analysis that there -- that that -- that the pattern was -- I guess, the voting patterns were compatible with that conclusion or it didn't contradict that conclusion.

So, I mean, it's typically not a complete analysis. It's a -- you know, a preliminary analysis and report. Would report back and say could I take another look.

And this is often -- I'm often initially hired as a consulting expert. And so, I agree I'll take a look at things and let them know what I'm

seeing and then they can decide if it's -- if I'm of use to them or not.

So -- so I have in cases looked at that and said, you know, what I'm seeing here looks like, you know, this is not -- you know, I don't know if you're going to win the case or not, but -- but I'm not going to be helpful to you if what you're trying to say is -- or what you're trying to argue against is the notion that voting is racially polarized. And that's usually where, I guess for obvious reasons, that's where that ends.

So I'm -- I've never been asked under that circumstance to then reduce that to writing and provide an expert report or testify, which I think it's probably sensible since I'm basically letting them know that, you know, all I can do is testify to the facts as they come up from the analysis and if that's not helpful I think wisely the defendants don't ask me to testify or to write a report if the -- if the empirical analysis is unhelpful to them.

Q And so, what are you seeing when you conclude that there is racially polarized voting in that preliminary analysis?

I can rephrase that maybe a little bit

more clearly.

What would you need to see in the data to conclude that there is racially polarized voting?

A So I would be looking for evidence that minority voters are voting cohesively. That they're typically voting cohesively, when the contest is racially contested, they're typically voting for -- cohesively for minority candidates.

And that when that occurs, when minorities are voting cohesively for minority candidates, the white voters, nonminority voters, Anglo voters, are typically voting cohesively to defeat those candidates.

Q And so, breaking down the second step of that definition. For there to be racially polarized voting, does a minority group need to cohesively vote for a candidate that is the same race as that minority group?

A Minority voters can be cohesive without voting for a candidate of that minority group even in racially contested elections.

But if the -- and I know there's dispute about sort of where this enters into things, but at this initial stage I'd be providing, you know, just something fairly holistic.

And I think if -- if minority voters are voting cohesively but -- but not necessarily for minority candidates in contested elections then I would -- in my view that's not racially polarized voting.

And so, I would say that's not a fact pattern that's particularly supportive of the notion that the elections are racially polarized.

Q So if minority voters are cohesively supporting a nonminority candidate it would preclude the existence of racially polarized voting in your opinion?

A No.

Q When would you conclude that there is racially polarized voting despite a minority group cohesively voting for a nonminority candidate?

A So again, if you're talking about -- obviously, we're talking about multiple elections, but if we're looking at a single election, in the single election we were looking at, it's a racially contested election and minority voters prefer the nonminority candidate, then what I would say about that election is that that election does not provide evidence of racially polarized voting.

I wouldn't say that it provides evidence

that there isn't racially polarized voting. Just in and of itself it's insufficient as a single election to be supportive of the notion that the voting is racially polarized.

Q So a minority group cohesively supporting a nonminority candidate would not, in your opinion, provide evidence that there is not racially polarized voting?

MR. JACOUTOT: Object to form.

BY MR. MILLER:

Q I can re- -- I'm trying to capture the "nots" in what you just described.

So is --

MR. MILLER: I'll rephrase that, though. Thanks, Bryan.

BY MR. MILLER:

Q A minority group cohesively supporting a nonminority candidate would not, in your opinion, provide evidence of racial polarization, right?

A I think I agree. I guess -- I mean, the way I think of it is, if we take a particular election we can think about what does that election provide us with evidence of or not evidence of.

So an election which minority voters cohesively support the minority candidate in a

1 racially contested election belongs in the column
2 of check mark over here for -- that that election
3 supports racially polarized voting.
4 If minorities are not voting cohesively
5 then it's not supportive of racially polarized
6 voting. It may in fact be evidence against
7 racially polarized voting.
8 Where in the single election where
9 minorities are voting cohesively for a nonminority
10 candidate in a racially contested election, then, I
11 think it clearly doesn't below in the category of
12 provides -- clearly provides support for racially
13 polarized voting.
14 At the same time it doesn't disprove
15 racially polarized voting. It just simply doesn't
16 belong in that column of elections that demonstrate
17 the -- sort of the entire fact pattern of what we
18 would like to see broadly across the series of
19 elections to conclude that the voting is racially
20 polarized.
21 Q Okay. So in minority groups cohesive
22 support for a nonminority candidate doesn't
23 disprove the existence of racially polarized
24 voting, right?
25 A Correct.

Q All right. In order to conclude that racially polarized voting exists, do you need to draw a conclusion as to the cause of the cohesive voting by a racial group?

A I assume -- well, I think we need to be careful here at the outset.

So causality is a -- is a scientific concept, is a complex one, and demonstrating causality in nonexperimental settings is either difficult or impossible.

So in a -- in a science sense we certainly don't need to -- we don't need to and don't inquire into causality.

But there are -- there are fact patterns that are compatible with what you might broadly call racially or I would broadly call racially polarized voting.

And there are fact patterns that are -- that do not provide support. And I don't see -- I don't -- my job -- I don't attempt to disprove whether there's racially polarized voting -- voting or not. I don't see that as my -- my role.

I see my role as simply asking whether the evidence that's been provided supports the notion that there might be racially polarized

voting.

This evidence is not going to establish causation. It's either going to be compatible or noncompatible with, you know, with a notion about -- a developed kind of notion about racially polarized voting.

So that may be -- that may have also kind of loose notions about things that might be considered causation, but it doesn't involve any analysis of causation in a scientific sense.

Q Okay. So proving racially polarized voting does not require proof of the cause of voter behavior, right?

A Correct.

Q All right. And just to sort of wrap up some of these high level questions.

Have you addressed in your report the opinions of experts other than Dr. Handley and Dr. Palmer?

A Just if I could go back to the -- just to the previous question just quickly.

I just want to make clear because we talked about -- or I talked about the fact that there's causation in the scientific sense and then there's causation in the more -- sort of in -- in

common speech.

And I just want to make clear that when I said you don't need to demonstrate -- you don't need to prove that this is caused by race, I mean, I think you do need to demonstrate -- my view of the amount of votes I require is that there be some demonstration that these voting patterns are on account of race.

And again, on account of race is not a -- it's not a scientific statement about causality. It's a common parlance.

But, so in a legal sense you could say something -- we established something occurs on account of race without in a scientific sense having come anywhere near touching the issue of causality.

So I just want to be clear that I -- you know, I'm not setting aside the notion that there needs to be a demonstration that there's polarization in voting on account of race, but -- but at the same time that doesn't mean that anybody is establishing causation in a --

Q Can you --

A -- scientific sense as opposed -- I don't know what -- I don't have no idea what the legal

sense of causation is, it's not my area.

But as -- but as an empirical matter, you know, these are correlational studies, no where close to being -- to being actual studies of causation. There's no experimental design, there's no control, there's no manipulation of independent variables.

So we're not going to establish causation here ever.

Q So I just want to make sure I understand this.

So when evaluating voter behavior it's not possible to establish the cause of that voter behavior in your opinion?

MR. JACOUTOT: Object to form.

A It is possible. It's just not possible with the -- with the data and methods that we -- that we have at hand.

So we're dealing with -- not just with correlational analysis, but with correlational analysis at an aggregate level.

So at a minimum we need to be at the individual level, which we're not; and then at the individual level we would have to be able to exercise -- we certainly could do better with maybe

1 some form of quasi experimental design, which is
2 not what we have here or ideally with an
3 experimental design.
4 And those things are tip -- are often not
5 available in working with humans for -- because of
6 our -- the ethical concerns with doing research on
7 humans.
8 And they're certainly both ethically and
9 legally not available for working with votes cast
10 by individuals.
11 So we don't have the ability to expose
12 the -- at the voter level what their actual ballot
13 choice was, we can't open those records for
14 scientific purposes.
15 So we just don't -- I don't think we have
16 the capability to do that kind of work on this kind
17 of issue.
18 And so, they probably, correctly so, and
19 so the work that's done for the courts is done at a
20 level of not just correlation but of ecological --
21 ecological inference question.
22 And so, it's very indirect, but I think
23 -- I think the proper way to think about it is
24 whether the evidence is -- is compatible with
25 voting that's polarized on account of race or

1 whether it simply doesn't, you know, doesn't
2 demonstrate a pattern that's compatible with that.
3 And I think that's what I think is at
4 issue. I see the role here is to look into, to the
5 extent we can, at this correlation level to -- to
6 look at the evidence we have and ask whether in
7 bulk that evidence is -- is sufficiently compatible
8 or incompatible with the argument that voting is
9 polarized on account of race.
10 BY MR. MILLER:
11 Q With the statistical methods and data
12 that is available for evaluating voter behavior in
13 Georgia, is it possible to prove the cause of a
14 racial group's estimated vote?
15 A It is --
16 MR. JACOUTOT: Object to form.
17 A I mean, it certainly is in a legal sense
18 because courts reach these conclusions everyday.
19 In a scientific or empirical sense I
20 don't -- I don't -- I've never seen any study that
21 attempted to do that and I don't think it's likely
22 that -- that that's within the ambit of what would
23 be an ethically acceptable research agenda for a
24 true causal -- a true causal demonstration.
25 BY MR. MILLER:

Q Okay. And you referred to scientific causation and voting being on account of race.

Can you help me understand what you perceive to be the difference between the causal inquiry that on account of race requires and a scientific causation inquiry?

A So that if you -- again, this is -- well, I think the legal -- the clarity of legal standards in this area, I think are not ideal.

So there's nothing like the -- if you look at the clarity around Gingles 1, for example, there's -- you know, there's quite a bit of clarity about what's to be measured, how is it to be measured and what the standard is for whether you met that or not.

There's nothing like that clarity for Gingles 2 and 3, although, I think maybe in this decade we'll get some clarity.

But within that sort of set of -- within that legal inquiry, there are judges drawing conclusions saying as part of their findings that, you know, voting is racially polarized in the State of Georgia or voting is racially polarized in the State of Texas or whatever the jurisdiction is.

So they're reaching -- judges are

reaching a legal conclusion based on whatever they're basing it on.

But certainly -- and again, the input -- the empirical input into that is pretty standardized as you can see throughout this.

But the -- the basic use of an EI approach, the use of information from actual elections, and then arraying that information in terms of estimations of how, in this case, how Black voters vote, how white voters vote, there's not a lot of dispute about what that -- what the methodology is.

But -- and that methodology produces results that judges are comfortable one way or another making a decision about whether they -- what they see there meets the -- their idea of the legal definition of racially polarized voting.

But that's really independent of the question about, in the scientific sense about whether we're demonstrating causation.

Nobody's trying to -- to probe that in terms of the facts being presented by experts in these cases. Nobody's trying to probe at that level.

And I think that's probably correct

because if there was a legal standard that required that there be causation in the scientific sense then there would be -- there would be very little that could be done in any of these -- any of these cases.

Because it's just simply beyond -- beyond the capabilities, practical or ethical capabilities of social science.

So I don't think -- I don't believe judges are looking for -- they may be thinking of it causally in terms of reasoning in the loose sense or in the legal sense, but they're not expecting or thinking of causation in the scientific sense and I think that's appropriate.

Q So when you offer an opinion about whether voting is on account of race, is that a legal opinion?

A I don't think it's a legal opinion, no. It's a -- it's an opinion within -- within a context of a -- of an area in which expertise is utilized in making legal decisions.

And -- and I'm not -- I think what I see is my job is to -- is to analyze the degree to which the -- the empirical information in front of the court either is supportive of -- is compatible

with or supportive of a notion that voting is racially polarized or -- or whether it's simply insufficient to answer that question.

Again, I don't see my role in any way of proving the negative, proving that there is not racially polarized voting.

It's just assessing the degree to which the empirical evidence is accurate and that it supports -- is supportive of a pattern that would suggest that there may in fact be racially polarized voting. That is voting that's polarized on account of race.

Q And I'm just trying to understand when you say polarized on account of race. That on account of is a legal rather than a scientific determination?

A It's -- I mean, it certainly could be a scientific determination, but that's not the -- we're not presenting evidence that could answer that as a scientific or causal question.

We're representing evidence that I think is intended to and is helpful in answering that, you know, from a political or a legal perspective.

Q Okay.

MR. MILLER: Let's maybe take 10, if that

makes sense, is a good stopping point for -- for everybody.

VIDEO TECHNICIAN: Off the record --

MR. JACOUTOT: Sound goods.

VIDEO TECHNICIAN: Off the record 11:11.

(Recess taken.)

VIDEO TECHNICIAN: Back on the record. The time 11:23.

BY MR. MILLER:

Q Okay. So before we took a break, we had started to talk about some of the materials that you reviewed in this case and I just wanted to confirm.

Did you review any of the expert reports in this case other than the expert report that was filed by Dr. Lisa Handley?

A I guess if -- when I -- I don't know exactly how precisely in this case. So if we're talking about narrowly in this case as opposed to in this broader matter.

I think the only report that I looked at -- I think I was sent a whole packet of things so there was other reports in there and I may have glanced through some of the reports just to see if anyone else was offering, you know, anything in the

1 area of Gingles 2 and 3 or polarization, but not
2 in -- not in any detail.
3 Q Okay. And when you talk about other
4 reports. Do you mean like the report filed by
5 Dr. Palmer on racially polarized voting in the
6 Pendergrass and Grant cases?
7 A No. So, if -- so, yes, I looked -- I
8 looked extensively at the -- Dr. Palmer's report
9 and I mentioned Dr. Schneer's report.
10 So the reports related in -- across these
11 cases -- related to polarized voting, I've looked
12 at obviously and responded to.
13 I thought you were referring to other
14 experts as in things related to Gingles 1 or
15 totality of the circumstances beyond polarization.
16 The sort of, you know, voter turnout, things like
17 that.
18 So I haven't looked at the -- other than
19 just maybe a read through at expert's that are not
20 -- so in this -- what I would call this case --
21 Q Yes.
22 A -- you said Handley is the expert and
23 I've obviously looked and responded to her report,
24 but I assume there's a tomographer's report or
25 some -- maybe other associated things.

And so I would have -- I think I was provided some of that I may have looked at to see if it did in fact cross over into -- into this issue of Gingles 2 and 3 and polarization.

But I didn't -- although, I don't recall that specifically, if I found something that I thought was important I would have responded to it in this report. And I'm not responding to anything except Lisa Handley, so.

Q Okay. Thank you.

And thank you for -- for helping me be clear about which case is which case given how many there are.

So just another brief -- brief background question.

Am I correct that you've written about the connection, if any, between genetics and political beliefs before?

A That's correct.

Q Okay. And at a general level what has your research into genetics and political beliefs shown about the heritability of political beliefs?

A It -- it shows that in the current population the cases that work -- that I've been directly involved in in the U.S. or in Australia,

that in the current population a non-zero proportion of variation in -- in terms of most of what I've worked on in -- in political ideology is heritable.

And the typical estimates are that something around half of the variation, population variation in ideology can be accounted for by additive genetic inheritance.

Q Okay. And in addition to the heritability of political beliefs, are political beliefs in your research influenced by a voter's parents' political beliefs?

A So they are, but in -- in two senses.

And so, we think about the parental effect. Parents are obviously involved in early childhood socialization, as well as in adult socialization. So they provide part of the shared -- in what's called the shared environment that would be shared, for example, by twins.

And they provide, if they're the biological parents, they also provide genetic inheritance as well.

And the -- while traditionally I think the view has been that -- that shared parental environment or parental socialization's

1 particularly important in explaining political
2 beliefs. It turns out that while it's pretty
3 important in explaining party identification, it's
4 not as important to explaining general ideological
5 orientation.
6 So the -- again, something around half of
7 that variation in adults is explained by additive
8 genetic inheritance from their biological parents.
9 And another -- the next large category is
10 what's called unshared environment. So adult
11 experiences, free-will, however you want to think
12 of that.
13 But of the three, the role of parents
14 directly influencing your ideological beliefs is
15 the weakest. It's weaker than -- it's quite
16 powerful for, you know, for adolescents, it's
17 powerful at age 18, for example.
18 But in the adult population, the
19 population over age 25, the remaining effect of
20 direct parental socialization on ideology is quite
21 small. The effect of unshared environment, adult
22 experience, free-will, is substantial. And then
23 slightly larger than that is the effect of additive
24 genetic inheritance.
25 Q So --

A For example, for ideology but not for party. There's -- the role of genetics for party identification is very week, it's by far the weakest. And parental and adult socialization are -- are both quite powerful.

Q So a parent's partisan affiliation is a powerful predicter of a child's partisan affiliation in your research experience?

A That's correct, both in -- in our research and just more generally in looking at kind of what you broadly might call family tree kind of research.

There that parental influence is -- is the -- is a socialization influence. So this would be true for biological children, for adoptive children.

This is a -- that socialization influence, I'd like to think of party identification as similar to religious affiliation.

So that if your parents are Catholics you're more likely to be a Catholic. If your parents are Democrats you're more likely to be a Democrat. It's not because there's a gene for being Catholic or a gene for being Democrat. It's a socialization effect.

Q And do the socialization effects that influence party identification include the culture that a voter is raised in?

A That would be within -- within shared environment would be -- that would include culture, political events of the day, all sorts of things like that. So the entire shared environment.

Q And socioeconomics circumstances would be within that shared environment that would influence political affiliation as well?

A Could be, yes.

Q Okay. And would race be among those factors influencing political affiliation?

A Could be, yes.

Q Okay. And so, so it's fair to say that -- that a voter's partisan identification might be motivated by their race?

MR. JACOUTOT: Object to form.

A Yeah, that's possible.

BY MR. MILLER:

Q All right. And in -- in addressing -- in offering your opinions in this case on racially polarized voting, have you considered any nonempirical evidence?

A In terms of the -- what I'm -- in this --

so in terms of my thinking or are we talking about in terms of my report in this case.

Q In terms of your report in this case. Is your report in this case based on statistical analysis or is it -- let me step back and separate out the questions.

So is your report in this case based on statistical analysis of voter behavior?

A Yes.

Q Okay. And in offering your opinions in this case in your report, did you rely on nonempirical evidence?

A No.

Q Okay. So I want to turn then to the report and some of the sort of foundations for it.

So did the Secretary's attorneys provide you with any facts or data in this case?

A I don't think so. I -- my recollection is that the -- that the -- I mean, they certainly didn't tell me anything, they didn't provide me any facts to assume.

And I believe the data came either from information disclosed by Plaintiff's experts or from the Secretary of State's office.

They may have -- there may have been a

file from the Secretary of State's office that was passed on through the attorneys, but other than that, no.

Q Okay. So the data that you used to produce your report came from the Plaintiffs' experts, Dr. Handley and Dr. Palmer, or publicly available sources from Secretary of State's office?

A That's my recollection, yes.

Q Okay. So in your report which we marked as Exhibit 2, I want to turn to Page 9.

And let me know when you're on Page 9.

A I'm on Page 9.

Q Okay. So there's a table here that is titled Ecological Estimates of Voting Patterns by Race in the 2022 Republican U.S. Senate Primary for Dr. Handley's Eastern Atlanta Metro Region.

When you write ecological estimates, what modus of statistical analysis are you referring to?

A This is, again, King's EI RxC using the -- the MD.bayes call 2 RxC EI analysis.

Q Okay. And did you provide the form of ecological inference used in your report in the report itself?

A I -- I don't know if it's mentioned in the report. It's -- the script that produces it

was disclosed along with the report.

Q Okay. And then, at the top of Page 9 there's a reference, this is the first full sentence: "This can be seen as well in an initial look at EI estimates."

What do you mean by initial look?

A So there -- this is not a -- I just -- so Dr. Handley does analysis of different -- different regions and different groupings within the regions, such as mapping areas within regions. And there are multiple, I think, it's like, if I remember, 6 or 7 of those.

And so this is, just looking at that, pulling that one particular kind of map area or region out to assess this.

I think it's, for a variety of reasons, it's -- there's really not much reason to go beyond that. There's no reason to believe it would be any different anywhere else.

Certainly you can see that in the state-wide pattern.

But again, it's -- it's sort of a -- you might think of a set of tables like this that could be paired with all of the tables she has for -- for Democrat primaries by region by map area.

1 But I think this is sufficient to make
2 the -- to make the point. So that's why I label
3 that as the initial analysis.
4 Q Okay. So when you refer to an initial
5 look, you mean that you could have, but didn't
6 think you need to -- needed to do additional
7 variations of this table?
8 A That's correct.
9 Q Okay. And then we talked a little bit
10 about your collaboration earlier today. But did
11 you do the EI calculations in this table yourself?
12 A So again, the -- the data -- I provided
13 the data to Dr. Stevenson, told him what the -- you
14 know, that we're using our standard -- standard set
15 up for doing the RxC EI.
16 He performed that analysis, provided the
17 -- I'm sorry, he actually triggers the run on the
18 computer and then provides the output to me which
19 is what's reflected in this table.
20 Q And when he provides the output to you,
21 do you verify the accuracy of his calculations?
22 A I'm -- obviously having used it for a
23 fairly long period of time and worked on developing
24 the programming steps, I'm familiar with what's --
25 what's happening here in terms of what the R code

is doing. Just bringing in the right dataset, it's providing the right parameters, it's doing the analysis.

And then just looking at the -- these results and then comparing them to the actual distribution data across the Republican primary at the county level this is compatible, compatible with that.

So it's -- it passes a kind of reality check for what you can see in just looking at the -- at the county level at the raw information.

Q So do you do any EI calculations yourself to confirm the accuracy of Dr. Stevenson's EI calculations?

A No.

Q Okay. Have you ever in the past had to correct Dr. Stevenson's work?

A I think in -- there may have been a case where he provided a table and it was clear that he had -- had maybe reversed either, I think, maybe a candidate name or something in a table that was obviously reversed. And that I checked back with him about to verify that it was actually, you know, something that got reversed in labeling.

But other than that, no.

Q And so the sorts of checks that you're doing on Dr. Stevenson's work are the kind of checks that you could do just looking at the face of the table here; is that fair to say?

A So I'd say for -- I mean, this is unusual because it's an analysis that doesn't exist in this particular form in -- in the -- in say Dr. Handley's work.

Normally when we're doing this kind of analysis we're doing analysis that is -- is already exists in someone else's report.

And so there's another check in which you, you know, kind of look and see whether there's a consistency between say our analysis and Dr. Handley's analysis.

His is freestanding and so it's basically just a kind of reality check on -- on what it shows and -- I mean, I'm -- I mean, it's here because the court likes to see EI analysis. It's not necessary.

My conclusion about this -- about this contest can be made on the basis of the county results for this contest. It doesn't require EI at all. It's often the case that -- that EI provides more specificity then you really -- really need.

Q Okay.

A I mean, the question here is -- is essentially did white voters in the Republican primary support Herschel Walker and did Black voters in the primary support Herschel Walker.

And the EI is going to provide some indication that, you know, Black voters did support Herschel Walker or one of the other three Black candidates.

And it confirms that white voters gave majority of support to Herschel Walker without which he wouldn't have been the -- or he's the -- he's the plurality candidate of choice of voters in every county of Georgia.

He didn't -- nobody in any county got more votes than Herschel Walker in the Republican primarily.

So there totally isn't anyway to construct this that doesn't leave him as being the preferred candidate of white voters.

So this lends some indication of his support from Black voters, I don't think is very surprising, and that's really about all it tells you in addition.

As I said, the key take away from it is

that Herschel Walker clearly had the support of white voters in the Republican primary.

And again, that's the same exact conclusion you could reach from just looking at the county election results.

Q Okay. So that was just sort of reality check review that you did of this table?

A Correct.

Q Okay. Does Dr. Stevenson take a look at the opinions that you draw from his statistical analysis?

A When we -- when he provides the table we talk about -- we talk about the table. So I mean he understands what it is I think the table means and so we have that conversation.

He doesn't -- you know, he doesn't participate in writing the report. So I don't -- you know, but in an informal sense, right, we -- we -- we talk.

Basically, we have a conversation in which I explain to him in some detail what it is I want in the analysis and then he provides the analysis and then we talk over the results of the analysis.

And -- and that's the extent of his input

and our conversation. We don't typically talk about the larger report. We focus on the -- just on what his empirical analysis input's going to be.

Q And when you say what you -- that you tell him what you want in the analysis, what do you mean by that?

A So in this case I said I want to -- I want to look at the 2022 Republican primary to see what the levels of voter support are for Black versus white EI RxC analysis and transmit to him the datasets that he would need to perform that analysis.

And so, I mean, there's -- I don't really have to say a lot because we having done this, you know, I don't know how many times, a hundred times maybe.

It's always -- there's really not much here that varies from case to case. There's an input dataset for demographics, there's an input dataset for election results typically at the precinct level.

And so, in this case I told him I wanted to specifically to focus on -- on -- again, Handley's Eastern Atlanta Metro Region. So that's the -- that would be the counties that would be

drawn in and the input data. And that I just wanted a standard -- standard RxC which is the only kind of analysis that we run.

So that's -- that's what -- that's what I -- when I tell him this is what I want, is what I want to be the inputs into the analysis. And that I want the analysis to be standard, standard RxC analysis and that's it.

I mean, I don't tell him --

Q Okay.

A -- I don't tell him what I want the results to be, I just want to see what the results are.

Q And then, you said that you discuss the results when they come back.

But he's not looking at the report that you produced in this case to evaluate whether the opinions that you've drawn from his statistical analysis are consistent with his statistical analysis, right?

A Yeah, I don't -- I mean, we -- yeah, whether -- whether my opinions are -- or my -- so my opinions are based on the analysis. Whether those would be his opinions based on the analysis I don't know. I mean --

Q Okay.
A -- he's providing a mechanical process for me doing an analysis under my direction and -- and often he, for example, he -- most of the time doesn't know the race of the candidates, for example. He may not know the party of the candidates.
You know, he's not trying to draw a conclusion from it. He's just trying to, you know, provide the analysis in the form and fashion I directed based on the data I directed.
And so, you know, whether -- you know, we all can look at this table and draw conclusions from it, that doesn't take any special expertise.
Q Okay. Okay. So other than this table are your opinions relying on the analysis and the statistical analysis done by Dr. Palmer and Dr. Handley?
A Yes.
Q Okay. And did you have any concerns about the data that Dr. Handley relied on to reach your conclusions in this case?
A I think some at earlier stage I wasn't -- I may have mentioned that I wasn't happy with -- with her using an earlier iterative version of EI.

1 I have a preference for RxC which is what
2 we use, what Dr. Palmer uses, pretty much everybody
3 at this point uses some -- focuses on that.
4 So I'm never happy to see the iterative
5 because I think it can be potentially confusing.
6 It's not that it's -- necessarily takes you wildly
7 astray. And I'm -- I was willing to rely on her
8 earlier version, at least to make some initial
9 conclusions, which turned out to be unchanged by --
10 by this.
11 But her -- so her more recent report
12 reports the RxC results so that makes me happy
13 because now it's compatible with my analysis, it's
14 compatible with Dr. Palmer's analysis and pretty
15 much everybody's analysis at this stage, so.
16 But other than that sort of quibble about
17 the inappropriateness of -- if we can talk about,
18 you know, iterative EIS problems, it doesn't
19 produce appropriate confidence intervals, it
20 doesn't produce results that's down to a hundred,
21 it's just, again, something that's -- the worst
22 thing in the world, but it is -- it was a stop gap
23 that's been replaced, you know, for 20 years now.
24 So I just think it's better to have
25 everybody on the same page. And we're on the same

page now. So I don't have any -- I don't have any other methodological quibbles.

Q Okay. So no concerns about Dr. Handley's methodology in this report that you were responding to and no concerns about the data that went into the statistical analysis that the Plaintiffs' experts in this case did?

A That's correct. I'm relying for all the conclusions, other than the one dealing with the Republican primary, I'm relying on the results she produced in her report, the methodology she used and the data she used.

Q Okay. And were you -- did you have any concerns about the choice of elections that Dr. Handley had in -- in her analysis in this case?

A I'm trying to remember whose -- who chose which elections. I -- I -- she has, you know, pulled in a set of Democratic primaries which I appreciate. I think something Palmer -- Palmer did not do.

And if I'm remembering correctly, I'm trying to think what exactly what her selection frame was for the state wides, but I didn't -- I didn't see anything about that that I thought was, you know, given the information available broadly,

that was problematic.

So, you know, I think in my view the -- obviously, we draw different conclusions from her analysis, but I don't think it's necessary to go beyond the election analysis available here from somebody, either Dr. Handley or Dr. Palmer, to -- to reach these conclusions.

Q Okay. And she had looked at biracial general -- biracial elections. And would you agree that those are the most probative of racial polarization?

A Yes.

Q Okay. And so there aren't any additional kinds of elections that she should have looked at and didn't.

A Well, I would say what the -- so biracial elections are the most probative, but they -- they should be -- they should be in a broader context of elections in general.

So ideally you'd like a broader set of elections. I think that Palmer provides some elections that Handley doesn't and we get that -- we get that context. That context is important.

The -- I guess -- so I had a student once who was trying to do a research paper and was

interested in -- in how women vote, direction of vote, et cetera.

And so, the first thing he did was took a widely available survey dataset and he selected on gender, and so that he just had women. And that he was doing some analysis and he basically -- but the problem with that is what do you compare that to.

So it's -- you know, obviously, it's women answering the survey, that was the key thing that he wanted to look at, but in contrast to what. And so, if you're really interested in that you need to know in contrast to that.

So, again, the racially contested elections are, I think, the most probative. They're sort of understanding what they tell you.

The reality of being able to contrast that with a nonracially polarized election tells you whether you're actually seeing something that's related to the fact that the election is racially polarized or not. And I think that's important here, so.

Q So in your view candidates that are of the same race provides a necessary -- let me rephrase that question.

1 So in your view, does the determination
2 of whether racially polarized voting exists require
3 an examination of contests involving candidates of
4 the same race?
5 A I -- I don't think you can -- I don't
6 think you can have a full sense of how to interpret
7 what you're seeing in the empirical results without
8 having sort of a broader set of election
9 characteristics.
10 I mean, one -- one of the problems here
11 is that you have two things that are perfectly
12 confounded. And -- and when you have two things
13 that are confounded, then you're left unable to --
14 to opine on which of those factors you might
15 actually be looking at.
16 And -- and if the data's available -- if
17 you -- if you essentially created that confound
18 yourself by restricting the set of elections you're
19 looking at, then I think you just -- you know, if
20 that's what you want to do, then you've got to live
21 with the fact that -- that you can't make a
22 conclusion about which of those confounding factors
23 is responsible for the pattern.
24 And I -- I understand perfectly well that
25 some experts don't think they need to, but I think

the -- in my view the -- that's -- that's a decision for the court to make in light of that analysis, not because of the way the analysis was structured.

Q When you say which of the two confounding variables is responsible for the pattern, do you mean which variable caused the pattern?

A No.

Q What do you mean by "responsible for the pattern"?

A So if we have -- if we have a set of 10 elections and they are racially-contested elections, so we have a Black candidate and a white candidate, it's a general election, and the Black candidates are all Democrats and the white candidates are all Republicans, then we can put that table up and look at what the patterns are in terms of voter support in those elections.

But what you have to recognize there is that -- that while it's true that you can say something about Black support for Black candidates in that election series, you could take the word "Black candidates" out and put in "Democratic candidates," and nothing in your analysis, observation or conclusion would change because

there's simply no variation there.

All the Democratic candidates are Black, all the Black candidates are Democrats.

So again, if you're -- if you were to say this demonstrates that Blacks vote cohesively for Black candidates, it's also true that it demonstrates that Blacks vote cohesively for Democratic candidates, then I think you could -- I think it -- well, it's not unreasonable to suggest that if you simply put a table like that in and label the race of candidates, exclude nonracially-contested elections and -- and leave off partisan labels, that's -- I -- I -- in my view, that is a deceptive table because it suggests as some expert, Dr. Handley doesn't conclude this, but I've certainly seen lots of expert reports where experts produce that table and then say in a summary sentence, this is true for -- in previous cases in a variety of places, including Georgia -- where someone will say that table demonstrate that Black voters vote cohesively for Black candidates.

And I think the problem with that is while it's technically true that that is compatible with that table, that's going to be taken to mean something quite different from -- than what the

1 table was actually capable of -- of showing.
2 So again, it's just clear -- you add
3 clarity by adding in those other contests,
4 although, it remains equally true, you know, when
5 you include nonracially-contested elections what
6 you see is Black voters vote cohesively for
7 Democrats regardless of whether they're Black or
8 white.
9 And that's a piece of information that I
10 think is important here. And it's important for
11 the court to have. What the court makes of it is
12 -- is a question of how they apply a legal
13 standard.
14 And -- and I honestly could care less how
15 they apply a legal standard or what they arrive at.
16 I just want to make sure that -- that if they're
17 concerned -- if that concerns them at all, that the
18 table doesn't show anything beyond the fact that
19 the Black voters are voting for Democratic
20 candidates, I just want to make sure that the court
21 is okay with that, knows that and understands that,
22 and is not sort of led to believe that the table
23 actually shows that -- that what Black voters are
24 cohesively voting for are Black candidates as
25 opposed to willingness to support white candidates.

Q So in the table that you just hypothesized, wouldn't that descriptively be true that Black voters are cohesively voting for Black candidates?

A Yes, precisely. So if you filter --

Q Okay.

A -- the table down that way, you can -- you're able to make that statement and it be strictly speaking true, but it also is very misleading.

Q Okay.

A And I don't think that's appropriate. Again, when you're providing information to the court, I don't think it's appropriate to provide it in a way that -- that either potentially or intentionally misleads the court.

Q Okay.

A And again, Dr. Handley's not doing that here, but -- but it's -- it is possible to do that and it's possible for somebody to look at that table and -- and believe it's strong evidence of a particular pattern of voting exclusive of some other pattern.

And I think that's not -- that's not the most useful way to provide the information to the

1 court.
2 Q So the -- the problem is in the
3 implication that it is exclusive of another
4 descriptor -- another relationship that would be
5 consistent with what you're seeing?
6 A I mean, if -- if I thought that racially
7 polarized -- if I thought that
8 nonracially-contested elections are the most
9 probative, I could produce a table with only
10 nonracially-contested elections, and I could show
11 that Black voters could vote cohesively for white
12 candidates.
13 Q And isn't that --
14 A And it's true -- but it's true -- it is
15 true, right, within that set of elections. So if
16 we go to the broader set of elections, what we'll
17 see is there are a whole host of elections in which
18 Black voters are voting cohesively for white
19 candidates.
20 And so, I could present just that table
21 and say it's clear that in Georgia Black voters
22 vote cohesively for white candidates.
23 That's -- and that suggests -- again, for
24 that same exact table, I can say similar to white
25 voters that vote cohesively for white candidates,

which hardly suggests polarization since they're both voting for white candidates.

And again, I wouldn't produce that table or present that table because while it's narrowly true of the table, it's true in a constructed sense. By constructing the table that way, you can say that about that table.

But if you go with the -- at the bottom line, if you say that about the voting in the state of Georgia, it's not true.

It is not true about voting in the state of Georgia as a general conclusion unless you state very specifically in the context of biracial elections where the Democrat and the -- and the Black candidate are the same candidate, then that's true.

And again, what it leads to by the end of the report is either a broad conclusion or a perception on the part of someone reading the report, that you've demonstrated something that you, in fact, haven't demonstrated.

That's my only concern, that we're clear about what the empirical evidence demonstrates so that the court can then figure out -- and it's a challenge I know -- can figure out what that means

in a legal sense. They can't figure out what it means in the legal sense if they're simply wrong about what is true in a factual sense.

Q Okay. Let's go ahead and maybe we can talk about this with more specificity in the context of Dr. Handley's report.

MR. MILLER: So Schuyler, if you could can pull up Document 3 and then mark that as Exhibit 3 and publish.

And let's make sure again that -- that we put the sticker in a spot where it's not going to obscure text.

(Deposition Exhibit 3 marked.)

BY MR. MILLER:

Q And Dr. Alford, just let me know when that's popped up.

A I think it's struggling with all those appendices. It's hopefully just spinning. It says "Generating a file preview, make take a while." That's quite correct, it is taking a while.

MR. MILLER: All right. You want to hop off the record for a second while we -- if you don't mind?

So let's go off the record.

VIDEO TECHNICIAN: Okay.

MR. MILLER: I posed that as a question.
VIDEO TECHNICIAN: Off the record 12:05.
(Off the record.)
VIDEO TECHNICIAN: Back on the record. The time is 12:06.
BY MR. MILLER:
Q Okay. So Dr. Alford, have you seen Exhibit 3 before?
A Yes, I have.
Q And this is the report that Dr. Handley wrote that your rebuttal report responds to in part, right?
A Yes, it's her most recent report in this case.
Q Okay. And as you were discussing before we just took that brief break, you don't have any dispute with the statistical models that she used, right?
A That's correct.
Q And -- and you also don't dispute the results that those statistical models produced, right?
A Correct.
Q Okay. So is it fair to say that the disagreement between you and Dr. Handley in this

case turns on how to characterize the results of her statistical analysis?

A Yes, largely on how to characterize the results.

Q Okay. So let's see if we can start by finding some common ground and narrowing out some of the things that are in dispute.

So do you agree with Dr. Handley that Black voters in the areas of Georgia that she analyzed vote cohesively in general elections for state-wide offices?

A Yes.

Q Okay. And do you agree with Dr. Handley that white voters in the areas of Georgia she analyzed vote cohesively in general elections for state-wide offices?

A That's mostly true. I think there's some areas where they're -- where they're not voting cohesively, but -- but generally that's true.

Q Okay. And so the pattern of white voter behavior across Georgia in the areas that she's looking at is generally one of cohesion?

A Correct.

Q Okay. And would you say that there's a very high level of cohesion among Black voters in

the areas of Georgia that Dr. Handley looked at?
A Yes.
Q Okay. And with small exception, would you say that there is a very high level of cohesion among white voters in the areas of Georgia that Dr. Handley looked at?
A Yes. And again, that -- that varies a little bit because in some of the areas you've got a higher proportion of white Democratic voters in the areas that are heavily -- more heavily Democratic.
But generally speaking, for most of that analysis, the level of cohesion among white voters is -- is high, yes.
Q Okay. And again, speaking in the general elections for state-wide offices that Dr. Handley analyzed, did white and Black voters support different candidates?
A Yes.
Q Okay. And fair to say that large majorities of Black and white voters supported different candidates?
A That's generally the case, yes.
Q Okay. So she also analyzed state legislative elections in seven areas of Georgia,

1 right?
2 A Correct.
3 Q Okay. And were Dr. Handley's estimates
4 of Black and white voter behavior in state
5 legislative elections generally consistent with her
6 estimates of voter behavior for state-wide general
7 elections?
8 A Yes.
9 Q Okay. And so, they show the same pattern
10 of extremely cohesive Black support for a single
11 candidate, right?
12 A Correct.
13 Q And they show with minor area exceptions
14 overwhelmingly cohesive white support for a single
15 candidate, right?
16 A Based on -- unless you're overwhelmingly
17 cohesive means, but I mean --
18 Q Very high. Let me rephrase that
19 question.
20 A -- clearly -- so I think by any
21 definition of cohesion, they show cohesive white
22 support for a different candidate than the one that
23 you have the very cohesive Black support for.
24 So it's -- it is slightly less cohesive,
25 but I felt -- I still think it's in a range that --

that anybody would label as clearly cohesive.
Q Okay. So in the state legislative elections, Black and white voters are voting cohesively, right?
A Correct.
Q And they're voting for different candidates, right?
A Correct.
Q Okay. And looking at the state legislative elections that Dr. Handley analyzed, did the -- the candidate preferred by the majority of white voters generally win state legislative elections in districts without a majority of Black voting age population?
A I -- that, I'm not sure. Her analysis shows what it shows, but that's not an issue. I was not focused on the performance issue. So that may well be the case but I don't know.
Q Okay. Well, so if we took a look at -- okay. So let's take a look at -- sorry, one second. Yeah, let's go to Appendix B in her report.
A Appendix? I'm sorry, which appendix?
Q Appendix B.
A B?

Q B as in boy.
A I'm there.
Q Okay. So this is an appendix that covers recent state senate contests in the areas that -- that Dr. Handley analyzed.
And so, just looking at -- at the results here, are the candidates preferred by the majority of white voters generally defeating the candidates preferred by the majority of Black voters?
MR. JACOUTOT: Object to form.
A I want to say it varies by district.
BY MR. MILLER:
Q Well, so let's take a look at State Senate District 16. In that race, did the candidate preferred by the vast majority of white voters defeat the candidate preferred by the vast majority of Black voters?
A Yes.
Q Okay. And the same result is true in State Senate 17, right?
A Yes. But not in 22 or 25.
Q So let's take a look at State Senate District 22 and we'll pull up -- let me give you the page. Okay, so if you turn to Page 21 of -- of Dr. Handley's report and just let me know when

you're there.
A I am on Page 21.
Q Okay. And so if we take a look in the Comparison Table 3a, which is for the Adopted State Senate Districts, State Senate District 22 is listed in that table, right?
A Correct.
Q Okay. And the Black voting age population percentage of District 22 is listed in that table, right?
A Correct.
Q Okay. And the Black voting age population of Senate District 22 is 56.5 percent, right?
A Correct.
Q Okay. So you had noted that in the appendix it showed that the candidate preferred by Black voters won the election in that district, right?
A Correct.
Q And then here we see that the BVAP percentage, and I'm referring to Black voting age population if I use the phrase "BVAP," the BVAP percentage is 56.5 percent, right?
A Correct.

Q Okay. So the candidate preferred by the majority of Black voters won in a district with a BVAP percentage of 56.5 percent, right?

A Correct.

Q Okay. And so, would this result -- we just looked at three districts, two of which the candidate preferred by white voters won and one of which the candidate preferred by Black voters won where the BVAP percentage was 56.5 percent.

Would you expect to see this pattern play out across the other areas that Dr. Handley analyzed?

A Again, we're -- you know, we're -- we're going back and forth between a table and the text and a table and the appendix, and, you know, I -- I would say that certainly a district that is majority BVAP, you would expect to see the Democrat winning because the -- as we already know, the Black voters vote overwhelming with Democratic.

In districts that are not BVAP majority, the district might be a Democratic majority district or it might not. It would depend on the distribution of Democratic voting among the white population as well as obviously turnout.

So I think, yes, any district that's

1 majority BVAP is likely to be a Democratic district
2 and so a performing district in that sense.
3 But -- but it's certainly the case that
4 just generally that loss of districts that are not
5 majority BVAP also are Democratic districts and
6 also perform. So I don't -- without going through
7 this for each of these elections, I don't know what
8 the table shows about non-BVAP majority districts.
9 Q When you say the Democrat would win in a
10 district that is -- that has a Black majority
11 voting age population, that the Democrat is the
12 candidate preferred by Black voters in that
13 situation, right?
14 A Democrat is the candidate preferred by
15 Black voters in any partisan election situation, I
16 think we've established that.
17 Q Okay.
18 A So the Democrat would win, and that
19 would, therefore -- because Democrats are -- or
20 because Blacks overwhelmingly vote Democratic, that
21 would be the preferred candidate, as it would be if
22 the candidate was white.
23 Q Okay. And you said that you weren't --
24 that you hadn't looked at performance in your
25 report. So do you know whether Black voters in the

areas that Dr. Handley analyzed are able to elect their candidate of choice in districts without a majority Black voting age population?

A Again, I -- I don't know with regard to the districts that she's chosen. But -- but it is the case that in -- in any district in which a majority of the voters are Democratic, Black voters, even if it's only a single Black voter, will elect their candidate of choice assuming that Black voters are voting Democratic.

Q But you don't know in this case whether any of the areas that Dr. Handley analyzed are electing the candidate preferred by Black voters in the absence of a majority Black voting age population?

MR. JACOUTOT: Object to form.

A Yeah, as I said, I'm not -- I'm not concerned with the issue -- I don't think -- in my view there's nothing in -- really in dispute here. If you draw a Democratic district, however constituted, that the winner will be a candidate of choice of Black voters in Georgia.

So whether these districts are -- are -- have to be drawn as majority districts or not, if they do, that would be unusual, I'll just say that.

I have lots of experience with this in -- both in Georgia and other places.

And typically, it's not necessary that a district be majority Black in order to elect a Democrat. It just depends on how you draw the district lines and -- and what the white population looks like with regard to Democrat versus Republican.

So in -- in the areas like Atlanta where you have white voters who vote Democratic, you can draw districts with less than a majority of Black population that'll perform.

Whether any of these do or don't, I don't know because I didn't examine the performance issue.

BY MR. MILLER:

Q Okay. So then let's turn to -- let's turn to Appendix A1 of her report. Let me know when you're there.

A I'm there.

Q Okay. And so this table shows General and Runoff Election results in the Eastern Atlanta Metro Region, right?

A Correct.

Q Okay. And as we discussed when we were

1 talking about this more generally, the level of
2 Black support for the Black-preferred candidate in
3 these elections is uniformly high, right?
4 A Correct.
5 Q All right. So there's cohesive Black
6 voting in the Eastern Atlanta Metro Region in the
7 elections Dr. Handley analyzed in Appendix A1,
8 correct?
9 A Correct.
10 Q All right. And here would you describe
11 the level of white support for candidates in these
12 elections as showing white voter cohesion?
13 A In the first contest, no, white voters
14 appeared not to be voting cohesively. So they're
15 doing 40 percent support according to the E -- the
16 R -- R -- let's say you have an RxC 40 percent of
17 their support to the Democratic candidate, so I
18 would not consider that to be cohesive voting.
19 That's fairly close to an even split.
20 In the governor's contest, that's up to,
21 Republican candidates, up to 62 percent. So that
22 to me is still -- it's less cohesive than it is
23 cohesive.
24 I mean, the weakest standard that I'm
25 aware of for anybody who has a standard is 60

1 percent.
2 Generally you're seeing that this vote
3 exceeding the threshold of 60 percent, but -- but
4 it's basically mid 60s.
5 So, you know, that's not particularly
6 cohesive voting. It does look as though it
7 typically is -- there's a regularity there of it
8 being for the Republican candidate.
9 But again, there's a lot of -- obviously
10 in this particular region, there's a substantial
11 part of the white vote that's voting Democratic.
12 Q So other than the 2022 general election
13 for U.S. Senate and then there's also a 2020
14 general election for U.S. Special Senate race, the
15 other elections analyzed in Appendix A1 are showing
16 that a greater than 60 percent estimate of white
17 voters are supporting a single candidate, right?
18 A Correct.
19 Q Okay. And would you define that greater
20 than 60 percent support for a single candidate as
21 cohesive -- as cohesive voting?
22 A Look, I wouldn't, but it's the -- there
23 are other experts who offer that as a minimal -- as
24 a minimal definition. So I would agree that
25 anything below 60 percent I don't think is in any

1 sense cohesive.
2 And I think 60 percent is an arbitrary
3 and weak threshold for cohesion. So I don't think
4 this mid 60s voting is particularly -- is
5 particularly cohesive.
6 So it's -- you know, at 50 percent,
7 there's no cohesion at all. At 75 percent, you're
8 halfway between perfect cohesion and the complete
9 absence of cohesion.
10 So just in the sense of where does it
11 belong in the range of cohesion, it's in that
12 region that's less cohesive than not rather than
13 the region that's more cohesive than not.
14 So again, this isn't an issue with --
15 with the Black voting, it's not an issue in many of
16 the other elections we were talking about where
17 white voting is 85, 80-85 percent in one direction.
18 I think that's clearly cohesive voting.
19 But 65 percent, that's -- you know, when
20 you're -- when you're getting crossover -- when
21 more than a third of the way voters are crossing
22 over, you know, I'm not sure how to categorize
23 that. I mean, I don't -- I don't think there is a
24 court definition that I'm aware of.
25 But in terms of just a nonarbitrary

1 definition, I think maybe the most useful one might
2 be to consider whether you're in a region in which
3 voting is less cohesive than not or more cohesive
4 than not, and that dividing line would be 75.
5 Q Is that the dividing line that you have
6 applied in this case in terms of analyzing
7 cohesion?
8 A I mean, I try to avoid talking about
9 cohesion as a dichotomy. I talk instead about the
10 degree of cohesion.
11 But constantly everybody wants to force
12 you into saying something about -- so I'm
13 comfortable with talking about, you know, as -- as
14 we did about something that's -- that's very
15 extremely cohesive, very cohesive, whenever things
16 that are clearly cohesive.
17 But I'm just not -- in this -- once we
18 get to this realm, you can certainly say that --
19 that in terms of plaintiffs' experts, there's a
20 growing recognition among plaintiffs' experts that
21 the old idea that anything above 50 percent was
22 cohesive is just nonsensical.
23 And so you have to -- you have to have a
24 line somewhere. The court certainly hasn't put a
25 line anywhere.

1 So I'm just saying that to the extent
2 somebody has provided at least a weak standard
3 there, you know, I think for this point forward,
4 three or four plaintiffs' experts that are -- that
5 are using 60 percent as a potential line.
6 But again, that's -- that's arbitrary and
7 I think it's low.
8 And so, I just don't think it's
9 necessary -- I think ultimately the court may have
10 to make a decision that's dichotomous, but I don't
11 -- absent that, I don't think experts need to.
12 And so this -- I don't consider this to
13 be clearly cohesive voting on the part of white
14 voters. It is clearly cohesive voting on the part
15 of Black voters. It's a lot more --
16 Q So --
17 A -- tandem voting on the part of white
18 voters if they're not splitting 50/50, but -- but
19 they're certainly not splitting 98/2.
20 Q So you wouldn't describe the level of
21 cohesion of white voters as clearly cohesive, but
22 would you describe it as cohesive?
23 A Again, I -- if it is incohesive or not
24 cohesive, if you're going to -- if you're going to
25 say is this cohesion, then if I'm saying yes, then

I'm saying it's cohesion. If I say no, it means it's in a range that I'm considering to be not cohesive.

And again, I don't think that that dichotomy makes sense, but to the extent that there is a nonarbitrary line for that, that line would be at 75 percent.

So if you're going to say in a nonarbitrary sense is this cohesive as in closer to being cohesive than to being noncohesive, I would say, no, it is not -- in that sense not cohesive.

But -- but that's because you're asking me to put it into a dichotomy that I don't think is appropriate.

Q So --

A It's not a dichotomous measure. It's a continuous measure and the Court's perfectly capable of reading the number 65 and knowing what it means without me telling him what it means.

Q Well, so I'm trying to figure out what you think it means, though. So would you describe this as weak evidence of cohesion but evidence of cohesion nonetheless?

MR. JACOUTOT: Object to form.

A So it doesn't matter what the number is.

1 The number is by definition evidence of cohesion,
2 right, as evidence of the level of cohesion.
3 And that level of cohesion can vary from
4 50 percent in a two-party contest, right?
5 So in this kind of contest if the vote is
6 splitting 50/50, that by definition is the level of
7 cohesion, it just happens to be zero, right?
8 Because the level of cohesion is not
9 50 percent at 50 because at 50/50 there's no
10 cohesion at all that's voting, is entirely random
11 in effect to whatever it is you're clar- --
12 clarifying or categorizing it on.
13 So it is -- right, the only two points
14 that are -- that are by definition, right, one, the
15 absence of cohesion is at 50 percent.
16 Perfect cohesion is at a hundred percent,
17 which Blacks come very close to.
18 And an in between is the level of
19 cohesion varying from 50 percent to a hundred
20 percent. By definition, it can't go below
21 50 percent, it just switches sides. So it's a
22 folded scale. It's always above 50 percent and at
23 maximum -- it's maximum at a hundred.
24 So again, if you want to say cohesion,
25 noncohesion, you can divide that in half and talk

about whether you're closer to the lack of cohesion or to perfect cohesion. That would be at 75 percent.

But any other definition in there is -- until the Court offers a definition is arbitrary and unnecessary, right?

If you want to know what the level of cohesion is among white voters in these elections, just look at the level of cohesion of white voters. It's 65 percent, which is closer to noncohesion than it is to cohesion. It's dangerously close to failing even most plaintiff's standards for cohesion. So it's -- it' not very cohesive.

At 75 percent it would be balanced in between perfect and lack of cohesion. And above there, above 80, I think, you're -- you're there and you're clearly in the region of cohesion.

And I'd be comfortable with saying that's clearly cohesive or solidly cohesive or something. It's not extremely cohesive, which it would be in the case of Black vote in the upper 95 and up.

But again, if -- if you want -- you don't need to put a -- number 65 is not cohesion or lack of cohesion, 65 is the level of cohesion on a scale from 50 to 100.

BY MR. MILLER:

Q And you -- would you describe that as a -- as a low degree of cohesion?

A Yes.

Q Okay. And for you, if you were asked to define cohesion in a binary, which understanding your objection to defining cohesion in a binary, but if you're asked to define cohesion in a binary, you would set the level of support necessary to show cohesion at 75 percent, right?

A There -- yeah, so there are -- there are really only two places that are nonarbitrary to set that. One is at 75 percent and the other is at 50.

And then what you need to recognize is if you set it at 50, then by definition all voter groups are cohesive in all two-party elections, right, because by definition they're going to have a preferred candidate. And if -- if cohesion starts at 50 percent plus one voter, then voting by definition will always be cohesive.

So I reject out of hand the definition -- up until now probably the majority of plaintiffs' experts offer the definition of cohesion as cohesion exists any time more than -- one voter more than 50/50.

1 That definition of cohesion just says
2 that there is voting because it's -- at that point
3 there is no Gingles 2 standard because all
4 elections show cohesion.
5 And so, I don't think -- if the court
6 said you need to demonstrate that voters are
7 cohesive, I don't think it would make sense if what
8 they meant by that was you need to demonstrate that
9 their -- that their cohesion falls somewhere on the
10 scale of cohesion from zero to a hundred meaning
11 nothing, right? All elections pass that test.
12 So if the standard is something above
13 that, that -- that just the ability to measure
14 level of cohesion, whatever it might be, then the
15 only other nonarbitrary point is 75.
16 Q So if you were asked to say yes-or-no a
17 group is cohesive, your answer would turn on
18 whether support was at a 75 percent or greater
19 level?
20 MR. JACOUTOT: Object to form.
21 A So I would say, first of all, in a
22 two-party contest by definition all groups are
23 cohesive in the sense that they have a level of
24 cohesion and it's above zero, except in a perfectly
25 tied election for a group which is definitionally

not likely.

And then in terms of the level of cohesion, the level of cohesion is what it is. And if you want to characterize that into a region that's more cohesive than not or less cohesive than not, the division would be at 75.

I still -- I see no reason -- it's like if you have a record of people's height and you want me to tell you whether a person is tall or not when we're looking at a table that says they're 5'8, I don't think I need to categorize that. I'm giving you less information, not more. I don't like taking information out of something.

And so, there needs to be a legal standard, I have no doubt of that, but there's not an empirical standard beyond this sort of nonarbitrary 75 percent.

And I'm not really in favor -- I'm in favor of just saying the person is 5'7" tall. It speaks for itself and is far more accurate than classifying them as tall or not tall or whatever.

BY MR. MILLER:

Q So in terms of determining whether there is sufficient cohesion for racially polarized voting, what is the level at which you would need

to see minority group support for a single candidate?

A So you're asking me about a legal?

Q I'm asking you if you were -- if you were asked to -- if you were asked to assess whether racially polarized voting exists in a given area, what degree of support by minority voters would you need to see for candidates to conclude that there was cohesion sufficient for racially polarized voting?

MR. JACOUTOT: Object to form.

A Well, I mean -- so you want sort of my definition then of racially polarized voting or -- because racially polarized is a term of art. It's not a -- it doesn't exist out in the world. It's -- it's a legal creation.

BY MR. MILLER:

Q Right. So if you were -- if you were to conclude that there is racially polarized voting in an area, what level of cohesion among minority voters would you need to see before you could reach a conclusion that there was racially polarized voting?

MR. JACOUTOT: Object to form.

A Again, if -- if you want a nonarbitrary

1 line, the nonarbitrary line is at 75 percent. If
2 it's above 75 percent, then you're more cohesive
3 than not.
4 If the nonminority vote is above that
5 line in the opposite direction, then I think you
6 could argue that that's -- you know, you've got
7 some standard for making that -- for making that
8 choice. But, again, that -- the question there is,
9 is that -- I mean, that's a nonarbitrary standard.
10 The court is going to set a standard that
11 then is going to be a legal standard, I assume at
12 some point. But as far as I can tell they haven't
13 set one yet.
14 So the best I think you can offer is to
15 say, you know, it is -- what you see in the -- in
16 the table is what's in the table.
17 And so I think reasonable people would
18 agree that if 95 percent of Blacks are voting one
19 way and 85 percent of whites are voting the other,
20 that that's -- that voting is polarized on whatever
21 basis. It looks like -- that looks like it's sort
22 of polarization, opposite ends of a spectrum.
23 If you're -- if you're closer to voting
24 equally rather than voting in opposite ways, then
25 I -- then I think probably not -- it's not useful

to apply that -- that term.

But I think the problem here is just that there's a constant flux here between what is essentially an adjective in a legal term. And because the legal term is not well defined and the adjective is not well defined, we're just -- you know, we're -- we're trying to characterize a number that doesn't need to be characterized.

BY MR. MILLER:

Q So let's flip to Appendix A2 in Dr. Handley's report. And just let me know when you're there.

A All right, I'm in A2.

Q Okay. So in the elections analyzed in Appendix A2, is there a high degree of cohesion among Black voters?

A Yes.

Q And here in this appendix, would you describe the degree of cohesion among white voters as high?

A Yes.

Q And are white voters and Black voters cohesively supporting different candidates in this --

A Yes.

Q -- area?
Sorry.
A Sorry, that was my fault.
Q No, no, go ahead.
A But the answer is, yes, they are supporting different --
MR. JACOUTOT: I'm going to object to form for that. Sorry, I'm a little late but...
MR. MILLER: Okay. Let me -- let me reask it. I may draw the same objection.
MR. JACOUTOT: Okay.
BY MR. MILLER:
Q But in -- in Appendix A2, are Black voters and white voters cohesively supporting different candidates?
MR. JACOUTOT: Object to form.
A Okay. So, yes, here I think, again, by any reasonable definition these are -- both cases are mostly above 90 percent. They're supporting different candidates, they're supporting them cohesively, and as a consequence the voting is polarized.
BY MR. MILLER:
Q Okay. And would you say that the -- how would you describe the degree of polarization in

the elections in Appendix A2?

MR. JACOUTOT: Object to form.

A I'd describe it as polarized.

BY MR. MILLER:

Q Would you say that it is starkly polarized in Appendix A2?

MR. JACOUTOT: Object to form.

A I -- I mean, I don't know. I -- it's -- again, the numbers speak for themselves. It's -- I think it's clearly -- this is clear polarization.

This is what polarization looks like when, you know, 90 percent of a group -- one group goes one way and 90 percent goes the other.

This is what polarization looks like in Congress when 90 percent of the Republicans vote one way and 90 percent of the Democrats vote the other.

It's not perfectly polarized or as sometimes as you know from reporting on Congress if -- if 12 percent of the Republicans in Congress crossed over to vote with the Democrats, some people would label that a bipartisan piece of legislation because it actually drew more than one person from the other side. So there is polarization worse than this and we've seen it.

But in terms of voter polarization, this is exactly -- this is unambiguous, the two groups are voting cohesively in different directions and they're doing so in an obvious pattern, right, that the Democrat -- the Republicans -- I'm sorry, the Black voters are voting overwhelmingly Democratic in this area, white voters are voting overwhelmingly Republican.

And so we can look down the list and each time we see that exact result, that -- that -- that is what's happening here. It's a very high degree of partisan polarization.

BY MR. MILLER:

Q Do you also see in this appendix Black voters cohesively supporting the Black candidate?

A Well, we can see in the first election they're supporting a Black candidate.

Interestingly enough, at 98.5 percent they're supporting Warnock. And then you have another Black candidate that's getting 1 percent of the vote. So that's -- again, the Black vote is -- within the Black vote it's polarized in favor of the Democratic candidate.

Black voters --

Q And just to make sure that we're on the

same page here, which -- which election are -- okay, so you're looking at either the 20 -- are you looking at the first election? I just want to make sure that we're --

A No.

Q -- we're talking about the same thing, the 2022 U.S. Senate with a Black --

A So A2 -- the first election in A2, 2022 General --

Q Okay.

A -- Warnock and Walker.

Q Okay. And so here you have -- you have cohesive support by Black voters for a Black candidate, right?

A Correct. And not for the other Black candidate. They're polarized in this election by party.

Q Okay.

A Black voters are polarized by party.

Q Okay.

A And then if you drop down to the 2021 U.S. Senate Election, Ossoff/Perdue, you have two white candidates. And you'll notice the exact same result, right, 98.9 against 1.1, right?

So, again, Black voters are polarized

here in favor of the Democratic candidate in spite of the fact that the Democratic candidate is white and there is no Black candidate here.

So, yeah, there's -- there is no evidence here of -- of a racial effect. And so probably that racially polarized voting in my view is -- is an overstatement.

And -- and if you sort of carefully exclude, which a definition of using only racially contested elections would do, right, the two elections we've talked about, Herschel Walker/Warnock and Ossoff/Perdue are not racially contested elections, they don't belong in this table.

But by her definition when you would take them out, you would be able to go through that entire table and show that in every case the voting was polarized with regard to the race of the candidate.

And that's just -- right, that's just misleading because as we can see when we see the Ossoff/Perdue contest or the Warnock/Walker contest, we see the exact same result.

And again, what that shows us is that this is polarized by party consistently and not

1 by -- it's only by -- by cutting out of the table
2 everything that suggests that there's a party
3 influence that's different than the -- than the
4 racial influence that allows you to say what you
5 were -- I mean, your question was, doesn't this
6 show that Black voters are voting cohesively for
7 Black candidates?
8 And the answer is when they are the
9 Democrat they are and when they're not the Democrat
10 they -- it makes no difference at all, right?
11 It's just this is just highly polarized
12 partisan voting irrespective of the race of the
13 candidates.
14 Q Is there -- Doctor, did you --
15 A That's what those two Senate races tell
16 you. That's what -- those two Senate races are --
17 they're recent. They're extremely high profile.
18 Everybody knew the race of the candidates, I
19 suspect. Everybody knew the party of the
20 candidates.
21 They're just -- that's -- all you need is
22 to look at those two contests and they tell you
23 unambiguously what this voting pattern is about.
24 And particularly, they're telling you unambiguously
25 what you can't attribute this to.

You cannot attribute this polarization to the fact that -- that Ossoff is white or that Perdue is white, right? That's -- it's not -- it's not attributable to the race of the candidate in spite of the fact that by excluding all of those other contests, it appears to be compatible with that, but it, in fact, is not compatible with that.

Q So Dr. Alford, I want to just touch on one thing that you said there.

So when we look at the race of voters, we're seeing cohesion in this appendix for Black voters, right?

A Black voters are cohesive, yes.

Q Okay. And -- and then if we turn to Appendix A3. We're again seeing cohesive support for a single candidate by Black voters, right?

MR. JACOUTOT: Object to form.

A So we're talking about -- so this is -- I want to make sure. This is --

BY MR. MILLER:

Q Yeah.

A This is A3 East Central Region Map Area 3?

Q Yes.

A Yes.

Q Okay. And are white voters voting very cohesively in this map area?

MR. JACOUTOT: Object to form.

A Once again, they're -- Black voters voting cohesively for the Democratic candidate, white voters for the Republican candidate, independent of the candidate's race.

BY MR. MILLER:

Q Okay. So Black voters are cohesively voting for a single candidate, and white voters are cohesively voting for a single different candidate, right?

A Yes, different as in party --

Q Okay.

A -- specifically.

Q And then for Appendix A4, do we see the -- do you see the same pattern in Appendix A4 that we discussed in the prior appendices?

A Yes.

Q Okay. And so we have cohesive white support for one candidate and cohesive Black support for a different candidate in this appendix, right?

A No.

MR. JACOUTOT: Object to form.

A Again, different by party.
BY MR. MILLER:
Q Okay. We see cohesive white support for a candidate and we see cohesive Black support for a different candidate, correct?
A Yes.
Q Okay.
A Yes, different by party.
Q Okay. And in Appendix -- Appendices A5, A6, and A7 -- and please take your time to re -- to flip through if you'd like to review -- are we again seeing cohesive Black support for a candidate and cohesive white support for a different candidate?
A It looks as though the -- the pattern for -- for A1 through A7 is the same. It shows cohesive -- again, cohesive Black support for the Democratic candidate and cohesive white support for the Republican candidate.
Q So there is cohesive support among Black voters for a single candidate, right?
A Correct.
Q And there is cohesive support among white voters for a single candidate that is different than the candidate for whom Black voters are

cohesively voting, right?

A Yes, different by party.

MR. JACOUTOT: Object to form.

MR. MILLER: Okay. So I think that this would be an okay time to take lunch if that's okay with you. Can we go off the record, please.

VIDEO TECHNICIAN: Off the record 12:50.

(Lunch recess.)

* * * * *

VIDEO TECHNICIAN: Back on the record. The time 1:42.

BY MR. MILLER:

Q Okay. So Dr. Alford, I want to take a step back and look at something on Page 9 of your report if you can --

A My report?

Q Of your report, yes.

A Okay.

All right.

Q All right. So in the paragraph under Summary Conclusions, you write: "It is cohesive Black voter support for Democratic candidates, and white voter support for Republican candidates that

1 the general election analysis reveals, not cohesive
2 Black voter support for Black candidates and white
3 voter support for white candidates."
4 Right?
5 A Right.
6 Q Okay. So could you just explain what the
7 basis is for your opinion that voter support
8 candidates on the basis of party affiliation rather
9 than on the basis of race?
10 A Well -- well, that's not the conclusion
11 you just read. I don't think that's in there.
12 Q So how is the conclusion that I just read
13 different from a conclusion that voter support
14 candidates on the basis of party affiliation rather
15 than race?
16 A Well, this -- so this is just describing
17 two potential queues for voters. The party queue
18 that's on the -- both widely known and on the
19 ballot. And the racial queue that presumably
20 people recognize in regard to candidates. So those
21 two queues are available.
22 And then the question is what this
23 analysis shows in response to that. It's --
24 there's no -- this is not an analysis of the
25 partisanship of the voters or -- or what the role

of that partisanship is in voting.

It's simply an analysis of the degree of cohesion in support for the candidates of the two parties or relative to the other question which is the support for black or white candidates.

So what this shows is the voters of those groups are voting cohesively in the case of Black voters for the Democratic candidate and white voters for the Republican candidate. And the same is not true as far as what it shows with regard to the race of candidates.

I think you might presume that this has something to do with party ID, but that's not the analysis here. I'm not focusing on the partisanship of the voters, I'm focusing on the -- the voting behavior as revealed in the EI analysis that Dr. Handley did.

Q Were there any biracial contests that Dr. Handley analyzed in which Black voters did not cohesively support a Black candidate?

A I think not because, I think, again, as we discussed, the selection of the -- of the cases -- in all of the cases the -- the -- of the biracial elections the Black candidate is also the Democrat. So that dataset alone does not allow you

to distinguish.

It is true that Black voters are supporting the Black candidate. It's equally exactly true that the Black voter is supporting the Democratic candidate in those biracial -- in the biracial elections that we have analysis of here.

Q Okay. So it is equally true that Black voters are cohesively supporting Black candidates in the biracial general elections that Dr. Handley analyzed?

A Correct.

Q Okay. Speaking generally, are white voters cohesively supporting white candidates in the general elections that Dr. Handley analyzed?

A In the biracial?

Q Yes.

A Yes. So again, in the biracial, that's exactly -- that's exactly the result in the biracial. And again, it's equally true for whites vote for white candidates and whites vote for Republican candidates.

Q Okay. So it is equally true that white voters are cohesively supporting white candidates in the biracial general elections that Dr. Handley analyzed?

A Correct.
Q Okay. And so have you offered an opinion in this case as to the cause of Black voters' behavior?
A I'm sorry, I didn't hear the question.
Q Oh, sorry.
Have you offered an opinion in this case as to the cause of Black voters' behavior?
A I mean, I'm -- I'm offering an opinion about what the data provided by Dr. Handley tells us or doesn't tell us about Black voting behavior and white voting behavior. I don't think either of us has analysis in the -- in the sense of a sort of a scientific causal analysis. The pattern is what the pattern is. That's -- it's a very simple pattern. I don't think it's difficult to understand.
And I think the question is, what does the -- what does that pattern indicate and what it's compatible with and what's it not compatible with. But it's not -- either in the empirical sense or in the legal sense, it's not a causation analysis.
Q Okay. And so, is Black voter behavior in this case consistent with voting on account of

1 race?
2 A No.
3 Q Okay. Why not?
4 A Because, again, it's -- if you only focus
5 on the elections in which for both white and the
6 Black candidate biracial elections party and race
7 are perfectly confounded, then that set of
8 elections you can say, okay, that could be that
9 this voting pattern is being driven by partisanship
10 of the candidates or it could be driven by the race
11 of the candidates, so we can't separate that given
12 that those are perfectly confounded.
13 But even in the limited selection that
14 Dr. Handley provides, we have elections where
15 they're not confounded and the -- and the pattern
16 couldn't be any clearer. Like the -- the -- the
17 pattern is starkly partisan and -- and not racial.
18 There just isn't any evidence here that there's
19 anything beyond partisanship.
20 Again, the partisanship of the candidates
21 is driving this polarization that -- that she's
22 emphasizing in the general elections. And even
23 though she only has two elections in there where
24 you can see what this would look like, you know, in
25 a case in which the Black candidate -- or in which

1 the Democratic candidate was not also black, she
2 does have two cases where you can see in that --
3 where those are not confounded and they are
4 perfectly consistent with party and completely
5 inconsistent with race.
6 And then we have all the elections,
7 general elections, that she didn't analyze that
8 Palmer did. His analysis again is completely
9 compatible with hers for the racially contested
10 election.
11 And again, every one of the other
12 elections is perfectly consistent with the argument
13 that the party of the candidate is driving this and
14 totally inconsistent with the argument that's
15 driven by race. So you can --
16 Q And so to be clear --
17 A -- you can narrow the window of what
18 you're looking at and say, well, this could be race
19 or it could be party, but that's artificially
20 narrowing that window.
21 As soon as you pull back, what you see is
22 there's nothing in there that's consistent with
23 anything other than just party voting.
24 And so, that doesn't demonstrate or prove
25 that the causation is party. It just demonstrates

that the analysis and the data that's been provided here does not support the argument that this is voting or polarization on the account of race.

And so, Dr. Handley needs to do something more than just present those elections. They just don't show -- they do show a very clear pattern of polarization by party and they don't show a clear pattern of polarization by race with regard to the race and party of the candidate.

Q And so that last bit is what I want to focus in on. So the -- the intra-racial contests where you have two Black candidates or two white candidates, in your opinion those contests mean that the statistical analysis provided by the experts in this case is inconsistent with voting on account of the race of the candidate, right?

A Right. So we're -- we're looking at the -- at the race of voters and then asking about the pattern that they -- that that -- that we see for those voters by race in the -- in the elections.

And Dr. Handley has provided a set of biracial elections because she agrees that they're highly probative. Why are they highly probative?

They're highly probative -- really the only description that she offers of them is exactly

1 the correct one. Biracial elections are considered
2 to be particularly probative.
3 Since the only characteristic we've
4 identified here is biracial, then the reason
5 they're most probative is because they include both
6 a minority and a nonminority candidate. Right?
7 So that probativeness comes from the fact
8 that when we have a contest that provides choice of
9 Black or white among candidates, that choice is
10 especially revealing about what's driving the
11 behavior of voters when they make that choice.
12 If we look at that pattern and see that
13 Black voters are splitting their vote 50/50 between
14 the Black and the white candidate, then it's not a
15 quibble about race of the candidate, race of the
16 voter, it's the -- it's the reason why it's -- it's
17 probative.
18 Q So --
19 A Also, it's probative of how voters are
20 voting with regard to the issue of race. And
21 again, what we see when we look at those contests
22 is that Blacks are voting overwhelmingly for the
23 Black candidate and whites for the white candidate.
24 And then the question is, is that,
25 therefore, evidence that they're voting on account

of race which is why those contests are probative because they feature variation on the race of candidates.

And the answer is, unfortunately, because we know that people also vote on the basis of partisanship or are swayed by the partisan affiliation of candidates, you perfectly confounded the two.

And then when we unconfound them, it's not that we get a modest pattern of a little bit of this or a little bit of that. When we unconfound them, it's clear that it would be a mistake to interpret that distinctive pattern to the race of the candidate which is the point of the probative biracial contest.

And by adding even a single contest or in the multiple contest added by Palmer, there's absolutely no evidence that the -- that the race of candidate is making any difference. It's entirely the party of the candidate.

So in the same sense that biracial elections are particularly probative for understanding the effect of the race of the candidate on the behavior of voters, bipartisan contests are particularly useful for understanding

the effective party. Because here there just isn't any question about what this shows.

Again, it's -- I'm not saying that this is -- this shows that there's no effective race. I'm just saying you haven't shown that there is any effective race.

It's -- and it's the complete absence of any evidence of any voting on account of race based on --

Q So --

A -- what your own expert says is the most probative thing to look at.

Q So, Dr. Alford, you -- one thing that you just said, you don't have an opinion in this case that Black voter behavior is not motivated by the race of the candidate; is that correct?

MR. JACOUTOT: Object to form.

A But, you know, I do have an opinion about that.

BY MR. MILLER:

Q Okay. So --

A I do have an opinion about it. But maybe I'm -- maybe I'm misunderstanding this, but my looking at these tables, right, if there is an explanation that -- that -- that works in some way,

1 it's an awfully complicated explanation because on
2 the face of it -- I mean, this is just -- this
3 isn't a close call.
4 On the face of it, there's just no
5 evidence at all that there's any difference between
6 the candidates, between the races, that are
7 biracial and the ones that aren't. They all just
8 show the exact same extreme partisan election
9 pattern.
10 So that's the only evidence of it. If
11 that's enough -- you know, again, I'm agnostic
12 about what the court -- if the court doesn't care
13 if this is just party voting, if they're perfectly
14 fine with saying if parties are split by race,
15 that's enough and we're -- we'll deal with it, then
16 that's perfectly fine.
17 I just want to make sure the court
18 doesn't think that what's been presented here is
19 any evidence whatsoever that supports that
20 argument. The only evidence here supports
21 completely and consistently the idea that voters in
22 Georgia are voting on the basis of a party of
23 candidates.
24 It's -- it's true in the election
25 analysis. It's true in the performance analysis.

1 Every district that's majority Democratic and votes
2 majority Democratic is -- is going to elect
3 candidates of choice of Blacks because the
4 candidate of choice of Blacks is the Democrat
5 whether the Democrat's white or Black.
6 Q And are there biracial contests in which
7 Black voters are cohesively supporting white
8 candidates in the analysis here?
9 A Again, the analysis has been structured
10 so that the only elections that are biracial are
11 also elections in which the Black candidate is
12 always the Democrat, the white candidate is always
13 the Republican. So you can ask that question as if
14 it has -- is some -- is somehow important to this
15 case.
16 But it is important to this case only if
17 you have no -- that Plaintiffs have no obligation
18 to provide any evidence that suggests that anything
19 beyond just voting on the basis of a party of the
20 candidate is in operation here.
21 Q Do you know if there are elections in
22 Georgia where the white candidate is a Democrat and
23 the Black candidate is a Republican?
24 A I don't.
25 Q Okay. And so you're not suggesting that

there was a decision to exclude races with a white Democrat and a Black Republican, just to be clear, right?

A Oh, no, I'm suggesting that in your question you're deliberately reducing the focus to a set of elections in which the Democratic candidate is always Black and the Republican candidate is always white.

And that in the -- in her report Dr. Handley does essentially the same thing, although she includes, for reasons she doesn't explain, two biracial elections, one involving a Black Republican, Black Democrat, one involving a white Democrat, white Republican.

I'm not sure why they're included, but again, when you ask the question and start the question off by saying in this set of biracial contests, you're knowingly limiting it to sets in which you can't distinguish the effective party and race.

And again, if the court doesn't care, then who cares. You don't care, I don't care, nobody cares. If the court does care, then there's no way for the court to answer that question without looking beyond those biracial contests.

1 And as soon as you look to even one
2 additional contest, it's abundantly clear that the
3 pattern you're describing is simply -- you're just
4 conveniently describing a pattern of voting on the
5 basis of the party of candidates as voting on the
6 candidate's race.
7 Q So what I'm trying to understand -- what
8 I'm trying to understand, Dr. Alford, is -- is what
9 would the -- I'm trying to understand the -- the
10 import of a fact.
11 And the fact is that we're not aware, you
12 and I talking today, about the existence of a race
13 with a contest with a Black Republican and a white
14 Democrat.
15 And so I'm asking, does -- how does the
16 absence of Black support for a Black Republican
17 over a white Democrat factor in, if at all, to your
18 opinions in this case?
19 A Okay. So first of all, I want to -- I
20 don't know how familiar you are with the entire
21 compass of modern Georgia elections, but I'm not
22 particularly familiar with it, and I've made no
23 assessment of it for this case.
24 So the fact that we're not aware of it
25 doesn't mean it doesn't exist. But I think the

1 fact -- at least, I can't speak for why you aren't
2 aware of it, but I'm not aware of it because I'm
3 focused on the election selected by Dr. Handley, by
4 Dr. Palmer, in the one biracial Republican primary.
5 So whether there are other elections out
6 there or not, I don't know. But my point is, if --
7 if there's nothing out there except the pattern
8 that -- of elections that are in the majority of
9 elections of Dr. Handley's general election table,
10 then it's an interesting table but it simply
11 doesn't demonstrate anything about voting on
12 account of race, and so it's just insufficient.
13 It just doesn't -- as it stands it -- to
14 the extent it can separate party of the candidate
15 and race of the candidate, it is completely clear
16 that the -- that the factor that was there is the
17 party of the candidate.
18 And in that situation, then you need
19 something else to bolster this idea that somehow
20 it's not the party of the candidate, it's -- it's
21 somehow indirectly, whatever it is, whatever that
22 argument is, I don't know what it is, but I'm not
23 making a causal argument.
24 I'm just saying this is what's -- these
25 are the facts on the -- on the page in

Dr. Handley's report. It's -- it doesn't show voting that's polarized on account of race.

And absent that, I just don't think that meets -- that meets the bearer of burden of proof. I don't know.

And again, it's -- it's up to the court to decide whether in a sort of a Brennon-esk sense whether just having a different voting pattern regardless of what is in my opinion sufficient.

But my point is that there's evidence here to show what the election pattern is. There's evidence to show what that -- what the pattern is with regard to race of the candidates.

THE COURT REPORTER: He's breaking up.

MR. MILLER: Dr. Alford, I'm sorry to interrupt you, but we're having some trouble with hearing you. I think that you're cutting in and out, and I just -- I don't want the record to -- to be compromised by cutting in and out. I can see the court reporter gesturing as well.

Could we go off the record for just a second.

VIDEO TECHNICIAN: Off the record 2:04.

(Recess taken.)

VIDEO TECHNICIAN: Back on the record.

The time 12:11.

MR. MILLER: Okay. And would the court reporter just be able to read back the last question that I asked and maybe we can just pick up there again.

That's okay if you don't have it, I'm glad to ask a different question, but...

THE COURT REPORTER: No, I'm sure I have it. It's just it was a long question and a very long answer.

MR. MILLER: Sure.

(Whereupon, the requested portion of the record was read by the reporter.)

THE REPORTER: Okay.

"So what I'm trying to understand, Dr. Alford, I'm trying to understand the import of a fact. And the fact is that we're not aware, you and I talking today, about the existence of a race with a contest with a Black Republican and a white Democrat.

And so, how does the absence of Black support for a Black Republican over a white Democrat factor in, if at all, to your opinions in this case?"

Does that help you understand where you

1 were?
2 THE WITNESS: It does me.
3 MR. MILLER: All right.
4 A Okay. So, again, we're not aware those
5 elections may exist or may not. The elections I'm
6 dealing with here are largely the elections
7 selected by Dr. Handley or Dr. Palmer. And we've
8 got the one Republican, recent Republican primary.
9 Those other elections may be out there,
10 and if they were, they would certainly be useful.
11 But they're not necessary in order to answer the
12 question about what it is that the -- what the
13 source or what the pattern is how best to describe
14 the pattern in the elections included in
15 Dr. Handley's report.
16 In the general election included in
17 Dr. Handley's report, there just simply isn't any
18 question that what we're seeing is consistent with
19 polarization based on the party of the candidate
20 and it's not consistent with polarization based on
21 the race of the candidate, so.
22 BY MR. MILLER:
23 Q And the reason that you think that it is
24 not consistent with polarization based on the race
25 of the candidate is the 2022 U.S. Senate election

1 between Warnock and Walker and the Jon Ossoff races
2 where there is both a white Democrat and a white
3 Republican? Is that the basis for the
4 inconsistency that you have perceived?
5 A No. I think it's important to -- to
6 indicate -- the first point is that taking those
7 two contests out, we didn't have what you referred
8 to as the biracial general election contest, right?
9 And we have a pattern in those contests
10 and that pattern shows two things at exactly the
11 same degree. It shows that voters appear to be
12 voting -- Black voters appear to be voting
13 overwhelmingly for the Democratic candidate and the
14 Black candidate. White voters appear to be voting
15 overwhelmingly for the Republican candidate and the
16 white candidate.
17 So taken as a block, they don't supply
18 any information that would help us to disaggregate
19 those two things, right?
20 All we can say about what that
21 demonstrates is that voters are voting in those
22 elections for Black Democrats and white Republicans
23 in the way they're voting for them, but we can't
24 disambiguate what's party polarization, what's
25 racial polarization or what some combination of

1 those two.
2 So that in and of itself without the
3 Ossoff race or the Walker race would not be
4 sufficient to establish voting that's polarized on
5 account of race.
6 Q Isn't that always going to be --
7 A Leaving out --
8 Q Dr. Alford, isn't that always going to
9 be -- I'm sorry, let me rephrase that question.
10 What would you need to see in biracial
11 contests to demonstrate racially polarized voting
12 if cohesive support by Black voters for the Black
13 candidate and cohesive support by white voters for
14 the white candidate was not sufficient?
15 A Again, because in every instance the
16 Black candidate is the Democrat and in every
17 instance the white candidate is a Republican, then
18 you can't -- you can't answer that question. It's
19 an insufficient database for doing that.
20 If there isn't any other data available
21 in the elections, then you have to go beyond these
22 elections to try to figure that out. There is
23 other information available here because there are
24 lots of other election contests that are not
25 included here. And they're in Palmer's report and

1 two of them are in Handley's report.
2 And they show you very quickly, very
3 easily and very consistently what it is that's
4 going on in the subset of elections that you're
5 saying are the -- are the most probative ones.
6 And it -- I mean, there just isn't any
7 question about it. It's -- it would -- again, it
8 would be nice to have lots of other things in the
9 election patterns, but you don't need them to --
10 first of all, you don't need them to know that if
11 you don't look outside that set of perfectly
12 confounded elections, then you can't say whether
13 it's the result of the party of the candidate or
14 the race of the candidate. That's just a simple
15 fact. That's just -- it's axiomatic, right?
16 You have two perfectly correlated
17 measures and if that's all you got, that's all you
18 got, and you just can't say.
19 But there's no reason to stop there. You
20 can -- you can look at other elections and you can
21 see very quickly that it's -- to the extent there's
22 a pattern there, it's a partisan pattern and you
23 need to -- if you're going to argue that that
24 partisan pattern is somehow -- that race is driving
25 the party voting in such a way that the party

voting now eliminates the effect of the race of candidates, that's a -- you know, that's an argument to make.

It's an odd and complex one, but it's not being made here. And it's not only not being made but it's not being -- because there's no evidence being provided for it.

So if all the evidence you've got is the evidence of Handley and Palmer's report, then all I'm saying is what that's -- what is that evidence of and what is it not evidence of.

And as long as the judge is willing to say you don't need to provide evidence, plaintiffs don't need to provide evidence of -- that there is polarized voting on account of race, then you've got no problems because you've got polarized voting here.

But the fact pattern is really -- it's not in dispute. As far as I understand it, Dr. Handley doesn't dispute that this is partisan polarization.

Q So --

A Dr. Palmer doesn't dispute it.

Q So what I'm -- and I apologize if I'm -- if I'm being dense in these questions.

But what -- what I'm trying to figure out is, if we just have a universe of biracial general election contests, no matter how many, over what length of time, none of that would matter, if the candidate cohesively supported by Black voters is always a Democrat and the candidate cohesively supported by white voters is always a Republican, that could never show racial polarization on its own?

MR. JACOUTOT: Object to form.

A And again, if -- if the issue is that there -- there is nothing else available, you don't think -- obviously, the court has in the past ruled in these cases when there are no biracial contests, right? When there are no minority candidates.

In the scope of the elections that are analyzed all of the elections feature only nonminority candidate. That's not an ideal situation for a fact pattern, but that's the data you have to deal with and you can -- you can try to figure out, you know, what sense you can make of that or what it means with some caveats perhaps.

But -- but that's a hypothetical, right? We don't face that situation here. We have plenty of contests to answer this question and the answer

to the question is unambiguous.

Like Dr. Palmer doesn't suggest, Dr. Handley doesn't suggest, nobody looking at these figures, no expert at least, suggests that they show that this is about the race of the candidate and not the party because it simply isn't. It just isn't.

BY MR. MILLER:

Q So --

A So if you want to back up and make some other argument in order to reestablish the notion that this party polarization is occurring on a part -- on account of race, by -- you could do that by looking at the race of the candidates. And when we look at them, as we can see here, there's just not any effect.

So -- so then you can back up and say, well, maybe -- maybe it's just the tendency of Blacks to vote Democratic and whites to vote Republican is -- is somehow some earlier connected cause, whatever, that's going to require some empirical analysis, not just hand waving and saying maybe this is true. Okay, it's...

I mean, I don't know what else to say. This -- this is as clear a fact pattern in the

1 general elections as -- as you can ask for to
2 disambiguate whether you've proven something about
3 the influence of candidate's race on voting -- oh,
4 here's a simple statement.
5 Based on this table, I can say this,
6 Black voters in Georgia will vote cohesively for a
7 Black candidate, white voters will not. They will
8 vote cohesively for the white opponent of that
9 Black candidate. That is -- according to this data
10 and Dr. Handley's report, that is clearly false.
11 That is clearly not true.
12 The converse clearly is true. If I say
13 Black voters will vote for the Democratic candidate
14 of any contest, general contest, white voters will
15 vote for the Republican in general election
16 contests, that's clearly true. But the data
17 supports it. So the data clearly supports that
18 statement. And the other statement is clearly
19 false.
20 And then the only question is, do you
21 need that second statement? Is it enough to say
22 Black voters support the Democrat cohesively, white
23 voters support the Republican candidate cohesively
24 full stop.
25 If that's enough to make the case, then

that's great, I won't dispute that. Nobody disputes that that's a factual pattern here.

If it's not enough, if you need to actually inquire as to something that shows in effect a race beyond party, then you have everything you need to do that here. You can look at that.

And the answer is, can you make that second statement that in addition to Blacks voting for the Democrat and whites voting for the Republican, it's also the case that Black voters will cohesively support the Black candidate if there's a Black candidate in the contest, and that white voters will -- will support the white candidate if there's a white candidate in the contest.

And -- and absent the presence of race in those contests, you'll get a result that's a racial variation. You'll get a result that's different from what you get from just party.

And here you don't get that. And so it's -- it's just being what's been presented here. And I don't say this isn't a fairly good assessment of general elections in Georgia.

General elections in Georgia are

1 polarized on the basis of party and the race of the
2 candidate does not make much difference beyond the
3 party and certainly there's no evidence here that
4 it makes any difference.
5 Q So you mentioned a moment ago that you --
6 that an expert could prove or support racially
7 polarized voting using only intra-racial, so white
8 candidate versus white candidate contests, right?
9 A Correct.
10 Q How does one show voting on account of
11 race by your definition with only intra-racial
12 contests?
13 MR. JACOUTOT: Object to form.
14 A Where that's been established in the
15 past, at least in the cases that I'm familiar with,
16 it's -- it is in nonpartisan elections.
17 So in city council elections, for
18 example, you may be able to establish that -- that
19 pattern because there is not -- and maybe if you
20 look at others -- obviously, you can't look at
21 party because they're nonpartisan contests.
22 And so, there the pattern you make some
23 argument about appeals made by candidates and
24 campaigns or, you know, geographical factors,
25 whatever. You can build -- you can build a case in

1 the absence.
2 You can also build a case about, you
3 know, if this is in a jurisdiction where you have a
4 -- you know, the all white primary like Fort Bend,
5 Texas, then you can make the argument that it's,
6 you know, with that kind of a situation there
7 essentially -- it's essentially a mechanism
8 designed to -- to make that impossible.
9 So there's, like I said, totality --
10 ultimately a total -- totality of circumstances.
11 And so, there are -- there are ways to -- there are
12 ways to bridge that.
13 But I mean, that's -- you know, again, in
14 terms of this case, that's just a hypothetical.
15 This is a partisan election case. There's an
16 abundance of -- there's an abundance of different
17 election types to look at. And -- and -- and it's
18 been looked at by multiple experts and they all
19 come to the same empirical conclusion and so it is
20 what it is.
21 BY MR. MILLER:
22 Q So in bipartisan, intra-racial contests,
23 can you demonstrate racially polarized voting?
24 A If all you have are -- so all you have is
25 elections in which the -- the candidates are -- if

all you have is -- is contests in which there -- you have no contrast between the race of the candidates and their partisan elections, then, you know, you're going to see -- you're going to see partisan voting. That's all it's going to show you is how much partisan voting has an impact.

And if -- if the voting is not polarized on the basis of party, then what you will see is that elections that aren't polarized. And if it is polarized on the basis of party, you'll see party polarization.

Maybe that's a good thing that you're not fooled into thinking you're seeing something beyond that.

Q So there wouldn't be any way to show racially polarized voting in a dataset that contained only bipartisan intra-racial elections, right?

MR. JACOUTOT: Object to form.

A That's not -- be careful by saying there isn't any way. There are -- there are all kinds of ways to analyze this.

We're just talking about a single -- if you produce a single table in which that's all you got in the table, then as is true here, the -- the

1 table itself is -- you know, if you -- if you
2 crunch the table down to only biracial contests or
3 only no biracial contests, you're going to end up
4 confounding party and race and not being able to
5 tell what the separate influences are.
6 So the -- the -- I mean, the takeaway
7 from that is simple, don't do that unless you have
8 to.
9 So in some hypothetical case where that
10 doesn't exist, which I haven't seen, then, you
11 know, maybe you've got to be more creative or
12 figure something out, I don't know, but we don't
13 have something here.
14 Everything you need to answer the
15 question is here. It's right there in Handley's
16 report in black and white. It's as simple as that.
17 It's there in black and white and
18 Democrat and Republican, and it's -- like there's
19 -- I mean, if your concern is that if you don't
20 accept this, if when you have evidence of these --
21 clear evidence of this is party of the candidate,
22 not race of the candidate, and you don't accept
23 that because of some hypothetical world some day,
24 you might not have the ability to separate those
25 two, you know, that's -- that's way outside of my

pay grade.

We have the ability here. I mean, every other case I've been involved in. So we have it, we can make that separation. The question is whether this -- you know, whether this fact pattern establishes what it is that you claim that you're establishing on behalf of the Plaintiffs, and the answer is simply that it does not.

BY MR. MILLER:

Q And does --

A Interesting -- I'll just say, interestingly from my point of view, it's not a fact pattern that people look at and say, oh, my gosh, I don't think I believe that. I think this is some EI magic or something.

It's -- the fact pattern is -- is -- comports completely with everybody's understanding of politics in Georgia today.

But there's nothing about this that is controversial, it's just -- the state is, you know, may be becoming a blue state or may be becoming a red state on the basis of how people vote, on the basis of party.

This is a -- party polarization in the state as in the country is extreme right now. The

1 state is being heavily contested. Hundreds of
2 millions of dollars are being put in by the
3 Democratic and Republican party and they're not
4 putting it in because they're -- these contests
5 with the partisanship or the things don't matter,
6 they're putting it in precisely because they can
7 win this state if they can get enough people to
8 vote Democratic and...
9 I mean, I just want the idea that -- that
10 if we accept the -- the opposite conclusion that
11 the -- I mean, think about it, right? Take party
12 out of this, take it out, put up the table, take
13 out the two nonbiracial contests and take party
14 out. And this tells you very clearly whites in
15 Georgia will only vote for whites, 98 percent, 90
16 percent. Blacks in Georgia will only vote for
17 Blacks 95 percent. It is really simple.
18 Is it possible for any Black candidate to
19 win a contest state-wide in Georgia? And the
20 answer is no. It's simply not possible, right?
21 A Black voter in Georgia or a Black
22 candidate in Georgia, if that's true, can't get any
23 higher than the Black share of the vote because the
24 crossover is approximately the same in both.
25 So Stacey Abrams can't exceed the

1 proportion of the vote in the State of Georgia
2 that's Black statewide, she cannot by definition,
3 if your view of this table is correct.
4 I think you agree that that's not true,
5 and therefore, your view of this table is not
6 correct. There are white voters in Georgia that
7 vote Democratic.
8 Q So --
9 A And that total of Democratic votes
10 determines the outcome of the election whether the
11 candidate is Black or white.
12 Q Dr. Alford, does anything about the
13 analysis provided in Dr. Handley or Dr. Palmer's
14 reports allow you to draw a conclusion about
15 whether voters are making decisions on the basis of
16 their race in supporting a candidate, their race
17 being the race of the voter's?
18 A So I -- I think we agree, and have from
19 the beginning, that Black and white voters are
20 voting differently based on these general
21 elections. Black voters are voting for the
22 Democratic candidate, white voters are voting
23 predominantly for the Republican candidate.
24 So in that sense, right, we -- we know
25 what we know.

1 Q And do we also know that Black voters
2 are -- well, so -- yeah, let me strike that and
3 then rephrase the question.
4 So what, if anything, does the analysis
5 here show about whether voter behavior is on
6 account of the voter's race?
7 MR. JACOUTOT: Object to form.
8 A Well, as -- as traditional in -- in these
9 cases, we're separating the estimation for voters
10 by race. So I guess any time you separate the
11 voters by race and then look at what their voting
12 behavior is, you -- it's possible, I suppose, that
13 even though you've separated them by race and you
14 see the same pattern or a different pattern,
15 whatever it is you find, that that -- that that may
16 not, in fact, be due to the race of the voters, but
17 that's what you separated. So that's the
18 difference you see.
19 And then whether that difference is -- is
20 -- how that difference might be connected beyond
21 simply having classified voters by their own
22 self-described race, I don't know.
23 BY MR. MILLER:
24 Q So do we have polarization in the areas
25 analyzed by Dr. Handley on account of the voter's

1 race?
2 MR. JACOUTOT: Object to form.
3 A Certainly -- I mean, I guess I don't know
4 what you mean by polarized on account of the
5 voter's race.
6 When the voters are voting -- are voting
7 for Republican in different -- or, sorry,
8 Democratic and Republican candidates at very
9 different -- in very different patterns by race,
10 whether that's -- you know, how exactly that's
11 connected to race, I don't know.
12 But it's -- you've demonstrated that --
13 that the -- that the tendency to support Democratic
14 candidates and Republican candidates is different
15 by race.
16 And again, that's not an ultimate causal
17 -- causation or inquiry, but I think that's
18 essentially the question the court is always asked.
19 BY MR. MILLER:
20 Q So we have --
21 A And I've already --
22 Q Oh, sorry, go ahead, finish your answer.
23 A No, I was going to say, I mean, you
24 already -- but you -- Gingles 1 you've already
25 separated -- you know, you separated the issue

about numerosity and compactness on the same -- presumably on the same breakdown, and then you're just asking about voting patterns.

Q So we're seeing in the results in Dr. Palmer and Dr. Handley's reports polarization -- oh, sorry.

We're seeing polarization in Dr. Palmer and Dr. Handley's reports that is attributable to the race of the voters; is that right?

MR. JACOUTOT: Object to form.

A It's -- it's connected empirically, right, that's the -- that's the point of analysis. It's -- it's connected empirically to the -- to the categorization of voters into the pool of Black voters, white voters, others.

BY MR. MILLER:

Q Okay. And -- and we talked a little bit earlier, but it's -- about this, but polarization can reflect both race and partisanship, right?

A It could, yes.

Q Okay. Okay. And you -- you served as an expert in a number of cases brought under Section 2 of the Voting Rights Act, right?

A Yes.

Q All right. And so you've seen a number

of expert reports filed in such cases, right?
A Yes.
Q And just speaking descriptively, do experts in racially polarized voting generally seek to draw conclusions as to the cause of voter's behavior?
A Again, in a scientific sense, these are not causal analyses, they're -- they're conclusions about correlations related to the -- to the race of voters and to election outcomes and to -- and to aggregated voting.
Q Okay. And so Plaintiff's experts in Section 2 cases don't generally try to disprove partisanship as a potential motivator of voting behavior in your experience, right?
A So traditionally, I'd say that was almost universally true. Since the issue has been -- has been raised particularly where it's been raised, yes, I'd say certainly the current round that there's an expert like Matt Barreto and Dr. Palmer, Dr. Collingwood, variety of other people, yeah, actively seek to address that issue because of the -- the view that that's -- if that issue's raised, it needs to be addressed.
And I think here the issue is raised just

1 by the simple fact pattern in -- in Dr. Handley or
2 Dr. Palmer's report.
3 Q Okay. So you're starting to see attempts
4 to disprove partisanship in -- as a motivator of
5 voter behavior in Section 2 cases, is that what you
6 just said?
7 A I'm -- I'm a little reluctant to
8 categorize as disprove partisanship. I think the
9 point is that if -- that where it has been pointed
10 out -- and remember, this is a subset of election
11 cases, but where it's been pointed out or where
12 it's clear that the -- that the pattern is -- is
13 well explained by party of candidate as by race of
14 candidate, then plaintiff's experts typically are
15 either proactively or -- or in response to that
16 issue being raised attempt to make -- demonstrate
17 something to suggest that they're showing something
18 beyond just polar- -- polarization on the basis of
19 pardon.
20 Q Okay.
21 A Some experts -- some experts -- some
22 plaintiffs' experts say, I don't have to do this or
23 they address it by saying I know this is -- people
24 raise this issue.
25 But the issue, in fact, is -- is

1 unimportant under the law and so I don't have to
2 deal with it because it -- polarization whether
3 it's partisan or -- or racial with regard to
4 candidates is the same thing under the law.
5 Or they respond to it by saying, you
6 know, something about the origins of party
7 affiliations or some causal analysis, something.
8 But -- but yes, it's not -- it's no
9 longer unusual for them to respond to that,
10 including in their initial report before the
11 issue's has been raised by -- by a comment on the
12 report. They raise it proactively in the report
13 itself.
14 Q And what statistical analysis would an
15 expert do in order to attempt to disprove
16 partisanship as a potential motivator of voting
17 behavior in your opinion?
18 A Sometimes I feel like I'm in an
19 alternative universe. I mean, I not -- you've --
20 this -- this analysis. Dr. Handley's analysis is
21 the analysis she used to disprove partisanship.
22 It's just -- if you're asking me what
23 analysis would you do to disprove partisanship, if
24 the fact was that the country was heavily polarized
25 on the basis of party, you're asking what analysis

1 would disprove what's factually true.
2 It's just factually true that U.S.
3 politics right now is extremely polarized on the
4 basis of party. You can't -- I mean, you would
5 have to have been living in a cave for 50 years not
6 to realize that.
7 In political science in the 1950s, there
8 was an article called "There's Not a Dime's
9 Difference Between the Parties."
10 The -- the American Political Science
11 Association launched an entire effort to try to get
12 people to take party more seriously and to try to
13 be more polarizing, quit just sort of sitting
14 around in the middle somewhere.
15 Nobody talks about that anymore because
16 we're -- we're in an extraordinarily polarized era,
17 particularly for American politics.
18 So if you're asking is there a technique
19 of analysis that would obscure the reality of the
20 role of partisanship in American elections and
21 prove it's not there, I don't know what the
22 technique would be because any technique, including
23 the one Dr. Handley is using, shows that to be true
24 and to be overwhelmingly true.
25 Q So does that mean that there can't be

1 racially polarized voting?
2 MR. JACOUTOT: Object to form.
3 A No.
4 BY MR. MILLER:
5 Q So if partisan polarization is always
6 going to be present, how can racially polarized
7 voting be proven?
8 A Well, first of all, partisan polarized
9 voting isn't always going to be present. It just
10 happened to be present now. And it's largely
11 pushed a lot of other factors out of voter's mind.
12 All right. So there are a whole series
13 of things. I mean, like, if you had -- if you told
14 me 30 years ago that out of 14 or 15 perfectly
15 plausible candidates, the Republicans would
16 nominate Donald Trump, I would have told you you're
17 out of your mind.
18 But -- but they did and then -- and the
19 voters supported Trump and continue to support
20 Trump on a largely partisan basis.
21 But we're in a partisan era. But we have
22 not always been in a partisan era and we won't
23 always be in a partisan era.
24 So that's just a fact, right? So -- so
25 that's the background fact. And then -- and you

1 want to know can you still find if race is in
2 there, and it may be, and then how would you
3 determine that.
4 And one answer would be just to look
5 across the set of elections like these and you'll
6 see -- you'll see what -- what the -- what the
7 added effect of -- of race of a candidate is over a
8 party of a candidate or the subtracting effect.
9 And here you don't -- you just don't see that.
10 So what that tells you is whatever it is,
11 it's -- it's small. But more importantly, what it
12 tells you is that if you're going to make your case
13 on the basis of this 90 versus 90 polarization,
14 you're going to have to accept that that 90 versus
15 90 is party, it is not racial polarization.
16 It's -- unless you want to define racial
17 polarization as having nothing to do with the race
18 of candidates.
19 In other words, if the question is with
20 regard to choice of candidates, are Black and white
21 voters equally situated once you take into account
22 their party affiliation, just suggests they're
23 equally situated.
24 Q And based on your description of partisan
25 polarization more generally, that's going to -- let

me strike that.

So just to make sure that I'm -- I'm clear here, are there any situations in which racial polarization would still be evident against the current backdrop of extreme partisan polarization in the United States?

MR. JACOUTOT: Object to form.

A Again, it's -- you know, party -- party is one of the signals that we get in our election system in -- in partisan elections. There is a party signal on the ballot that was -- we indicate that on the ballot. In some states we even vote straight party ticket where the only thing voters are voting on in the pack at the top of the ballot is the party label.

So it's there. It's a stimulus for voters. There's lots of other information out there. Quality of candidates, the honesty of candidates, the race of the candidates, the gender of candidates, the religion of candidates or lack thereof. Sexual orientation of candidates. This in the modern world that's out there.

All that's out there and all of that can have an effect on the ballot. There's nothing magical about the thing. Well, because it's a

1 partisan election, nothing else can matter. Those
2 things can matter.
3 They're -- but, you know, you can -- but
4 needless to say in characterizing some elections in
5 the south, people used to say Black voters can --
6 can, you know, have any candidate they want so long
7 as the candidate is white, right?
8 That it's -- Black voters are able to
9 elect the candidate they prefer as long as they
10 don't prefer the Black candidate. If they prefer
11 the Black candidate, that candidate won't be
12 elected because white voters won't support a
13 candidate regardless of the candidate's ideology,
14 et cetera.
15 So that's not the case in these
16 elections. These cases don't illustrate that Black
17 voters can have any candidate they want as long
18 that candidate's not Black because that's not what
19 we're seeing here. We're just not seeing that
20 effect.
21 So again, it may be in a highly -- I
22 don't know if you think it's a positive or a
23 negative, but the fact is people just don't care
24 about -- generally don't care about race as much as
25 they used to, you know, a whole variety of ways.

1 And they care about party a whole lot more than
2 they used to. And so that's what it comes down to.
3 And it's -- it's only to make things a
4 lot simpler. I mean, if you -- you know, if you
5 just want to create representation in a certain
6 way, this is not very complicated. You just -- you
7 just structure the districts for a particular
8 partisan outcome.
9 Any district that's majority Democratic
10 will more often than not elect a candidate of
11 choice of Black voters in Georgia. Any district
12 that's majority Republican will more likely than
13 not elect a candidate of choice of white voters in
14 Georgia.
15 So it's really -- it's not a particularly
16 complicated picture. I mean, certainly it suggests
17 to me that maybe you ought to spend a little more
18 time addressing partisan gerrymandering than the
19 current court believes is appropriate.
20 But, you know, sort of the gist about the
21 same time that the Supreme Court decided not to
22 worry about it, partisan gerrymandering is just
23 running rough shot at levels never seen before, you
24 know. But that's a -- that's an issue for another
25 day.

Q So Dr. Alford, when's the last time you analyzed a dataset for a given jurisdiction and determined that there was evidence of racial polarization?

A Fairly recently, I would say.

Q And --

A I don't think it -- it comes up fairly often. I mean, not -- not -- in most cases I think most people don't, you know, end up in court in these things unless they've got some sense of what's going on, but you know, certainly some people get sued and I'm asked to come in and look and give some advice to the lawyers and not --

Q And so, what --

A I would say it's certainly not -- not common, but it's not uncommon and -- and it's happened fairly recently, yes.

Q And so what distinguished that situation, given the common back drop of extreme partisan polarization, from what we're seeing in the statistical analysis provided by Dr. Handley and Dr. Palmer in this case? What was different?

A What was different was the behavior of voters was clearly aligned at some level, maybe not as clear as it is here, but pretty clear evidence

that minority voters typically preferred minority candidates and white voters mostly preferred white candidates or nonminority candidates. And just what do you expect, I guess.

Q Well, so, what I'm -- what I'm trying to figure out, though, is that we have in this case EI estimates showing that the overwhelming majority of Black voters when given a choice between a Black candidate and a white candidate are choosing the Black candidate, right?

A No. I'm talking you can -- again, you know, if you want to keep going down that route of creating a -- you know, a fake table with a fake result and stating it as if it meant something, go ahead.

But we don't have any evidence here that Black voters overwhelmingly prefer Black candidates. We don't.

Q So --

A They give exactly the same share of the vote to white candidates if they happen to be the Republican.

So if you're asking about what's the fact pattern where I would tell -- as a consulting expert would tell the -- the jurisdiction that it

1 ought to settle the case or I'd tell lawyers for
2 the plaintiffs that they ought to pursue the case,
3 it's not this fact pattern.
4 It's a fact pattern where Black voters
5 actually -- or Hispanic voters actually prefer to
6 vote for candidates of their own ethnicity, and
7 white voters prefer to vote for white candidates.
8 Not where it's just, you know, a breakout by the --
9 by the party identification or party label of the
10 candidates.
11 This is where it's actually -- it
12 actually breaks out by the race of the candidates,
13 not by the party of the candidates.
14 Q So what you're looking for to see
15 racially polarized voting is a greater degree of
16 support for -- by a minority group for a candidate
17 of that minority group than a candidate not of that
18 minority group in a general election, is that what
19 you're describing?
20 A But that's not -- that's not the pattern
21 I -- the pattern that I am describing to you is not
22 that pattern.
23 Q Okay. What pattern are you describing?
24 A This is not the case of where there's a
25 one percentage point or two percentage point

1 difference. The pattern I'm describing to you is
2 one where you get evidence of polarization, and
3 that the table -- that evidence of polarization is
4 consistent with the -- and connected to the race of
5 the candidates.
6 And that's not what's going on here,
7 right? So here it's not connected to the race of
8 candidates, but when the evidence is connected to
9 the race of the candidates where it actually varies
10 by the race of the candidates, not by, you know,
11 some other shared characteristic, then I think
12 that's -- that's the kind of evidence you'd be
13 looking for.
14 Q And when you say "varied by the race of
15 the candidates," do you mean that the degree of
16 support for candidates of the same party will vary
17 based on the race of the candidate or candidates of
18 different parties will vary based on race of
19 candidate?
20 Just what does that mean? I'm just
21 trying to understand what that's going to actually
22 look like in practice.
23 A Well, I guess what it would look like in
24 practice would depend on what it looked like in
25 practice, I guess. I don't know.

I don't -- the -- the case that I'm talking about, the most recent case I'm talking about is a -- are nonpartisan elections. And in those nonpartisan elections there's -- there's a pattern of voting by race.

I'm involved in another case where in the nonpartisan elections there's no indication of voting by race.

So there's -- when you do this analysis on nonpartisan elections, you sometimes see racially polarized voting and sometimes you don't, and that varies by jurisdiction and -- and so it is what it is.

Q Is it possible --

A In general --

Q -- to see evidence of racially polarized voting in a partisan election today in 2023?

A I mean, I think you're -- you seem to be suggesting that the reason that we're not seeing racial polarization in this election is because somehow the technique doesn't allow it or partisanship doesn't allow it.

It's -- there's nothing about this that's inherent in the nature of the partisan elections. It's -- it's just -- it factually isn't there.

1 So is there any way it could be there,
2 yes, if -- if -- if voters, in fact -- if white
3 voters, for example, would not vote for a Black
4 candidate regardless of their party, then you'd
5 sure as heck see it.
6 Q And so, when you referred a few minutes
7 ago to having seen evidence of racially polarized
8 voting recently, that was in nonpartisan elections,
9 right?
10 A Correct.
11 Q Okay. When is the last time you
12 concluded there was racially polarized voting in a
13 bipartisan election?
14 A Not any time recently. I mean, I -- it
15 may have been in -- in some earlier local case, but
16 I -- nothing specific comes to mind.
17 Q Okay. So you can't recall the last time
18 you determined that there was racially polarized
19 voting in a partisan election?
20 A It's not -- so, again, it's not typically
21 something I'm doing independently. In most cases
22 I'm hired after there are already experts on the
23 other side and I'm going to respond to what the
24 evidence they provide.
25 I'd say and in -- in a majority of cases,

1 certainly over the last decade or two decades,
2 polarization -- the polarization in general
3 elections is -- is largely partisan polarization.
4 Q Okay. Does showing that Black voters
5 constitute a politically cohesive unit require an
6 inquiry into the reason that Black voters are
7 voting cohesively?
8 MR. JACOUTOT: Object to form.
9 A It might or might not, depends on, you
10 know, I guess the first -- sort of the first step
11 in an inquiry. I think you can determine whether
12 voters are voting cohesively without regard to
13 what's creating that cohesion. And then you can
14 inquire about that or not depending on what you
15 want to do.
16 BY MR. MILLER:
17 Q So in a case where you're evaluating
18 racially polarized voting do you, in your opinion,
19 need to assess the reason that Black voters are
20 voting cohesively?
21 A It depends on what your purpose is. I
22 guess if you want to -- if you want to ask the --
23 sort of the first -- some people argue that the --
24 and I, at times have been persuaded by the
25 argument, that the Gingle threshold test doesn't

1 inquire about anything beyond just whether two
2 groups vote in different ways, and completely
3 agnostic about why.
4 And if you accept that version, then you
5 can certainly conduct that inquiry without --
6 without any concern.
7 I mean, that's really -- you know, when
8 we had that earlier discussion about does this show
9 that Blacks and whites are voting differently? It
10 certainly does.
11 So if that's all you want to know is are
12 they voting differently and you don't want to go
13 beyond that, then -- then you're done.
14 Q Do you accept that formulation of the
15 Gingles factors?
16 A As I said, I've gone back and forth. I
17 think it's a -- what's being waived there I think
18 is right -- ultimately, you're going to have to
19 show that voting is racially polarized under the
20 totality of the circumstances. That's I think is
21 clear.
22 And then I think the question of whether
23 you would need to -- the question of whether you
24 need to inquire beyond that at the Gingles level is
25 really -- as I understand the Gingles threshold

1 test, the idea is to create a kind of manageable
2 standard that helps kind of get things cleared up
3 and only go to a full trial for things where, you
4 know, there's some potential for this -- for the
5 case to go somewhere.
6 So if you think in -- given that the
7 inquiry -- the polarization data that's used for
8 the totality of the circumstances is the same data
9 that was used for the Gingles, I think there's an
10 efficiency argument for looking at that at the
11 Gingles level so you can decide as a threshold
12 matter.
13 But I can see an argument that as a
14 threshold matter, you would need to have racially
15 polarized voting on account of race, if there's a
16 totality of circumstances, you have to have it.
17 Then it would seem like it would also -- could also
18 apply at the threshold.
19 If you think it's actually more efficient
20 just to do the threshold test just to see if you
21 have essentially a sort of pattern that's fixable
22 or something, and then inquire of that totality in
23 circumstances in trial, you know, that to me is
24 not -- it's not just a legal argument, but it's a
25 -- it's kind of legal standards, legal approach,

1 legal test kind of thing.
2 I -- I really don't -- all I know is
3 if -- if it's got to be a part of totality of the
4 circumstances, then it's going to have to be
5 discussed somewhere. And I don't particularly care
6 whether it's -- whether it's depositive or
7 dispositive at the -- at the Gingles level or at
8 the totality. So, I don't know.
9 I -- I've read a judge's opinion where
10 they made a -- what I thought a pretty persuasive
11 argument that it was -- that it was a totality
12 factor and not a Gingles factor.
13 So I think reasoned people can make
14 arguments either way, I don't really care.
15 Q Okay. So you don't have an opinion about
16 whether the reason for -- for Black voter cohesion
17 matters at the Gingles factor stage of a Section 2
18 case?
19 MR. JACOUTOT: Object to form.
20 BY MR. MILLER:
21 Q Let me rephrase that actually.
22 MR. MILLER: That's a fair objection,
23 Bryan.
24 BY MR. MILLER:
25 Q So do you have an opinion as to whether

1 the reason for Black voter cohesion needs to be
2 assessed as part of the Gingles Step 2 inquiry?
3 MR. JACOUTOT: I'm just going to object
4 to the extent it calls for a legal conclusion.
5 A Yeah, I don't -- I don't have any
6 particularly strong feelings about that either way.
7 I mean, again, I can think of some
8 efficiency arguments, whatever, but it's -- that's
9 -- that's for the courts to decide and I don't -- I
10 don't see that in the end it's -- you're going to
11 end up at the same place, so I don't think it
12 matters whether it's -- whether it's part of
13 Gingles 2 or whether it's part of the totality.
14 BY MR. MILLER:
15 Q Okay. And then does showing that white
16 -- that white voters vote sufficiently as a block
17 to usually defeat Black voters' preferred candidate
18 require an inquiry into the reason for white
19 voters' behavior?
20 A Again, if you're just --
21 MR. JACOUTOT: Same objection.
22 A If that's just -- if you're strictly
23 talking about Gingles 3, it's -- you know, again,
24 it's a legal question. I don't know.
25 I just know that ultimately that -- you

1 know, if -- if you're going to advance from there
2 to -- to the -- to racial polarization as a
3 totality, then you're going to have to answer that
4 question. So you can answer it wherever you want.
5 BY MR. MILLER:
6 Q Okay. Okay. And just kind of looking
7 back to some of the things that we were talking
8 about earlier.
9 In your opinion, can there be racially
10 polarized voting if Black voters are cohesively
11 supporting white candidates?
12 A There can be, but, again, the -- the most
13 probative contest for assessing those issues are
14 racially-contested elections, and I don't think
15 it's -- they're probative because it doesn't matter
16 which candidate Black voters are preferring.
17 If -- if Black voters prefer white
18 candidates half the time and Black candidates half
19 the time, that doesn't seem to me to be a
20 particularly strong suggestion of -- of voting on
21 account of race. It's just the opposite, so.
22 Can there be? You know, I -- I think
23 that's a strange kind of hypothetical, but you
24 certainly need to provide some evidence to suggest
25 that. But if the fact pattern is that Blacks are

1 equally likely to vote for a Black candidate or a
2 white candidate, then I don't think that in and of
3 itself establishes racially polarized voting on
4 account of race or even cohesion on account of
5 race. It's --
6 Q And that's again --
7 A I assume the reason that Dr. Handley is
8 touting and you have been emphasizing the clarity
9 of the -- of the cohesion among Black voters and
10 among white voters is that that's -- you care about
11 that clarity.
12 And you keep saying every Black candidate
13 in this table, as long as we exclude the senate
14 contest, as being supported cohesively by Black
15 voters.
16 If the table showed that that was true
17 half the time and not true half the time, I don't
18 think you'd be hitting that so hard.
19 And rightly so, because it suggests --
20 again, it suggests that it's not really -- like,
21 Black voters are equally likely to choose a Black
22 or a white candidate. It sounds like they might be
23 indifferent to the race of the candidate.
24 And I do think that tells you something
25 different, at least in the totality sense, about

not only how this is functioning but how it's likely to work out when you try to remedy it.

Q Okay.

MR. MILLER: Okay. I think that it might be a good time to take -- if we can go off the record, please.

VIDEO TECHNICIAN: Off the record 3:04.

(Recess taken.)

VIDEO TECHNICIAN: Back on the record. The time 3:22.

BY MR. MILLER:

Q Dr. Alford, Dr. Handley analyzed a set of Democratic primaries in her report, right?

A That's correct.

Q Okay. Is it in your opinion necessary to analyze primaries to determine whether there is racially polarized voting in a given area?

A I would say if -- if the general election analysis doesn't provide an answer to that question, then certainly primary data is one alternative.

Q An alternative, but is it a necessary alternative?

A I -- again, if -- you know, if you're -- if you're comfortable that the general election

analysis demonstrates what you want to demonstrate, then I don't think you need to look at primaries.

If you don't believe that the -- that the general election analysis is -- demonstrates what it is you're trying to demonstrate, then certainly you can look at primaries.

I'm not sure it's required, but I guess it depends on whether you want to -- I mean, if -- you know, if you want to accept that the general election analysis doesn't allow you to determine that and just give up, then you don't have to do it. Nobody's making you do anything.

But if the general election analysis is not useful or helpful in understanding that, it leaves you with an open question about what's going on in the elections, then I think you -- if you want to win the case as a Plaintiff, I think you need to do something.

So something's required and that might be maybe the most obvious next step. I mean, I think assumes -- I wasn't surprised to see Dr. Handley looking at primaries.

Q Okay. So it's -- so primaries are one means of providing evidence of racially polarized voting on top of an analysis of general elections,

1 right?
2 A Correct.
3 Q Okay. And in the primaries that
4 Dr. Handley analyzed, are the primary contests
5 preventing Black-preferred candidates from being
6 elected to office?
7 A I'm not sure what you mean by that.
8 Q Are --
9 A Are they --
10 Q Are -- so to take office, a candidate
11 generally needs to win both a primary and a general
12 election, right?
13 A Correct.
14 Q And are the Black-preferred candidates in
15 these areas losing in the primaries that she
16 analyzed?
17 MR. JACOUTOT: I'll object to form.
18 A I -- I don't know who's winning or
19 losing. I'm just looking at her analysis of how
20 the different groups voted, so.
21 BY MR. MILLER:
22 Q Okay. So you didn't -- you didn't offer
23 any opinion in this case about whether primaries
24 are preventing Black-preferred candidates from
25 being elected to office in the areas that

1 Dr. Handley analyzed; is that correct?
2 A Correct.
3 Q Okay. And so, when Black-preferred
4 candidates are -- okay, let me strike that.
5 Would whether Black and white voters
6 support different candidates in primary elections
7 affect your opinion whether there is racially
8 polarized voting?
9 A It's -- it's -- you know, it's evidence
10 that might contribute to that. So again, I think
11 it's worth looking at.
12 It certainly could provide evidence that
13 would be a part of a broader opinion. I don't
14 think it's in and of itself conclusive but...
15 Q And if white voters and Black voters were
16 supporting different candidates in primary
17 elections, would that polarization be explainable
18 by partisanship?
19 A Again, that's -- it's a degree of
20 polarization. Just supporting different candidates
21 is not polarization.
22 But -- but candidate support is -- in --
23 in the context of a single party's primary, is
24 unlikely to be related to the party in particular
25 in the narrow sense that we're talking about in the

1 general elections, which is that voting is related
2 to the party label on the ballot because there
3 aren't party labels on the ballot in a Democratic
4 or Republican primary.
5 Except that people obviously, I think,
6 understand that in the Democratic primary -- well,
7 I should say, some people understand in the
8 Democratic primary there are Democrats and in the
9 Republican primaries mostly are Republicans.
10 Q So when you say that partisanship is
11 unlikely to -- to factor into voter behavior in a
12 primary, how would it factor into voter behavior in
13 a primary at all?
14 A So just -- I just want to make clear
15 that, again, in the general election discussion,
16 I'm -- I'm not talking about how voter partisanship
17 necessarily factors into a voting decision, I'm
18 just talking about how the party queue on the
19 ballot affects the behavior of the Greeks that
20 we're analyzing.
21 And so there is no party queue on the
22 ballot here. So in that sense it can't -- it can't
23 affect voting.
24 It may affect it in other ways, so have
25 been -- so there are -- well, for example, in the

1 Republican primary in 2022, there was a candidate
2 that's kind of had the backing of kind of
3 establishment party figures.
4 So if you're sort of an establishment
5 party figure, what used to be considered to be, you
6 know, kind of a normal Republican, now maybe it's a
7 rhino, I don't know, or whatever. So that those
8 sort of variations, factual variations, within
9 party, the strength of party ID, may have
10 considerable effect on -- on how people feel a
11 candidate's inside the primary.
12 But -- but it's not going to -- the
13 effect's not going to be the effect that -- of
14 simply a candidate queue.
15 So again, that puts us over into another
16 area of inquiry.
17 So in my view, the utility of the primary
18 is that they eliminate the party queue on the -- on
19 the ballot. Sometimes that confuses voters, but --
20 but there is not a party label that allows them to
21 simply vote for all the Democrats or pull a
22 straight party ballot lever.
23 And so it's a -- it's a context that --
24 that eliminates the pattern -- the source of one of
25 the patterns that we see in the general election

voting.

Q And so we earlier talked about how a party label can be a confounding variable in your opinion in general elections. Do primaries eliminate that confounding variable when addressing voter behavior?

A Yes. And again, there -- it's no longer confounded because while it is true that all of the Black candidates in these primaries are -- are running as Democrats, so are all the white candidates in the primaries.

And so, it is no longer the case that -- that Black and Democrat go together, and therefore, make it hard to separate it. The party label is consistent across everyone.

And so what's varying from candidate to candidate are a whole series of factors, one of which is the race of the candidate.

And it's now not perfectly confounded by the party of the candidate, so, yes, you eliminated the confounding factor.

Q Okay. So we're able to isolate the queue provided by the race of the candidate when we look at parties; is that fair to say?

A We're able to -- I wouldn't say you're

able to isolate it because all the other things that affect voting are still out there affecting voting.

But just as when you look beyond the -- the racially contested elections, you're able to disambiguate between the party queue and the racial queue because of the mix in the primaries, instead of going in a different direction by -- by making sure that everybody is the same party you can disambiguate that party queue from the racial queue. That's --

Q Okay.

A -- done off of other queues.

So you definitely can -- it definitely removes the effect of the party, the candidate's party label from the set of queues that a voter might draw on.

And so in that sense that by holding party constant, it let's you look at what effect varying race has, all of the things being out there.

Q And is it possible for a general election to be racially polarized if the primaries leading up to that general election were not themselves racially polarized?

MR. JACOUTOT: Object to form.

A I guess -- you know, it's -- it's very difficult to say that something is impossible. But I guess -- I hesitate to say it's impossible, but I would say if -- if that were the fact pattern, I -- I think it would presume extremely difficult fact pattern for -- for -- for making any sort of judgment under Section 2 of the Voting Rights Act.

I mean, what -- so this is jurisdiction where in the -- in -- in the primaries white and Black voters don't care about the race of their candidates.

In the Republican primary, the Republicans don't care, Black, white, doesn't make any difference. Democratic primary, they don't care one way or the other. Makes no difference at all.

And then when they -- when it gets into the general election suddenly they care deeply about and suddenly race is a powerful factor that -- that seems extremely odd.

And -- and one of the things I think that's important and that the -- one of the reasons the court likes to see elections over a period of time, not just a single election, is the idea that

1 this is not just some momentary issue but, rather,
2 is a sustained issue that absent the intervention
3 of the court is going to continue to prevent
4 minorities from being able to elect candidates of
5 choice.
6 And so if this -- if this prejudice in
7 the electorate is one that switches off and on
8 within a single election year, in that fashion -- I
9 mean, I -- it's hard to see what -- I can't quite
10 understand what that would be exactly.
11 But I just -- that seems like you set a
12 -- that's a very uphill battle, I think, for
13 establishing that.
14 I mean, the only way that seems likely to
15 me is if voters in the general election continue
16 not to care about the race or candidates or they've
17 already shown they don't care and just vote on the
18 basis of the party of the candidates.
19 I can't imagine that in the general, that
20 suddenly voters that had -- I mean, the argument
21 would be so the Republicans have just nominated a
22 Black candidate, but they refuse to vote for Black
23 candidates in the general election.
24 I guess it's possible, but that's a very
25 self-defeating kind of behavior, isn't it? It's

1 just odd beyond -- it's odd behavior generally.
2 It's also strategically nonsensical. So --
3 BY MR. MILLER:
4 Q So --
5 A -- certainly would have a hard time
6 believing that's an act -- could be an actual fact
7 pattern.
8 Q So let's alter that hypothetical then a
9 bit, and suppose that there is racial polarization
10 in the primaries of one political party, but not
11 racial polarization in the primaries of the other
12 political party.
13 Would it still be possible to demonstrate
14 racial polarization in general elections with that
15 primary background?
16 A It's always possible to just --
17 MR. JACOUTOT: Object to form.
18 A You keep coming back to this, is it
19 possible to demonstrate. It's -- there's nothing
20 about this that suggests it's impossible to
21 demonstrate. It's possible to demonstrate, it just
22 has to be there.
23 If voters take race into account in their
24 voting in the general election beyond, you know,
25 whatever their inclinations are based on, ideology

and a region and friends and neighbors and et cetera, they do; and if they don't, they don't.

So is it possible? Of course, it's possible. There's nothing -- there's nothing about the situation that makes it impossible for voters to -- to vote on the basis of the race of candidates that -- the race of the candidates is typically there, typically fairly well-known, and as far as I know there's nothing to stop people from taking it into account if they take it into account or not take it into account if they don't.

BY MR. MILLER:

Q Okay. So there's nothing dispositive to racially polarized voting in a general election from the exist -- from the lack of racially polarized voting in one party's primary, right?

A Well, if we've established racially polarized voting in the general elections and then found that voting wasn't racially polarized in one party's primaries, I would say that -- I mean, it's interesting, but I don't think that changes all that much.

On the other hand, if you find that voting is not racially polarized in the general elections, then I don't think it -- then I think

it's -- that's obviously a different situation.
Q Okay.
A But, yes, if -- if voting is racially polarized in the generals and racially polarized in one of the parties, then I think that could be -- the fact that it's not racially polarized in the other party wouldn't -- wouldn't undermine the -- the case.
It's obviously dependent on the configuration, but I think there are configurations in which that would not undermine the case for racially polarized elections on account of race.
Q Okay. And do you agree that there are many reasons why a person might vote in a particular party's primary?
A I'm sure there are.
Q And similarly, there are many reasons why a person might affiliate with a particular political party, right?
A Yeah. Again, in -- in the United States somewhat unusually we have actual party identification which is different than disaffiliation or supporting a party.
So some people support parties, some people feel some affiliation with parties, and some

1 people have an actual partisan identification in
2 the United States.
3 Q And all of those degrees of support could
4 be influenced by a number of factors, right?
5 A Yes.
6 Q And we talked earlier about how race is
7 one of the reasons that a person might express some
8 degree of support for a political party, right?
9 A Yes.
10 Q Okay. And so, similarly, race could be a
11 reason for participation in one political party's
12 primary, right?
13 MR. JACOUTOT: Object to form.
14 A I think it could be.
15 BY MR. MILLER:
16 Q And then does the absence of racially
17 polarized voting in a primary tell us why the
18 voters who voted in that primary chose to vote in
19 that primary?
20 A The inquiry into why people choose to
21 vote in a primary is a -- is a large and
22 multifaceted inquiry, so I wouldn't think any one
23 thing would tell you the answer to that question.
24 So I -- I would say among a whole lot of
25 other things that doesn't tell you the reason why

1 somebody might or might not vote in that primary.
2 Q Okay. And --
3 A I don't think there is -- I don't think
4 there is a reason. And again, I think there's kind
5 of large number of forces that come together to
6 motivate participation, period, and specific
7 participation. And so that's -- that doesn't say
8 one way or the other what might be going on.
9 Q And then with respect to party
10 affiliation support, whatever degree that might be,
11 the lack of racial polarization in a party's
12 primary doesn't tell us why that party's voters
13 affiliate or support that party, right?
14 MR. JACOUTOT: Object to form.
15 A Again, it -- it may -- I want to be
16 careful about what you're saying. It doesn't tell
17 us that that's the reason.
18 It may, in fact, be the reason, right?
19 It doesn't exclude it from being the reason. But
20 in and of itself, it doesn't tell us that or pretty
21 much anything else about why people are
22 participating.
23 So it's a -- it suddenly doesn't bar that
24 as an explanation, it doesn't mean -- it doesn't
25 bar everything else as an explanation.

1 I mean, here we're just into a -- as far
2 as I can tell, at least in the context of this
3 case, you know, an area that's just almost
4 completely unexplored.
5 BY MR. MILLER:
6 Q So it doesn't tell us one way or the
7 other -- sorry -- it being the lack of racial
8 polarization in a party's primary -- doesn't tell
9 us one way or the other why voters affiliated or
10 supported that particular party, is that an
11 accurate description of what you just said?
12 A I guess -- I think maybe you're just --
13 you're stating something that's so general that my
14 responses are just not meaningful, and I assume you
15 really don't want to get unmeaningful responses
16 because then when I -- at some point I get asked a
17 meaningful question that sounds really similar,
18 I'll give a different answer. You'll feel like I
19 cheated you and I don't want to do that. I really
20 want to be as clear as possible.
21 So if -- if people are participate -- or
22 voting in a primary without regard to race, then I
23 think if you were trying to make a case that they
24 picked the party on the basis of race, it's a race
25 -- when I'm choosing my political party, that

1 overwhelming concern to me is race. And so I pick
2 a party based on race.
3 And then once I'm -- I've chosen that
4 party, when it comes time to nominate candidates, I
5 don't care about race at all.
6 But is that possible? I mean, I guess
7 it's not impossible because people do really,
8 really weird things. But it certainly seems as
9 opposed to the other possibility highly unlikely.
10 So consider two possibilities. So I
11 choose to go into the whatever it is, the America
12 first party solely because I am a racist. And then
13 when there's a primary within the party, I could
14 care less whether the candidates are Black or
15 white. That seems pretty unlikely.
16 It seems much more likely to me that --
17 that if you join a party because you're a racist,
18 that your behavior within the party will probably
19 be racist. I mean, I don't know.
20 I heard an expert once indicate that he
21 thought Clarence Thomas was a racist. I -- you
22 know, I just find some of this use of these terms
23 to be a little bit extraordinary.
24 But -- but I think if -- you know, if
25 people joined parties because they have a strong --

1 they have strong racial preferences with regard to
2 politics, then I don't -- I don't understand why
3 they would leave those prejudices or preferences at
4 the door and show no indications of that inside the
5 party.
6 Again, it's not impossible because that's
7 kind of the way you're phrasing it. Does this
8 disprove or prove? Doesn't do either. But one of
9 those is a lot more likely than the other.
10 And if you're going to convince me that
11 -- that people join parties for racial reasons but
12 don't vote within the party in a racial way, you're
13 going to have to fill that story in with something
14 awfully convincing because it just sounds very
15 strange to me.
16 Q So I want to separate out what you refer
17 to as racial preferences of voters from a voter's
18 race.
19 So if I'm understanding you correctly,
20 you would view the lack of racially polarized
21 voting in a party primary as suggesting that voters
22 have not chosen to vote in that primary because of
23 their racial preferences; is that right?
24 A I'm not sure. I mean, that's sort of
25 running it backward the other direction. So yes, I

1 would say -- and I think it makes more sense
2 running time forward always than running time
3 backwards, but...
4 So running that forward, if people -- if
5 people are choosing a party on the basis of their
6 preferences for -- along the lines of race of
7 candidates, then I think they would -- you didn't
8 need a very complicated explanation for why that --
9 that force which drew them to the party is no
10 longer relevant --
11 Q And so --
12 A -- within the party.
13 Q -- can -- can we distinguish or do you --
14 let me rephrase that.
15 Do you distinguish between a person's --
16 what you're referring to as -- as racial
17 preferences, which is just the candidates, from
18 that person's, let's say, racial identity? Are
19 those distinct concepts?
20 MR. JACOUTOT: Object to form.
21 A Yes, I think they are.
22 BY MR. MILLER:
23 Q Okay. So --
24 A So I'm -- I'm not -- I would just say,
25 you got to remember what we have information about

here. Right?

What we have information about in this analysis, Dr. Palmer's, Dr. Handley's and mine, we have information about the race of voters and we have information about their preferences over the race of candidates.

We don't have information about the racial identity of either of the voters or the candidates. We don't know about, you know, what other kinds of things may be involved in -- in their decisions. We just -- that's what we have the information about.

And so, the -- what we're able to provide analysis for is whether -- whether, in fact, voters of different races make very different decisions depending on the -- you know, with regard to candidates, depending on the candidate or party of -- race or party of the candidates.

And so, it's -- what we can match up is -- we can vary the race of candidates and look at how that affects voting by racial groups, but that's really all we have access to.

Q Okay. And within the primaries that Dr. Handley analyzed, are there primaries that are racially polarized?

A Yes.

Q Okay. And setting aside for a moment the definition of cohesion that we discussed earlier. Do you agree that in a majority of Democratic primaries that Dr. Handley analyzed, the majority of Black voters supported a single candidate?

A I don't know.

Q Okay. So we can look at maybe Page 8 of your report, and I'm just looking at the second full paragraph. And so you say: "Using even a modest 60 percent standard for voter cohesion, Black voters voted -- Black voters voted cohesively for Black candidates in only 35 contests out of 77 (46 percent). If we add the instances where Blacks vote cohesively for white candidates that rises to 49 contests (64 percent of the 77 total)."

So using a 60 per- -- well, using a 60 percent standard for voter cohesion, do you agree that in a majority of the Democratic primaries that Dr. Handley analyzed, Black voters cohesively supported a single candidate?

A Again, I'd have to look. There are some multiple candidate contests in there. And I'm -- again, this is not -- I'm not endorsing the 60 percent standard, so I'm just, you know, trying to

make -- sort of put this as close as I can to sort of what her standard might be, perhaps, or someone's standard might be.

I wouldn't consider -- unless the Black cohesion is above 75 percent and white -- Black voter and white cohesion the other direction is about 75 percent, I wouldn't consider it to be a racially polarized selection.

So in what proportion are the Black voters voting cohesively by -- in my judgment would be -- that would be cases where Black voters are voting at about 75 percent for a candidate, so I don't think that would be the majority.

And whether this is voting for a single candidate, I don't. I could look back over it, but again, you have multiple candidate contests where you're really going to -- you're talking about racial voting and you don't want to think about what do you -- what do you do there. Do you look at single candidates? Do you look at some candidates by race, whatever?

I think it's -- I mean, it's -- it is what it is. I guess, you know, it depends on what you -- what you want to treat as cohesion. Do you want to treat a majority or do you want to treat

60 percent, you want to treat 75? There's lot of ways you can look at that.

But you got to -- you know, you'll have to make that determination and figure out what it shows you.

Q So I'm -- I'm just asking about what you wrote in your report, and it looks like in your report, applying a 60 percent cohesion standard, a majority of Democratic primaries show Black voters cohesively supporting a single candidate? That's what you've written there, right?

A Yeah, I'm not sure. I'd have to look back to see what the count was on that because I'm not sure if that's a count of a single candidate or not. I don't think it's actually a count necessarily of a single candidate.

Q Okay. So your concerns that you're raising now about single versus multiple candidates and the 75 percent cohesion threshold, those are not in your report, correct?

A I think I do discuss the cohesion standard in the report.

Q And then in the analysis of the primaries, you apply a 60 percent cohesion threshold, right?

MR. JACOUTOT: Object to form.

A Like -- so I'm -- I'm giving an illustration that even if you used a very minimal standard, you'd still get a result that obviously is dramatically different from the general elections.

And so I'm just -- you know, rather than -- but on a realistic standard and -- and provide a more extreme result, I'm just saying, you know, even if you sort of loosen everything up, you still don't get -- you still don't get the result that's being asserted here based on the general election, so, I guess, I think it's factually correct.

But I'm not en- -- I just want to make clear, I'm not endorsing a 60 percent standard for cohesion. I don't think 60 percent is cohesion.

BY MR. MILLER:

Q Okay. And in your report when you referenced the 60 percent threshold for cohesion, you describe it as having been used by, quote, "multiple plaintiffs' experts."

Who are those plaintiffs' experts that you're borrowing this threshold from?

A I think the most -- so two or three early mentions, one by Barreto, another by Enos. And

then I saw it picked up somewhere else more recently, but I can't -- I can't remember for sure.

So I mean, there's a movement away from asserting that -- that -- you know, that a simple majority is cohesive, so, which I think is useful and appropriate.

But again, in the end this is not a -- there's not a social science standard for polarization or cohesion. There's going to be some -- and as of right now there's not a -- as far as I can tell, there's not a court standard, so.

Q Okay.

A So -- so again, labeling cohesive or not cohesive, it's -- you know, it's cohesive at 51 percent, at -- maybe at 60, not at 75, pick your point. It is what it is.

And I think anybody, again, that's capable of reading these tables and then seeing what the tables show, there's a lot of variety here.

And in behavior, it doesn't look at all like the -- the pattern Dr. Handley described as clearly polarized voting. This doesn't look clearly polarized to me at all.

Q Has your report offered an opinion as to

1 cohesion other than by reference to the 60 percent
2 threshold?
3 A I think the point of this entire section
4 is I don't think that the Democratic primary shows
5 racially polarized voting.
6 But again, I don't -- again, argue about
7 standard or strengths or whatever, these -- just
8 the overall pattern of these elections to me is not
9 -- well, it doesn't look like a pattern that's
10 convincing evidence of racially polarized voting.
11 I think that's the context of the entire
12 discussion.
13 Q And in the discussion of the report
14 itself, the justification given for the lack of
15 cohesion is the failure to meet a 60 percent
16 threshold used by multiple plaintiffs' experts,
17 right?
18 A Well, I mean, earlier in the paragraph I
19 say: "The support of Black voters for Black
20 candidates varies widely, and seldom reaches above
21 80 percent."
22 So I guess you could argue that that's
23 the 80 percent standard.
24 "Similarly, white voter support for
25 Democratic candidates is typically below 20 percent

in general elections, but in the primaries white support for Black candidates varies widely and is often fairly evenly divided."

I mean, the point throughout here is that -- that they simply are not -- this is not the -- you know, we know what a pattern of polarized voting looks like because Dr. Handley showed it to us in the general elections. And this pattern in the primaries looks nothing like it at all.

Q And --

A I don't think you have to go to any particular extreme to suggest that this does not look like a pattern of consistent racially polarized voting. It's not even consistent cohesion on the part of Black voters.

Q And when you use the 80 percent measure there, you don't describe 80 percent as a threshold or a standard, right?

A No. If I'm -- and again, I'm not sure where it is in the report, but at some point I'm talking about -- earlier I think talking about the idea of the 75 percent as a neutral standard.

I know that at some point the court has mentioned something about 80 percent. I don't really -- again, that's for the court to decide.

But if -- if the court's going to make a decision about a standard, then for this -- for this set of results to be, you know, cohesive, cohesive voting or polarized voting, it's going to have to be a pretty weak standard because this is just not -- it's just not very obvious that there's -- and in here you don't have a party queue, but you have a candidate race queue, and it's just not driving behavior in the way that the -- that Handley describes or Palmer describes as racially polarized voting, even just in the sense of candidate choice.

Q Okay. So I'm sorry to belabor this point, but just to be clear, the -- is there a reference in your report to 75 percent or 80 percent or any percent other than 60 being the threshold for cohesion in a two-person contest?

A So on first paragraph, Page 6, there's a discussion. Talk about 75, talk about 80.

Q So the first paragraph on --

A Page 6.

Q So you say even if a more stringent threshold was applied, the results would still meet that. Have you in your analysis of Dr. Handley's primary elections evaluated the degree of cohesion

using a higher threshold?

A Again, I don't think I lay that out in detail in the report because I don't think it's necessary to make the point, but I mean, you can just look down the results and see that it doesn't meet that.

Q And --

A I don't --

Q And has your report offered a defense of a 75 percent or 80 percent threshold?

A Why would I?

Q Okay.

A You know, we discussed this already. I told you, the court needs to set a standard. I don't know what it's going to be.

I'm just saying, Court, figure out your standard and look down this table. If the standard is more polarized than not which would be 75 percent, and you run down that table, you don't get past Black cohesion. Blacks are not voting cohesively. So if they're not voting cohesively, you're done.

So you got to figure out what you mean by cohesion and then run the table. But I'll tell you this, if what you mean by cohesion is the pattern

you saw in the general elections, this is not that pattern.

Q And you describe the thresholds that we've been talking about for cohesion as applicable in two-person contests, right?

A It's more straight forward to apply in two-person contests, yes.

Q Okay. And the Democratic primaries that Dr. Handley analyzed are not all two-person contests, right?

A Correct.

Q So how do you go about assessing cohesion in a more than two-candidate contest?

A So I would look at a -- say you've got -- I mean, I just happen to be looking at Appendix C5, the Map 5 area table from Dr. Handley's report.

And Appendix C5 shows Secretary of State contest is the -- is that first contest. And there's a Black candidate that gets estimated 26 percent of the Black vote. There's a white candidate that gets 58 percent of the vote. And there's another Black candidate that gets 14, 15 percent of the vote.

So you can look at that and say, well, it's splitting across three ways. On the other

1 hand, it's pretty clear that the white candidate is
2 getting more votes than the two Black candidates,
3 so it's certainly not -- voting there is not
4 cohesive on the basis of the race of the candidate.
5 And if you -- if you basically joined
6 together the two Black candidates and say, well,
7 let's just look at voting for a Black candidate
8 versus at white candidate, then the split is --
9 again, to that point, your split is, you know,
10 59/41 which isn't cohesive. And so, that doesn't
11 -- that doesn't look like cohesion.
12 In the next contest, you have two Black
13 candidates one getting 48, 49 percent, the other
14 getting 19 percent. So you can add those two
15 together and you'll get something less than
16 70 percent. So if your standard is 60, you'd make
17 it; and if your standard is 75, you wouldn't.
18 So, again, you can -- in all of these
19 contests, you can simply sum the Black and the
20 white candidates.
21 And then you have -- in terms of race,
22 you have two sets of candidates, whether it just
23 happens to actually be one Black candidate and one
24 white candidate or three white candidates and two
25 Black candidates. You can sum up all of the Black

support for Black candidates and all of the Black support for white candidates, and then effectively you'll see where you are.

In the region of if not coalition -- if not cohesion around a single candidate, then maybe in a weaker sense cohesion around a set of candidates was shared with a shared race.

Again, it's a weaker sense of -- of cohesion because it's not necessarily even majority support for a particular candidate.

But I think in that, it is -- it -- it provides a way of -- of looking at support for Black candidates versus white candidates even if there are multiples of either or both in those categories.

Q Okay. So you would add up the candidates of one race and evaluate voters in a given racial group's support for the combined -- so their combined support for candidates of one race?

A Yeah, because I think it's a -- you know, in a -- so there's two ways of thinking about that.

But normally when you think about vote splitting, you think about the situation where, say, in a three-way contest there's one white candidate and two Black candidates.

The Black candidate's kind of splitting the Black vote. And so the white candidate is able to win even without a majority because the vote was splintered. But it wasn't like the Black vote was splintering between the Black candidates and the white candidate necessarily.

And so, if you just -- I think one way of being maybe overgenerous, but you know, join up the -- the votes shares for all of the Black candidates and all the white candidates and ask the question about whether -- even if Black voters were technically not cohesive because they split their vote evenly between two candidates, were they at least cohesive with regard to the race of the candidate they preferred.

I think that's a -- you know, again, it's -- it overstates cohesion in the sense that voting for two different candidates is not cohesion.

But I think it sort of -- with regard to the issue about whether that cohesion is related to the race of the candidates, then I think it's justifiable to combine the candidates even if -- if it slightly or somewhat exaggerates the degree of actual cohesion.

Q Okay. And then just one other statement

on Dr. Handley's primaries that I wanted to -- to take a look at.

This is on Page 8 of your report. And you said there that: "Dr. Handley is only able to conclude that 'the majority (55.8 percent) of the contests I analyzed were racially polarized.'"

You cite to Page 10.

And then you write: "a level not much above chance."

What's the basis for your statement that 55.8 percent of the Democratic primaries being racially polarized would be a level not much above chance?

A Well, it's probably an inartful way of discussing -- discussing, you know, what that actually -- what that actually implies.

Because it does depend on how you sum up candidates which wasn't entirely clear to me from her discussion.

So if you think mathematically about what we're talking about here. So as I said, ignoring concern for establishing minority/majority cohesion. It's just simply looking at preference for different candidates, right?

If -- if white voters voted for a

1 candidate by 50 percent, plus one vote, and Black
2 candidates -- and Black voters voted for a
3 different candidate, right?
4 So once we established that, you know,
5 whichever direction, however even that split, that
6 50/50 split, then what's the likelihood that the --
7 the other racial group is going to vote -- is going
8 to split in -- in a different direction, again,
9 given that minimal threshold.
10 And in that minimal threshold setting,
11 you'll find that 50 percent of your elections are
12 racially polarized.
13 Q So in your view, if voter --
14 A So they're just -- they're --
15 Q Sorry, go ahead.
16 A I was going to say it's just -- you're
17 essentially looking at a 50/50 split among -- you
18 know, if you're just looking at a 50/50 split, and
19 then you look at the other party as a 50/50 split,
20 you're just looking at, you know, essentially two
21 coin tosses. And half the time those coin tosses
22 will land on the same side, then half the time
23 they'll land on different sides.
24 So, again, without any -- at that minimal
25 standard, then, you know, here if that's -- again,

it doesn't mean that these particular contests are -- are, in fact, at that minimal standard, but -- but certainly the fact that it's barely a majority of the contests, and that if you apply that standard and were generating election outcomes at random, you would -- that would be true 50 percent of the time gives you some idea of where you are here.

Totally not -- it's not about being at zero, it's about -- again, it's about that -- that idea of sort of what the -- what's minimal here given that minimal definition.

Q So in your opinion, if voter behavior was random, you would expect to see a majority of white voters supporting a candidate different than the majority of Black voters in 50 percent of elections?

A Yes. So if you think about Candidate A and Candidate B. If voting choices are random, right, then you're going to generate random Black votes for Candidate A or B. And -- and random for Candidate A and B for white voters.

And that -- there's -- that's -- there are then four states it can be. It can be AA, it can BB or it can AB or BA. And AB or BA are the

supporting different candidates irrespective of which candidates. And AA and BB are the same candidate. Half the distribution is the same and half the distribution is different candidates.

It's just a two-by-two distribution for -- from random selection.

Q Okay. So the -- the basis for this statement about it being a level not much above chance is a comparison to a 50 plus 1 versus 50 plus 1 outcome with random voting behavior?

A Yeah. And I'm just emphasizing that because I want to make it clear, you might think that if voters are voting without regard to race, then that proportion of elections in which the -- the two groups are voting differently would be zero.

Are they voting without race, like, they would -- you know, that would just be the -- they would never vote differently. And that's just not true.

Like voting without regard to race is not going to cause them to always vote for the same candidate if you define the -- if you allowed your definition of polarization to go all the way down toward candidate of choice.

1 Voting randomly half the time, two groups
2 are going to have a different candidate of choice
3 and half the time they're going to have the same
4 candidate of choice.
5 Q So the last thing I wanted to talk about
6 was Table 1 in your report, the Republican primary
7 in 2022 for U.S. Senate in Dr. Handley's Eastern
8 Atlanta Metro Region.
9 Do you know whether a large number of
10 Black voters participated in this primary?
11 A A large number of Black voters. I mean,
12 I don't know what you consider to be a large
13 number. But the proportion of the Republican
14 electorate in this primary that was Black is very
15 small.
16 Q Okay. Do you know what proportion it
17 was?
18 A I -- overall, I think it's in -- it's in
19 single digits in a percentage maybe below 5
20 percent. And I think it peaks somewhere just a
21 little bit above 10 percent in terms of county by
22 county.
23 I'm thinking -- I could be wrong because
24 I'm just seeing a number in my head that somewhere
25 overall maybe 3 percent, something like that, and

1 no more than 12 or 13 percent in any county.
2 Q And in your opinion, is the proportion of
3 Black voters participating in this primary in this
4 region of raw sufficiently large to produce
5 reliable IE estimates?
6 A Well, I mean, the confidence intervals
7 aren't terrible. I -- you know, personally I don't
8 think it's -- I don't think it's a great platform
9 for doing that kind of analysis.
10 On the other hand, I don't think -- first
11 of all, I don't think the result is particularly
12 important. And I don't think the result is -- I
13 mean, if it's -- what -- what other result could
14 there be.
15 I mean, and certainly -- I'll say this.
16 It's probably not -- and that may not be the right
17 -- 62 may not be the right number.
18 It may be some other number, but I don't
19 think it's the case collectively Black voters
20 appear to be voting about 75 percent for Black
21 candidates. I think that's -- that seems quite
22 reasonable to me.
23 And if it's wrong -- but I don't think
24 Gary Black, for example, whose -- would be sort of
25 the establishment candidate, this estimate has him

at about 13 percent. I don't think he's the majority preference of Black voters.

I just think that -- this doesn't show that. That would be a very wide error given the confidence intervals.

And -- but that's the -- that's -- he has the strongest support among Black voters of the white candidates. And if the 12.8 percent is wrong, I mean, do you really think it's 62 percent.

Q So are you relying on this table for the EI estimates provided as to Black voters?

A I mean, I'm confident that the -- that the numbers aren't substantively different from that. That is, I'm confident that the majority of Black Republicans probably voted for Black candidates in the Republican primary.

And -- and more important, I think obviously we have a strong base for understanding how whites voted because we don't even need EI to do it.

Q Okay. And why are you --

A The Black candidates --

Q Oh, sorry, go ahead.

A The Black candidates got the majority of the vote in the Republican party or the plurality.

1 And Herschel Walker got the plurality in every
2 county in Georgia.
3 So it's simply not possible for anything
4 to be the case other than that given that Blacks
5 are only less than -- I think less than 5 percent
6 of the participants.
7 There's simply no other conclusion that
8 -- and that white voters overwhelmingly preferred
9 Black candidates in the Republican primary.
10 Q And --
11 A That's really the point of the table.
12 Q Okay. So -- so are you -- is it your
13 opinion just to be -- so I understand the kind of
14 high level takeaway from the table.
15 Is it your opinion that a minority group
16 making up less than 5 percent of an electorate in a
17 contest would typically be sufficiently large to
18 produce reliable EI estimates?
19 A No.
20 Q Okay.
21 A It depends heavily on the -- I'm sorry,
22 it depends heavily on the distribution of the
23 voters across -- you know, across the -- the area.
24 But I would say generally you don't --
25 you typically don't get very reliable estimates

1 when those voter groups are less than 10 percent.
2 But again, I don't -- that doesn't
3 concern me here in large part because I don't think
4 the point here -- the point of the table is to
5 answer the question about would Republicans support
6 a Black candidate.
7 And it's clear that they are, in fact --
8 or there's no question we can reliably estimate the
9 voting behavior of white Republicans in these
10 contests and they're voting overwhelmingly for
11 Black candidates.
12 Q And sort of just to --
13 A Even though you -- I'm going to say, even
14 though you have a mainstream Republican candidate
15 in there, Gary Black, who was endorsed by people in
16 the legislature and county sheriffs, in a sort of
17 early on sort of the mainstream best known insider
18 candidate would have been Gary Black.
19 Q Okay. And so with respect to -- to
20 voters identifying as "other" here which I take to
21 mean neither Black nor white, was that a similarly
22 small percentage of the electorate then as Black
23 voters?
24 A I would have to look back to see what
25 the -- because "other" is a catch-all category that

1 includes people that don't want to give an
2 identification and a variety of other things.
3 So I'm -- I don't recall what the size of
4 the "other" category was in the primary. The
5 "other" category is -- can be larger -- I think
6 typically larger in the general than it is in the
7 -- in the primary, but I -- I would have to look
8 back and see what that proportion is.
9 Q I mean, your best guess, it's less than
10 20 percent?
11 A I don't know.
12 Q Okay. So -- so you don't actually know
13 whether the "other" category here was 50 percent of
14 the electorate?
15 A I don't know.
16 Q Okay. And so based on the -- based on
17 this sample -- sorry, based on the proportion of
18 the electorate that is Black, are you able to
19 determine whether Black voters voted cohesively?
20 A In the Republican primary?
21 Q Yes.
22 A I -- I would not say -- I mean, I'm not
23 looking to see whether they voted cohesively or
24 not, but I would say you don't really have very
25 strong evidence one way or the other about Black

1 cohesion in the Republican primary.
2 Q Okay. And what about with respect to
3 candidates -- sorry. What about with respect to
4 voters who are identifying as an other race,
5 neither Black nor white?
6 A I don't think you have -- I mean, they
7 don't look to be particularly cohesive, but I don't
8 think you have particularly strong evidence there
9 either.
10 Q And when you say that -- that you don't
11 have strong evidence, do you mean that the EI
12 estimates in this table are not sufficiently
13 reliable to determine whether there was cohesion
14 among voters identifying as neither Black nor
15 white?
16 A No. So when you're -- I guess, if you're
17 talking about the -- sort of what you can draw from
18 these estimates, I think you -- you got two things
19 that are limiting here.
20 One is the -- you know, we talked about
21 the distribution, the relative paucity of Black
22 voters in the analysis.
23 And -- and the other is just right in
24 here, limitations in the -- in ecological inference
25 itself. I mean, there are -- there are things that

are difficult to be certain about in ecological inference and so, I don't know.

If I was -- if I had some reason to be concerned about the behavior of the "other" category, I would want to look more carefully at how you might do an analysis that explored more directly that behavior.

But then, again, my primary concern is the behavior of -- of white voters. And again, I don't think you need to rely on the EI to -- to recognize that the Republican party in Texas is -- or sorry, the Republican party in Georgia in its primaries is largely white and that that primary was varied by a substantial margin by a Black candidate and that candidate was the popular in every county in Georgia.

I don't -- I don't know what there is -- and what beyond just that alone, I don't think you really -- there's not much more you need to know.

Q So is there any purpose to the inclusion of the EI analysis in this table?

A For me, not particularly.

Q Okay. And just one other methodological question on this.

Did you look at whether the -- the share

of voters that were identifying as "other" varied between precincts in the Eastern Atlanta Metro Region?

A I don't recall looking at that.

Q Okay. And speaking more generally, is the reliability of EI affected by the degree to which a minority group's share of the electorate varies between precincts?

A Yes, the -- the more variability in the proportion than any group, the -- the better the estimates for that group.

In general, if the -- if the groups don't vary, then you're not going to get -- you're not going to get very clear estimates.

So it's -- it's a function of the number of precincts, it's a function of the heterogeneity of precincts. The more heterogenous, then the larger in number the -- typically the better your estimates will be.

Q Okay.

A But again, I -- I would just say I don't -- I don't particularly care about -- I don't think the EI is really necessary and I certainly don't -- I didn't choose this as the -- as the region most important to analyze.

Just it was convenient and it allowed if somebody wanted to sort of match the region to a region in Dr. Handley's analysis, that can be done. But I don't -- I don't think there's anything special about the Eastern Atlanta Metro Region with regard to these findings because they seem to generalize to the state as a whole.

Q Okay.

MR. MILLER: Can we hop off record, please.

VIDEO TECHNICIAN: Okay. Off the record 4:25.

(Recess taken.)

VIDEO TECHNICIAN: Back on the record. The time 4:36.

BY MR. MILLER:

Q Okay. So, Dr. Alford, I just had one or two more questions.

Did you do any EI analysis beyond what is presented in Table 1 of your report?

A No. I think everything else in the report just draws on the EI analysis from Dr. Handley or Dr. Palmer.

Q Okay.

MR. MILLER: Then I do not have any

further questions. I'm not sure, Bryan, if you have anything.

MR. JACOUTOT: I do. Just one follow-up question from -- from Dr. Handley's report.

EXAMINATION

BY MR. JACOUTOT:

Q This was before lunch, so it's been a little while, but I did mark it down. I just want to make sure I get it clarified, Dr. Alford.

If you can pull up Dr. Handley's report and go to Appendix A1.

Let's see. There it is. And let me know when you're there.

A I am there.

Q Now, in your testimony you -- a little bit later or a little bit into Mr. Miller's line of questioning on these appendices, I think you cleared this up, but just to be -- make sure the record is clear.

Mr. Miller stated at -- when you were looking at this appendix, that the level of Black support for the Black candidate is uniformly high in the elections examined here by Dr. Handley.

Do you recall him saying that to you?

A Yes.

Q Okay. And do you recall that you agreed with that statement?

A Yes.

Q Okay. If you can just look at the 2022 U.S. senate election contest and the -- the race of the candidates in that election and let me know if you still agree with the statement that -- that Mr. Miller made.

A So we're talking about the U.S. Senate to Ossoff/Perdue race.

Q No, no, no. Sorry. U.S. Senate 2022 General between Raphael Warnock and Herschel Walker.

Does that alter or change your agreement with Mr. Miller's statement that the level of Black support for the Black candidate is uniformly high?

A Well, again, I mean -- so the level of support for Warnock is high, but they're -- right, both of the major party candidates are Black, so I guess it just depends on how you interpret that.

Q Right. And -- yeah.

So we have two Black candidates and so the -- the Black support for -- for the Black democrat is very high, correct?

A That's correct. In this case, the Black

Republican is getting very level of support similar to -- actually even less support than, say, Brian Kemp is getting. But those are not, you know, statistically different numbers.

Q Gotcha.

A So again, it's -- it's uni -- it's uniformly true by party and it's not uniformly true by race either for this contest or for the Ossoff contest.

Q Okay.

MR. JACOUTOT: That's all I had.

MR. MILLER: Okay. And I don't have any recross from that, so we are all set, I think.

Thank you, Dr. Alford, very much. I know it was a long day and you had testimony last week as well, but I appreciate your time and travel out to Atlanta for -- for these depositions.

THE WITNESS: All right. I appreciate -- I found the discussion interesting and -- and you're a very patient person.

You kind of let me, you know, kind of go off wherever I go off and then, you know, where you -- bring me back around to what it is you wanted to ask about and you do that in a very kind way, so I appreciate that courtesy.

MR. MILLER: Well, that's -- that's nice of you to say. I appreciate the conversation as well. And we can -- we can hop off record.

VIDEO TECHNICIAN: Off the record 4:41.

(Deposition concluded at 4:41 P.M.)

* * * * *

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C E R T I F I C A T E

Deposition of: JOHN R. ALFORD, Ph.D.

Date of Deposition: FEBRUARY 27, 2023

STATE OF GEORGIA:

I hereby certify that the foregoing transcript was stenographically recorded by me via Zoom as stated in the caption. The deponent was duly sworn to tell the truth, the whole truth, and nothing but the truth. And the colloquies, statements, questions and answers thereto were reduced to typewriting under my direction and supervision and the deposition is a true and correct record, to the best of my ability, of the testimony/evidence given by the deponent.

I further certify that I am not a relative or employee or attorney or counsel to any of the parties in the case, nor am I a relative or employee of such attorney or counsel, nor am I financially interested in the action.

This, the 2nd day of March 2023.

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Judith L. Leitz Moran, CCR-B-2312

Registered Professional Reporter

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BRYAN F. JACOUTOT, ESQ.
bjacoutot@taylorenglish.com

March 7, 2023

RE: ALPHA PHI ALPHA FRATERNITY, et al. v. RAFFENSPERGER
2/27/2023, John R. Alford (#5776720)

The above-referenced transcript is available for review.

Within the applicable timeframe, the witness should read the testimony to verify its accuracy. If there are any changes, the witness should note those with the reason, on the attached Errata Sheet.

The witness should sign the Acknowledgment of Deponent and Errata and return to the deposing attorney. Copies should be sent to all counsel, and to Veritext at cs-ny@veritext.com.

Return completed errata within 30 days from receipt of testimony.

If the witness fails to do so within the time allotted, the transcript may be used as if signed.

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ALPHA PHI ALPHA FRATERNITY, et al. v. RAFFENSPERGER
2/27/2023 - John R. Alford (#5776720)

ACKNOWLEDGEMENT OF DEPONENT

I, John R. Alford, do hereby declare that I have read the foregoing transcript, I have made any corrections, additions, or changes I deemed necessary as noted above to be appended hereto, and that the same is a true, correct and complete transcript of the testimony given by me.

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

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

ATLANTA DIVISION

ALPHA PHI ALPHA FRATERNITY INC., a nonprofit organization on behalf of members residing in Georgia; SIXTH DISTRICT OF THE AFRICAN METHODIST EPISCOPAL CHURCH, a Georgia nonprofit organization; ERIC T. WOODS; KATIE BAILEY GLENN; PHIL BROWN; JANICE STEWART, *Plaintiffs*, v. BRAD RAFFENSPERGER, in his official capacity as Secretary of State of Georgia, *Defendant*.	CASE NO. 1:21-CV-05337-SCJ

PLAINTIFFS' NOTICE TO TAKE THE EXPERT DEPOSITION OF JOHN R. ALFORD, Ph.D.

PLEASE TAKE NOTICE that, pursuant to Rules 26 and 30 of the Federal Rules of Civil Procedure, counsel for Plaintiffs Alpha Phi Alpha Fraternity Inc., Sixth District of the African Methodist Episcopal Church, Eric T. Woods, Katie Bailey Glenn, Phil Brown, and Janice Stewart ("Plaintiffs"), will take the oral examination of Defendant's expert, John R. Alford, Ph.D. on Monday, February 27, 2023 at 10:00 am ET and continuing thereafter until completed. The deposition will proceed via Zoom videoconferencing through Veritext Legal Solutions. Details regarding the videoconferencing will be emailed to those participating once all arrangements are finalized.

The deposition shall be taken before a Notary Public or some other officer authorized by law to administer oaths for use at trial. The deposition will be taken by oral examination with a written and/or sound and visual record made thereof (e.g., videotape, LiveNote,

Exhibit
0001

deposition will be taken for the purposes of cross-examination, discovery, and for all other purposes permitted under the Federal Rules of Civil Procedure or any other applicable law.

Dated: February 21, 2023

Respectfully submitted,

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Exhibit
0002

EXPERT REPORT OF JOHN R. ALFORD, Ph.D.

Scope of Inquiry

I have been retained by the Georgia Secretary of State and State Election Board as an expert to provide analysis related to *Grant v. Raffensperger*, *Alpha Phi Alpha v. Raffensperger*, and *Pendergrass v. Raffensperger*. All three cases allege the current U.S. Congressional, state Senate, and state House districts in Georgia violate Section 2 of the Voting Rights Act. In early 2022, I provided a report and testified in the preliminary injunction hearing in this matter. I have examined the reports and supplemental reports provided by plaintiffs' experts Dr. Maxwell Palmer, and Dr. Lisa Handley in this case. My rate of compensation in this matter is $500 per hour.

Qualifications

I am a tenured full professor of political science at Rice University. At Rice, I have taught courses on redistricting, elections, political representation, voting behavior and statistical methods at both the undergraduate and graduate level. Over the last thirty years, I have worked with numerous local governments on districting plans and on Voting Rights Act issues. I have previously provided expert reports and/or testified as an expert witness in voting rights and statistical issues in a variety of court cases, including on behalf of the U.S. Attorney in Houston, the Texas Attorney General, a U.S. Congressman, and various cities and school districts.

In the 2000 round of redistricting, I was retained as an expert to provide advice to the Texas Attorney General in his role as Chair of the Legislative Redistricting Board. I subsequently served as the expert for the State of Texas in the state and federal litigation involving the 2001 redistricting for U.S. Congress, the Texas Senate, the Texas House of Representatives, and the Texas State Board of Education. In the 2010 round of redistricting in Texas, I was again retained as an expert by the State of Texas to assist in defending various state election maps and systems including the district maps for the U.S. Congress, the Texas Senate, the Texas House of Representatives, and the current at large system for electing Justices to the State Supreme Court

and Court of Appeals, as well as the winner-take-all system for allocating Electoral College votes.

I have also worked as an expert on redistricting and voting rights cases at the state and/or local level in Alabama, Arkansas, Florida, Georgia, Kansas, Louisiana, Michigan, Mississippi, New Mexico, New York, Pennsylvania, Washington, and Wisconsin. The details of my academic background, including all publications in the last ten years, and work as an expert, including all cases in which I have testified by deposition or at trial in the last four years, are covered in the attached CV (Appendix 1).

Data and Sources

In preparing this report, I have reviewed the reports filed by the plaintiffs' experts in this case. I have relied on the analysis provided to date by Dr. Palmer and Dr. Handley in their expert reports in this case. I have also relied on various election and demographic data provided by Dr. Palmer and Dr. Handley in their disclosures related to their reports in this case. In addition, I relied on data on turnout by race for the 2022 Republican Primary election provided to counsel by the Georgia Secretary of State, and 2022 precinct-level election results for that election downloaded from the publicly available website of the Georgia Secretary of State.

Dr. Palmer's Reports

Dr. Palmer, in his report in *Pendergrass v. Raffensperger* dated 12/12/2022, provides the results of an EI election analysis that he used to assess Racially Polarized Voting (RPV) in each of 40 contests between 2012 and 2022, and reports the results in his Tables 1 through 6 for five U.S. Congressional districts and as a combined focus area. Similarly, in his report in *Grant v. Raffensperger* dated 12/12/2022, Dr. Palmer provides the EI results for the same 40 contests between 2012 and 2022 as reported in his Tables 2 through 6, for three Georgia House and two Georgia Senate focus areas. The race of the candidate preferred by Black voters is indicated in Dr. Palmer's tables with an asterisk by the name of each Black candidate, and the absence of an asterisk indicating a non-Black candidate. Across the 40 reported contests 19 of the preferred candidates are Black and 21 are non-Black, providing an ideal, almost equal distribution, for comparing both Black and white voter support for Black-preferred candidates that happen to be Black, with Black voter support for Black-preferred candidates that happen not to be Black.

However, despite having this data identified in his reports and the associated opportunity analyze it, there is no discussion of the impact, if any, that the race of the candidate might have on the behavior of Black or white voters in these contests. Also, Dr. Palmer provides no party labels in these tables, and does not mention the party of candidates in his discussion of the results of his analysis.

As evident in Dr. Palmer's Tables 1-6 in his *Pendergrass* report, and Tables 2-6 in his *Grant* report, the pattern of polarization is quite striking. Black voter support for their preferred candidate is typically in the 90 percent range and scarcely varies at all across the ten years examined from 2012 to 2022. Nor does it vary in any meaningful degree from the top of the ballot elections for U.S. President to down-ballot contests like Public Service Commissioner. While slightly more varied, estimated white voter opposition to the Black-preferred candidate is typically above 80 percent. In the *Pendergrass* Table 1 for the combined focus area, Dr. Palmer reports estimates of Black voter support that only varies between 96 and 99 percent when results are rounded to the nearest percent. White voter opposition to the Black preferred candidate is slightly more varied, but still remarkably stable, ranging in *Pendergrass* Table 1 only from 84.5% to 91.4 percent.

What accounts for this remarkable stability in the divergent preferences of Black and white voters across years and offices? It is clearly not Black voter's preference for Black candidates, or white voter's disinclination to vote for Black candidates. At 98.5 percent, the average Black support for the 19 Black candidates identified as Black in Palmer's *Pendergrass* Table 1 is indeed nearly universal, but so is the average 98.4 percent support for the 21 candidates identified as non-Black in Table 1. Similarly, the average white vote in opposition to the 19 candidates identified as Black in *Pendergrass* Table 1 is a clearly cohesive 88.1 percent, but so is the average 87.1 percent white voter opposition to the 21 candidates identified as non-Black. The same can said for Dr. Palmer's results in his *Grant* report where, for example, the average Black support for the 19 candidates identified as Black in Table 2 is 98.2 percent, and Black voter support for the 21 candidates identified as non-Black is a nearly identical 98.1 percent. Similarly, the average white vote in opposition to the 19 candidates identified as Black in *Grant* Table 2 is a clearly cohesive 90.1 percent, but so is the average 89.1 percent white voter opposition to the 21 candidates identified as non-Black.

If we do consider the party affiliation of the candidates, the pattern over these election contests is stark in both the *Grant* report and the *Pendergrass* report. In all 40 contests the candidate of choice of Black voters is the Democrat and the candidate of choice of white voters is the Republican.

In contrast, the race of the candidates does not appear to be influential. Black voter support for Black Democratic candidates is certainly high, as Dr. Palmer's Tables 2 through 6 in *Grant* and Tables 1 through 5 in *Pendergrass* clearly show, but those same figures also show Black voter support in the same high range for white Democratic candidates as it is for Black Democratic candidates. Similarly, white voter support for Black Democratic candidates is very low, but white voter support for white Democratic candidates is also very low.[1] In other words, there appears to be just one overarching attribute of candidates that uniformly leads to their relative acceptability or unacceptability among white voters and Black voters alike. And it is not the candidate's race. It is their party affiliation.

For example, in the 2022 contest for Governor in Dr. Palmer's *Pendergrass* Table 1 (his combined focus region) Stacey Abrams, the Black Democratic candidate, gets an estimated 98.5% of the Black vote, but in the same election in the adjacent Lt. Governor contest Charlie Bailey, a white Democrat, gets an almost identical estimated 98.4% of the Black vote. Looking at White voters a similar pattern is clear. Abrams gets an estimated 10.3% of the white vote, but in the same election in the adjacent Lt. Governor contest Baily, the white Democrat, received a similar estimated 12.1% of the white vote.

Similarly, in the 2021 U.S. Senate runoffs in Dr. Palmer's *Pendergrass* Table 1 (his combined focus region) Raphael Warnock, the Black Democratic candidate gets an estimated 98.7% of the Black vote, but in the same election in the other Senate contest Jon Ossoff, a white Democrat gets an identical estimated 98.7% of the Black vote. Looking at white voters a similar pattern is clear. Warnock, the Black Democratic candidate, gets an estimated 15.2% of the white vote, but in the same election in the other Senate contest, Ossoff, the White Democrat, gets an almost identical estimated 14.5% of the white vote.

[1] The limited evidence from the 2022 endogenous elections provided in Dr. Palmer's supplemental reports do not contradict this broad pattern.

Moving beyond his EI analysis, Dr. Palmer also provides reconstituted election results to demonstrate the success rate of Black preferred candidates in his focus areas. Given that as mentioned above the Black preferred candidate is always the Democratic candidate and given the dominance of political party in the EI results as discussed above, it is no surprise that these tables show stable performance for Democratic candidates across the 40 contests, regardless of race. For example, in Dr. Palmer's Table 7 in his *Pendergrass* report, the average vote share for the Democratic candidate is 41.7 percent in the 19 contests where the Democratic candidate is Black, and a very similar 42.3 percent in the 21 contests where the Democratic candidate is not Black.

In short, all that Dr. Palmer's analysis demonstrates is that Black voters provide uniformly high levels of support for Democratic candidates and white voters provide uniformly high levels of support for Republican candidates. There is no indication in these EI results that the high levels of Black voter support for Democratic candidates is connected in any meaningful way to the race of the Democratic or Republican candidates. Similarly, there is no indication in these results that the high levels of white voter support for the Republican candidates is connected in any meaningful way to the race of the Democratic or Republican candidates.

Dr. Handley's Report

Dr. Handley's December 12, 2022 report in *Alpha Phi Alpha* focuses first on general elections, and reports results similar to those reported by Dr. Palmer. Black voters support Democratic candidates and white voters support Republican candidates. She indicates that she has chosen to focus on racially contested elections, so this limits the ability to see whether this partisan pattern varies at all with the race of the candidates, but in the two contests without a Black Democrat, the Ossoff 2020 Senate contest and 2021 runoff, the results for both Black and White voters are very similar to the results for the racially contested elections, as was the case in Dr. Palmer's larger set of general elections.

Unlike Dr. Palmer, Dr. Handley also analyzes eleven racially contested statewide Democratic primaries. The results in these primaries are very different from the general election patterns. The general election pattern is a very important contrast to keep in mind when evaluating the results for these eleven primary contests. In the general elections, Black support for the Democratic candidate is very high and very stable in the upper 90% range. Similarly,

White voter opposition to the Democratic candidates is also high and stable in the 80 percent and up range.

While there is not currently a bright-line court standard for determining the level of support needed under *Gingles* prongs 2 and 3 to demonstrate cohesion, multiple plaintiffs' experts have recently discussed a minimum of 60 percent threshold for cohesion in a two-person contest. Simply having a preferred candidate (50 percent plus 1 in a two-candidate contest) is not sufficient. This is, of course, true by definition. If simply having a preferred candidate was sufficient to establish cohesion, then the *Gingles* 2 threshold test would always be met in two candidate contests and thus not actually constitute a test at all. As Dr. Palmer notes on page 4 of his *Pendergrass* report, "[i]f the group's support is roughly evenly divided between the two candidates, then the group does not cohesively support a single candidate". Even if a more stringent 75 percent or 80 percent threshold was the cohesion threshold standard, the results for the general elections provided by both Dr. Palmer and Dr. Handley clearly establish partisan polarization, with Blacks always favoring Democratic candidates at stable levels well above 80 percent, and whites favoring Republican candidates at similarly stable levels, typically above 80 percent.

Applying the 60 percent threshold for cohesion to the 40 general election contests in Dr. Palmer's *Grant* report or the 40 general election contests in Dr. Palmer's *Pendergrass* report, produces the same clear result. In 40 out of 40 contests, Black voters provide cohesive support to the Democratic candidate and white voters provide cohesive support to the opposing Republican candidate. This unequivocal result is what Palmer references as supporting his conclusion of polarized voting. As he states on pages 5-6 of his December 12, 2022 *Grant* report:

> *Black voters are extremely cohesive, with a clear candidate of choice in all 40 elections. In contrast to Black voters, Figure 2 shows that White voters are highly cohesive in voting in opposition to the Black-preferred candidate in every election across the five focus areas. Table 1 lists the average level of support for the Black-preferred candidate for Black and White voters in each focus area. Across all five focus areas, Black voters support their preferred candidate with an average of 98.5% and a minimum of 95.2% of the vote, and White voters support Black-preferred candidates with an average of 8.3% and a maximum of 17.7% of the vote. This is strong evidence of racially polarized voting across all five focus areas.*

The same can be said for the 16 general election contests that Dr. Handley includes for each of her seven focus regions as reported in her Appendix C1-C7. In every one of the 16 contests examined in all seven regions, Black voter support for the Democratic candidate clearly exceeds 60 percent and in all the regular elections (excluding the one 20 candidate special Senate election in 2020) exceeded 90 percent. White voters provided cohesive support to the opposing Republican candidates exceeding 60% in every contest with the sole exception of the 2022 Senate contest in Appendix 1, where the white estimated vote fell just short of 60 percent at 59.3 percent.

As Dr. Handley, herself, states on page 9 of her December 23, 2022 Report:

> *Overall, the average percentage of Black vote for the 16 Black-preferred candidates is 96.1%. The average percentage of White vote for these 16 Black-preferred candidates across the seven areas is 11.2%. (When Ossoff is excluded, and only Black-preferred Black candidates are considered, the average White vote is slightly lower: 11.1 %.) The highest average White vote for any of the 16 candidates is 14.4% for Raphael Warnock in his 2022 general election bid for re-election. While the percentage of White support for candidates preferred by Black voters varies across the areas, in five of the seven areas the average did not even reach 10%. White crossover voting was the highest in the Eastern Atlanta Metro Region (Map 1), but only about one third of White voters typically supported the Black-preferred Black candidates in this area.*

She finds similarly clear evidence of polarization when she considers the analysis of state legislative elections included in her Appendix B1 and B2, stating on page 9 of her December 23, 2022:

> *Nearly every one of the 54 of the state legislative elections analyzed (53 of the 54 contests, or 98.1%) was racially polarized. The estimates of Black and White support for the state legislative candidates in these contests analyzed can be found in Appendices B1 (State Senate) and B2 (State House). Black voters were quite cohesive in supporting Black candidates in these state legislative contests: on average, 97.4% of Black voters supported their preferred Black state senate candidates, and 91.5% supported their preferred Black state house candidate. Very few White voters supported these candidates, however: Black-preferred Black state senate candidates garnered, on average, 10.1% of the White vote; Black-preferred Black state house candidates received, on average, 9.8% of the White vote.*

Based on their summary descriptions of their general election analysis, it is clear that both Dr. Palmer and Dr. Handley know what a convincing pattern of polarization looks like. That clear pattern is not present once candidate party labels are removed from the contest. Dr. Palmer

makes no effort to address this issue of conflating polarization in support for Democratic versus Republican candidates with racial polarization. Dr. Handley attempts to address the issue by providing analysis for eleven Democratic primaries in each of her seven focus regions.

But looking at the Democratic primary contests, as reported in Dr. Handley's Appendix C1-C7, the contrast to the pattern in the partisan general elects is stark. As detailed above, the pattern of Black voter support for Democratic candidates and white voter support for their Republican opponents in general elections is near universal, and both Black and white voters show strong and highly stable levels of cohesion. In contrast the pattern Dr. Handley identifies in the Democratic primaries is far from universal or stable. The support of Black voters for Black candidates varies widely, and seldom reaches above 80 percent. Similarly, white voter support for Democratic candidates is typically below 20% in the general elections, but in the primaries white support for Black candidates varies widely and is often fairly evenly divided. In many of the contests within Dr. Handley's six focus regions, for example, the votes of Blacks, whites, or both are divided too evenly to characterize the voting as cohesive. Even ignoring any concern for establishing minority or majority cohesion and applying a very loose standard of Blacks and whites simply preferring different candidates, Dr. Handley is only able to conclude that "the majority (55.8%) of the contests I analyzed were racially polarized" (page 10), a level not much above chance, and far below the 100 percent or 98.1 percent reported for general elections.

If we consider the *Gingles* 2 and 3 cohesion thresholds, even this slight result disappears. Using even a modest 60% standard for voter cohesion, Black voters vote cohesively for Black candidates in only 35 contests out of 77 (46 percent). If we add the instances where Blacks vote cohesively for white candidate that rises to 49 contests (64 percent of the 77 total). In those 49 contests, white voters cohesively opposed the Black preference in only 10 contests (20 percent of the 49 contests).

Herschel Walker Senate Race

The recent 2022 Republican U.S. Senate primary provides an additional racially contested primary to consider. Among the six candidates, the majority winner was Herschel Walker, one of the three Black candidates. Given that Black voters were less than 12 percent of the voters in in any county in the state in that primary, and that Walker received a majority of the vote in every county in Georgia, it is clear the Walker was the preferred candidate among White voters

in the Republican primary. This can be seen as well in an initial look at EI estimates for the area covered in Dr. Handley's Appendix A1, reproduced below in Table 1 (Eastern Atlanta Metro Region – Map Area 1, Dekalb, Henry, Morgan, Newton, Rockdale, and Walton). With an estimated 62 percent support among Black voters, and 67 percent support among white voters, Walker is the preferred candidate of both Black and white voters in the Republican primary.

Table 1; Ecological Estimates of Voting Patterns by Race in the 2022 Republican U.S. Senate Primary for Dr. Handley's Eastern Atlanta Metro Region

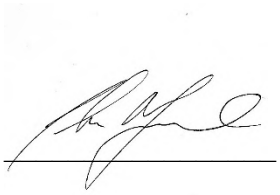
			95% Confidence Interval			95% Confidence Interval			95% Confidence Interval	
Last Name	**Candidate Race**	**Black support**	**Low**	**High**	**White Support**	**Low**	**High**	**Other Support**	**Low**	**High**
Herschel Walker	Black	**62.4%**	57.8%	67.4%	**67.0%**	66.3%	67.6%	5.3%	1.8%	11.7%
Kelvin King	Black	**10.1%**	7.7%	12.8%	**2.5%**	2.0%	3.0%	17.5%	12.5%	22.5%
"Jon" McColumn	Black	**3.0%**	1.7%	4.8%	**0.9%**	0.6%	1.2%	22.4%	18.8%	25.4%
Gary Black	white	**12.8%**	9.6%	16.2%	**15.3%**	14.5%	16.0%	9.3%	3.3%	17.0%
Latham Saddler	white	**7.1%**	4.1%	10.7%	**12.7%**	11.9%	13.5%	15.7%	7.8%	24.0%
Josh Clark	white	**4.5%**	2.7%	6.8%	**1.6%**	1.1%	2.2%	29.8%	23.7%	35.3%

Summary Conclusions

The partisan general election analysis report by Dr. Palmer and Dr. Handley show that Black voters cohesively support Democratic candidates, regardless of whether those candidates are Black or White. Similarly, white voters cohesively vote for Republican candidates, and in opposition to Democratic candidates, regardless of whether those Democratic candidates are Black or white. Thus, it is cohesive Black voter support for *Democratic* candidates, and white voter support for *Republican* candidates that the general election analysis reveals, not cohesive Black voter support for *Black* candidates and white voter support for *white* candidates. Nonetheless, the voting pattern is clearly one of partisan polarized voting, with both highly cohesive Black vote for the Democrat and highly cohesive white vote for the Republican candidate. The more limited analysis of Democratic primaries reported by Dr. Handley shows a very different picture of voting behavior from the general elections. Nothing even approaching the levels of Black and white cohesion seen in the general elections appears anywhere in the

primary contests, and the overall patterns are mixed and variable even within the same set of voters on the same day as we see in the multiple contests in the 2018 Democratic primary. Similarly, the 2022 U.S. Senate Republican primary indicates that white Republican primary voters are willing to support a Black Republican candidate over multiple white opponents.

February 6, 2023



John R. Alford, Ph.D.

Appendix 1

CV

John R. Alford

Curriculum Vitae
January 2023

Dept. of Political Science
Rice University - MS-24
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Houston, Texas 77251-1892
713-348-3364
jra@rice.edu

Employment:

Professor, Rice University, 2015 to present.
Associate Professor, Rice University, 1985-2015.
Assistant Professor, University of Georgia, 1981-1985.
Instructor, Oakland University, 1980-1981.
Teaching-Research Fellow, University of Iowa, 1977-1980.
Research Associate, Institute for Urban Studies, Houston, Texas, 1976-1977.

Education:

Ph.D., University of Iowa, Political Science, 1981.
M.A., University of Iowa, Political Science, 1980.
M.P.A., University of Houston, Public Administration, 1977.
B.S., University of Houston, Political Science, 1975.

Books:

Predisposed: Liberals, Conservatives, and the Biology of Political Differences. New York: Routledge, 2013. Co-authors, John R. Hibbing and Kevin B. Smith.

Articles:

"Political Orientations Vary with Detection of Androstenone," with Amanda Friesen, Michael Gruszczynski, and Kevin B. Smith. **Politics and the Life Sciences**. (Spring, 2020).

"Intuitive ethics and political orientations: Testing moral foundations as a theory of political ideology." with Kevin Smith, John Hibbing, Nicholas Martin, and Peter Hatemi. **American Journal of Political Science**. (April, 2017).

"The Genetic and Environmental Foundations of Political, Psychological, Social, and Economic Behaviors: A Panel Study of Twins and Families." with Peter Hatemi, Kevin Smith, and John Hibbing. **Twin Research and Human Genetics**. (May, 2015.)

"Liberals and conservatives: Non-convertible currencies." with John R. Hibbing and Kevin B. Smith. **Behavioral and Brain Sciences** (January, 2015).

"Non-Political Images Evoke Neural Predictors Of Political Ideology." with Woo-Young Ahn, Kenneth T. Kishida, Xiaosi Gu, Terry Lohrenz, Ann Harvey, Kevin Smith, Gideon Yaffe, John Hibbing, Peter Dayan, P. Read Montague. **Current Biology**. (November, 2014).

"Cortisol and Politics: Variance in Voting Behavior is Predicted by Baseline Cortisol Levels." with Jeffrey French, Kevin Smith, Adam Guck, Andrew Birnie, and John Hibbing. **Physiology & Behavior**. (June, 2014).

"Differences in Negativity Bias Underlie Variations in Political Ideology." with Kevin B. Smith and John R. Hibbing. **Behavioral and Brain Sciences**. (June, 2014).

"Negativity bias and political preferences: A response to commentators Response." with Kevin B. Smith and John R. Hibbing. **Behavioral and Brain Sciences**. (June, 2014).

"Genetic and Environmental Transmission of Political Orientations." with Carolyn L. Funk, Matthew Hibbing, Kevin B. Smith, Nicholas R. Eaton, Robert F. Krueger, Lindon J. Eaves, John R. Hibbing. **Political Psychology**, (December, 2013).

"Biology, Ideology, and Epistemology: How Do We Know Political Attitudes Are Inherited and Why Should We Care?" with Kevin Smith, Peter K. Hatemi, Lindon J. Eaves, Carolyn Funk, and John R. Hibbing. **American Journal of Political Science**. (January, 2012)

"Disgust Sensitivity and the Neurophysiology of Left-Right Political Orientations." with Kevin Smith, John Hibbing, Douglas Oxley, and Matthew Hibbing, **PlosONE**, (October, 2011).

"Linking Genetics and Political Attitudes: Re-Conceptualizing Political Ideology." with Kevin Smith, John Hibbing, Douglas Oxley, and Matthew Hibbing, **Political Psychology**, (June, 2011).

"The Politics of Mate Choice." with Peter Hatemi, John R. Hibbing, Nicholas Martin and Lindon Eaves, **Journal of Politics**, (March, 2011).

"Not by Twins Alone: Using the Extended Twin Family Design to Investigate the Genetic Basis of Political Beliefs" with Peter Hatemi, John Hibbing, Sarah Medland, Matthew Keller, Kevin Smith, Nicholas Martin, and Lindon Eaves, **American Journal of Political Science**, (July, 2010).

"The Ultimate Source of Political Opinions: Genes and the Environment" with John R. Hibbing in **Understanding Public Opinion**, 3rd Edition eds. Barbara Norrander and Clyde Wilcox, Washington D.C.: CQ Press, (2010).

"Is There a 'Party' in your Genes" with Peter Hatemi, John R. Hibbing, Nicholas Martin and Lindon Eaves, **Political Research Quarterly**, (September, 2009).

"Twin Studies, Molecular Genetics, Politics, and Tolerance: A Response to Beckwith and Morris" with John R. Hibbing and Cary Funk, **Perspectives on Politics**, (December, 2008). This is a solicited response to a critique of our 2005 APSR article "Are Political Orientations Genetically Transmitted?"

"Political Attitudes Vary with Physiological Traits" with Douglas R. Oxley, Kevin B. Smith, Matthew V. Hibbing, Jennifer L. Miller, Mario Scalora, Peter K. Hatemi, and John R. Hibbing, **Science**, (September 19, 2008).

"The New Empirical Biopolitics" with John R. Hibbing, **Annual Review of Political Science**, (June, 2008).

"Beyond Liberals and Conservatives to Political Genotypes and Phenotypes" with John R. Hibbing and Cary Funk, **Perspectives on Politics**, (June, 2008). This is a solicited response to a critique of our 2005 APSR article "Are Political Orientations Genetically Transmitted?"

"Personal, Interpersonal, and Political Temperaments" with John R. Hibbing, **Annals of the American Academy of Political and Social Science**, (November, 2007).

"Is Politics in our Genes?" with John R. Hibbing, **Tidsskriftet Politik**, (February, 2007).

"Biology and Rational Choice" with John R. Hibbing, **The Political Economist**, (Fall, 2005)

"Are Political Orientations Genetically Transmitted?" with John R. Hibbing and Carolyn Funk, **American Political Science Review**, (May, 2005). (The main findings table from this article has been reprinted in two college level text books - Psychology, 9th ed. and Invitation to Psychology 4th ed. both by Wade and Tavris, Prentice Hall, 2007).

"The Origin of Politics: An Evolutionary Theory of Political Behavior" with John R. Hibbing, **Perspectives on Politics**, (December, 2004).

"Accepting Authoritative Decisions: Humans as Wary Cooperators" with John R. Hibbing, **American Journal of Political Science**, (January, 2004).

"Electoral Convergence of the Two Houses of Congress" with John R. Hibbing, in **The Exceptional Senate**, ed. Bruce Oppenheimer, Columbus: Ohio State University Press, (2002).

"We're All in this Together: The Decline of Trust in Government, 1958-1996." in **What is it About Government that Americans Dislike?**, eds. John Hibbing and Beth Theiss-Morse, Cambridge: Cambridge University Press, (2001).

"The 2000 Census and the New Redistricting," **Texas State Bar Association School Law Section Newsletter**, (July, 2000).

"Overdraft: The Political Cost of Congressional Malfeasance" with Holly Teeters, Dan Ward, and Rick Wilson, **Journal of Politics** (August, 1994).

"Personal and Partisan Advantage in U.S. Congressional Elections, 1846-1990" with David W. Brady, in **Congress Reconsidered** 5th edition, eds. Larry Dodd and Bruce Oppenheimer, CQ Press, (1993).

"The 1990 Congressional Election Results and the Fallacy that They Embodied an Anti-Incumbent Mood" with John R. Hibbing, **PS** 25 (June, 1992).

"Constituency Population and Representation in the United States Senate" with John R. Hibbing. **Legislative Studies Quarterly**, (November, 1990).

"Editors' Introduction: Electing the U.S. Senate" with Bruce I. Oppenheimer. **Legislative Studies Quarterly**, (November, 1990).

"Personal and Partisan Advantage in U.S. Congressional Elections, 1846-1990" with David W. Brady, in **Congress Reconsidered** 4th edition, eds. Larry Dodd and Bruce Oppenheimer, CQ Press, (1988). Reprinted in The Congress of the United States, 1789-1989, ed. Joel Silby, Carlson Publishing Inc., (1991), and in The Quest for Office, eds. Wayne and Wilcox, St. Martins Press, (1991).

"Can Government Regulate Fertility? An Assessment of Pro-natalist Policy in Eastern Europe" with Jerome Legge. **The Western Political Quarterly** (December, 1986).

"Partisanship and Voting" with James Campbell, Mary Munro, and Bruce Campbell, in **Research in Micropolitics. Volume 1 - Voting Behavior**. Samuel Long, ed. JAI Press, (1986).

"Economic Conditions and Individual Vote in the Federal Republic of Germany" with Jerome S. Legge. **Journal of Politics** (November, 1984).

"Television Markets and Congressional Elections" with James Campbell and Keith Henry. **Legislative Studies Quarterly** (November, 1984).

"Economic Conditions and the Forgotten Side of Congress: A Foray into U.S. Senate Elections" with John R. Hibbing, **British Journal of Political Science** (October, 1982).

"Increased Incumbency Advantage in the House" with John R. Hibbing, **Journal of Politics** (November, 1981). Reprinted in The Congress of the United States, 1789-1989, Carlson Publishing Inc., (1991).

"The Electoral Impact of Economic Conditions: Who is Held Responsible?" with John R. Hibbing, **American Journal of Political Science** (August, 1981).

"Comment on Increased Incumbency Advantage" with John R. Hibbing, Refereed communication: **American Political Science Review** (March, 1981).

"Can Government Regulate Safety? The Coal Mine Example" with Michael Lewis-Beck, **American Political Science Review** (September, 1980).

Awards and Honors:

CQ Press Award - 1988, honoring the outstanding paper in legislative politics presented at the 1987 Annual Meeting of the American Political Science Association. Awarded for "The Demise of the Upper House and the Rise of the Senate: Electoral Responsiveness in the United States Senate" with John Hibbing.

Research Grants:

National Science Foundation, 2009-2011, "Identifying the Biological Influences on Political Temperaments", with John Hibbing, Kevin Smith, Kim Espy, Nicolas Martin and Read Montague. This is a collaborative project involving Rice, University of Nebraska, Baylor College of Medicine, and Queensland Institute for Medical Research.

National Science Foundation, 2007-2010, "Genes and Politics: Providing the Necessary Data", with John Hibbing, Kevin Smith, and Lindon Eaves. This is a collaborative project involving Rice, University of Nebraska, Virginia Commonwealth University, and the University of Minnesota.

National Science Foundation, 2007-2010, "Investigating the Genetic Basis of Economic Behavior", with John Hibbing and Kevin Smith. This is a collaborative project involving Rice, University of Nebraska, Virginia Commonwealth University, and the Queensland Institute of Medical Research.

Rice University Faculty Initiatives Fund, 2007-2009, "The Biological Substrates of Political Behavior". This is in assistance of a collaborative project involving Rice, Baylor College of Medicine, Queensland Institute of Medical Research, University of Nebraska, Virginia Commonwealth University, and the University of Minnesota.

National Science Foundation, 2004-2006, "Decision-Making on Behalf of Others", with John Hibbing. This is a collaborative project involving Rice and the University of Nebraska.

National Science Foundation, 2001-2002, dissertation grant for Kevin Arceneaux, "Doctoral Dissertation Research in Political Science: Voting Behavior in the Context of U.S. Federalism."

National Science Foundation, 2000-2001, dissertation grant for Stacy Ulbig, "Doctoral Dissertation Research in Political Science: Sub-national Contextual Influences on Political Trust."

National Science Foundation, 1999-2000, dissertation grant for Richard Engstrom, "Doctoral Dissertation Research in Political Science: Electoral District Structure and Political Behavior."

Rice University Research Grant, 1985, Recent Trends in British Parliamentary Elections.

Faculty Research Grants Program, University of Georgia, Summer, 1982. Impact of Media Structure on Congressional Elections, with James Campbell.

Papers Presented:

"The Physiological Basis of Political Temperaments" 6th European Consortium for Political Research General Conference, Reykjavik, Iceland (2011), with Kevin Smith, and John Hibbing.

"Identifying the Biological Influences on Political Temperaments" National Science Foundation Annual Human Social Dynamics Meeting (2010), with John Hibbing, Kimberly Espy, Nicholas Martin, Read Montague, and Kevin B. Smith.

"Political Orientations May Be Related to Detection of the Odor of Androstenone" Annual meeting of the Midwest Political Science Association, Chicago, IL (2010), with Kevin Smith, Amanda Balzer, Michael Gruszczynski, Carly M. Jacobs, and John Hibbing.

"Toward a Modern View of Political Man: Genetic and Environmental Transmission of Political Orientations from Attitude Intensity to Political Participation" Annual meeting of the American Political Science Association, Washington, DC (2010), with Carolyn Funk, Kevin Smith, and John Hibbing.

"Genetic and Environmental Transmission of Political Involvement from Attitude Intensity to Political Participation" Annual meeting of the International Society for Political Psychology, San Francisco, CA (2010), with Carolyn Funk, Kevin Smith, and John Hibbing.

"Are Violations of the EEA Relevant to Political Attitudes and Behaviors?" Annual meeting of the Midwest Political Science Association, Chicago, IL (2010), with Kevin Smith, and John Hibbing.

"The Neural Basis of Representation" Annual meeting of the American Political Science Association, Toronto, Canada (2009), with John Hibbing.

"Genetic and Environmental Transmission of Value Orientations" Annual meeting of the American Political Science Association, Toronto, Canada (2009), with Carolyn Funk, Kevin Smith, Matthew Hibbing, Pete Hatemi, Robert Krueger, Lindon Eaves, and John Hibbing.

"The Genetic Heritability of Political Orientations: A New Twin Study of Political Attitudes" Annual Meeting of the International Society for Political Psychology, Dublin, Ireland (2009), with John Hibbing, Cary Funk, Kevin Smith, and Peter K Hatemi.

"The Heritability of Value Orientations" Annual meeting of the Behavior Genetics Association, Minneapolis, MN (2009), with Kevin Smith, John Hibbing, Carolyn Funk, Robert Krueger, Peter Hatemi, and Lindon Eaves.

"The Ick Factor: Disgust Sensitivity as a Predictor of Political Attitudes" Annual meeting of the Midwest Political Science Association, Chicago, IL (2009), with Kevin Smith, Douglas Oxley Matthew Hibbing, and John Hibbing.

"The Ideological Animal: The Origins and Implications of Ideology" Annual meeting of the American Political Science Association, Boston, MA (2008), with Kevin Smith, Matthew Hibbing, Douglas Oxley, and John Hibbing.

"The Physiological Differences of Liberals and Conservatives" Annual meeting of the Midwest Political Science Association, Chicago, IL (2008), with Kevin Smith, Douglas Oxley, and John Hibbing.

"Looking for Political Genes: The Influence of Serotonin on Political and Social Values" Annual meeting of the Midwest Political Science Association, Chicago, IL (2008), with Peter Hatemi, Sarah Medland, John Hibbing, and Nicholas Martin.

"Not by Twins Alone: Using the Extended Twin Family Design to Investigate the Genetic Basis of Political Beliefs" Annual meeting of the American Political Science Association, Chicago, IL (2007), with Peter Hatemi, John Hibbing, Matthew Keller, Nicholas Martin, Sarah Medland, and Lindon Eaves.

"Factorial Association: A generalization of the Fulker between-within model to the multivariate case" Annual meeting of the Behavior Genetics Association, Amsterdam, The Netherlands (2007), with Sarah Medland, Peter Hatemi, John Hibbing, William Coventry, Nicholas Martin, and Michael Neale.

"Not by Twins Alone: Using the Extended Twin Family Design to Investigate the Genetic Basis of Political Beliefs" Annual meeting of the Midwest Political Science Association, Chicago, IL (2007), with Peter Hatemi, John Hibbing, Nicholas Martin, and Lindon Eaves.

"Getting from Genes to Politics: The Connecting Role of Emotion-Reading Capability" Annual Meeting of the International Society for Political Psychology, Portland, OR, (2007.), with John Hibbing.

"The Neurological Basis of Representative Democracy." Hendricks Conference on Political Behavior, Lincoln, NE (2006), with John Hibbing.

"The Neural Basis of Representative Democracy" Annual meeting of the American Political Science Association, Philadelphia, PA (2006), with John Hibbing.

"How are Political Orientations Genetically Transmitted? A Research Agenda" Annual meeting of the Midwest Political Science Association, Chicago Illinois (2006), with John Hibbing.

"The Politics of Mate Choice" Annual meeting of the Southern Political Science Association, Atlanta, GA (2006), with John Hibbing.

"The Challenge Evolutionary Biology Poses for Rational Choice" Annual meeting of the American Political Science Association, Washington, DC (2005), with John Hibbing and Kevin Smith.

"Decision Making on Behalf of Others" Annual meeting of the American Political Science Association, Washington, DC (2005), with John Hibbing.

"The Source of Political Attitudes and Behavior: Assessing Genetic and Environmental Contributions" Annual meeting of the Midwest Political Science Association, Chicago Illinois (2005), with John Hibbing and Carolyn Funk.

"The Source of Political Attitudes and Behavior: Assessing Genetic and Environmental Contributions" Annual meeting of the American Political Science Association, Chicago Illinois (2004), with John Hibbing and Carolyn Funk.

"Accepting Authoritative Decisions: Humans as Wary Cooperators" Annual Meeting of the Midwest Political Science Association, Chicago, Illinois (2002), with John Hibbing

"Can We Trust the NES Trust Measure?" Annual Meeting of the Midwest Political Science Association, Chicago, Illinois (2001), with Stacy Ulbig.

"The Impact of Organizational Structure on the Production of Social Capital Among Group Members" Annual Meeting of the Southern Political Science Association, Atlanta, Georgia (2000), with Allison Rinden.

"Isolating the Origins of Incumbency Advantage: An Analysis of House Primaries, 1956-1998" Annual Meeting of the Southern Political Science Association, Atlanta, Georgia (2000), with Kevin Arceneaux.

"The Electorally Indistinct Senate," Norman Thomas Conference on Senate Exceptionalism, Vanderbilt University; Nashville, Tennessee; October (1999), with John R. Hibbing.

"Interest Group Participation and Social Capital" Annual Meeting of the Midwest Political Science Association, Chicago, Illinois (1999), with Allison Rinden.

"We're All in this Together: The Decline of Trust in Government, 1958-1996." The Hendricks Symposium, University of Nebraska, Lincoln. (1998)

"Constituency Population and Representation in the United States Senate," Electing the Senate; Houston, Texas; December (1989), with John R. Hibbing.

"The Disparate Electoral Security of House and Senate Incumbents," American Political Science Association Annual Meetings; Atlanta, Georgia; September (1989), with John R. Hibbing.

"Partisan and Incumbent Advantage in House Elections," Annual Meeting of the Southern Political Science Association (1987), with David W. Brady.

"Personal and Party Advantage in U.S. House Elections, 1846-1986" with David W. Brady, 1987 Social Science History Association Meetings.

"The Demise of the Upper House and the Rise of the Senate: Electoral Responsiveness in the United States Senate" with John Hibbing, 1987 Annual Meeting of the American Political Science Association.

"A Comparative Analysis of Economic Voting" with Jerome Legge, 1985 Annual Meeting of the American Political Science Association.

"An Analysis of Economic Conditions and the Individual Vote in Great Britain, 1964-1979" with Jerome Legge, 1985 Annual Meeting of the Western Political Science Association.

"Can Government Regulate Fertility? An Assessment of Pro-natalist Policy in Eastern Europe" with Jerome Legge, 1985 Annual Meeting of the Southwestern Social Science Association.

"Economic Conditions and the Individual Vote in the Federal Republic of Germany" with Jerome S. Legge, 1984 Annual Meeting of the Southern Political Science Association.

"The Conditions Required for Economic Issue Voting" with John R. Hibbing, 1984 Annual Meeting of the Midwest Political Science Association.

"Incumbency Advantage in Senate Elections," 1983 Annual Meeting of the Midwest Political Science Association.

"Television Markets and Congressional Elections: The Impact of Market/District Congruence" with James Campbell and Keith Henry, 1982 Annual Meeting of the Southern Political Science Association.

"Economic Conditions and Senate Elections" with John R. Hibbing, 1982 Annual Meeting of the Midwest Political Science Association. "Pocketbook Voting: Economic Conditions and Individual Level Voting," 1982 Annual Meeting of the American Political Science Association.

"Increased Incumbency Advantage in the House," with John R. Hibbing, 1981 Annual Meeting of the Midwest Political Science Association.

Other Conference Participation:

Roundtable Participant – Closing Round-table on Biopolitics; 2016 UC Merced Conference on Bio-Politics and Political Psychology, Merced, CA.

Roundtable Participant "Genes, Brains, and Core Political Orientations" 2008 Annual Meeting of the Southwestern Political Science Association, Las Vegas.

Roundtable Participant "Politics in the Laboratory" 2007 Annual Meeting of the Southern Political Science Association, New Orleans.

Short Course Lecturer, "What Neuroscience has to Offer Political Science" 2006 Annual Meeting of the American Political Science Association.

Panel chair and discussant, "Neuro-scientific Advances in the Study of Political Science" 2006 Annual Meeting of the American Political Science Association.

Presentation, "The Twin Study Approach to Assessing Genetic Influences on Political Behavior" Rice Conference on New Methods for Understanding Political Behavior, 2005.

Panel discussant, "The Political Consequences of Redistricting," 2002 Annual Meeting of the American Political Science Association.

Panel discussant, "Race and Redistricting," 1999 Annual Meeting of the Midwest Political Science Association.

Invited participant, "Roundtable on Public Dissatisfaction with American Political Institutions", 1998 Annual Meeting of the Southwestern Social Science Association.

Presentation, "Redistricting in the '90s," Texas Economic and Demographic Association, 1997.

Panel chair, "Congressional Elections," 1992 Annual Meeting of the Southern Political Science Association.

Panel discussant, "Incumbency and Congressional Elections," 1992 Annual Meeting of the American Political Science Association.

Panel chair, "Issues in Legislative Elections," 1991 Annual Meeting of the Midwest Political Science Association.

Panel chair, "Economic Attitudes and Public Policy in Europe," 1990 Annual Meeting of the Southern Political Science Association

Panel discussant, "Retrospective Voting in U.S. Elections," 1990 Annual Meeting of the Midwest Political Science Association.

Co-convener, with Bruce Oppenheimer, of Electing the Senate, a national conference on the NES 1988 Senate Election Study. Funded by the Rice Institute for Policy Analysis, the University of Houston Center for Public Policy, and the National Science Foundation, Houston, Texas, December, 1989.

Invited participant, Understanding Congress: A Bicentennial Research Conference, Washington, D.C., February, 1989.

Invited participant--Hendricks Symposium on the United States Senate, University of Nebraska, Lincoln, Nebraska, October, 1988

Invited participant--Conference on the History of Congress, Stanford University, Stanford, California, June, 1988.

Invited participant, "Roundtable on Partisan Realignment in the 1980's", 1987 Annual Meeting of the Southern Political Science Association.

Professional Activities:

Other Universities:

Invited Speaker, Annual Lecture, Psi Kappa -the Psychology Club at Houston Community College, 2018.

Invited Speaker, Annual Allman Family Lecture, Dedman College Interdisciplinary Institute, Southern Methodist University, 2016.

Invited Speaker, Annual Lecture, Psi Sigma Alpha – Political Science Dept., Oklahoma State University, 2015.

Invited Lecturer, Department of Political Science, Vanderbilt University, 2014.

Invited Speaker, Annual Lecture, Psi Kappa -the Psychology Club at Houston Community College, 2014.

Invited Speaker, Graduate Student Colloquium, Department of Political Science, University of New Mexico, 2013.

Invited Keynote Speaker, Political Science Alumni Evening, University of Houston, 2013.

Invited Lecturer, Biology and Politics Masters Seminar (John Geer and David Bader), Department of Political Science and Biology Department, Vanderbilt University, 2010.

Invited Lecturer, Biology and Politics Senior Seminar (John Geer and David Bader), Department of Political Science and Biology Department, Vanderbilt University, 2008.

Visiting Fellow, the Hoover Institution, Stanford University, 2007.

Invited Speaker, Joint Political Psychology Graduate Seminar, University of Minnesota, 2007.

Invited Speaker, Department of Political Science, Vanderbilt University, 2006.

Member:

Editorial Board, Journal of Politics, 2007-2008.

Planning Committee for the National Election Studies' Senate Election Study, 1990-92.

Nominations Committee, Social Science History Association, 1988

Reviewer for:

American Journal of Political Science
American Political Science Review
American Politics Research
American Politics Quarterly
American Psychologist
American Sociological Review
Canadian Journal of Political Science
Comparative Politics
Electoral Studies
Evolution and Human Behavior
International Studies Quarterly

Journal of Politics
Journal of Urban Affairs
Legislative Studies Quarterly
National Science Foundation
PLoS ONE
Policy Studies Review
Political Behavior
Political Communication
Political Psychology
Political Research Quarterly
Public Opinion Quarterly
Science
Security Studies
Social Forces
Social Science Quarterly
Western Political Quarterly

University Service:

Member, University Senate, 2021-2023.

Member, University Parking Committee, 2016-2022.

Member, University Benefits Committee, 2013-2016.

Internship Director for the Department of Political Science, 2004-2018.

Member, University Council, 2012-2013.

Invited Speaker, Rice Classroom Connect, 2016.

Invited Speaker, Glasscock School, 2016.

Invited Speaker, Rice Alumni Association, Austin, 2016.

Invited Speaker, Rice Alumni Association, New York City, 2016.

Invited Speaker, Rice TEDxRiceU , 2013.

Invited Speaker, Rice Alumni Association, Atlanta, 2011.

Lecturer, Advanced Topics in AP Psychology, Rice University AP Summer Institute, 2009.

Scientia Lecture Series: "Politics in Our Genes: The Biology of Ideology" 2008

Invited Speaker, Rice Alumni Association, Seattle, San Francisco and Los Angeles, 2008.

Invited Speaker, Rice Alumni Association, Austin, Chicago and Washington, DC, 2006.

Invited Speaker, Rice Alumni Association, Dallas and New York, 2005.

Director: Rice University Behavioral Research Lab and Social Science Computing Lab, 2005-2006.

University Official Representative to the Inter-university Consortium for Political and Social Research, 1989-2012.

Director: Rice University Social Science Computing Lab, 1989-2004.

Member, Rice University Information Technology Access and Security Committee, 2001-2002

Rice University Committee on Computers, Member, 1988-1992, 1995-1996; Chair, 1996-1998, Co-chair, 1999.

Acting Chairman, Rice Institute for Policy Analysis, 1991-1992.

Divisional Member of the John W. Gardner Dissertation Award Selection Committee, 1998

Social Science Representative to the Educational Sub-committee of the Computer Planning Committee, 1989-1990.

Director of Graduate Admissions, Department of Political Science, Rice University, 1986-1988.

Co-director, Mellon Workshop: Southern Politics, May, 1988.

Guest Lecturer, Mellon Workshop: The U.S. Congress in Historical Perspective, May, 1987 and 1988.

Faculty Associate, Hanszen College, Rice University, 1987-1990.

Director, Political Data Analysis Center, University of Georgia, 1982-1985.

External Consulting:

Expert Witness, Soto Palmer v. Hobbs, (Washington State), racially polarized voting analysis, 2022.

Expert Witness, Pendergrass v. Raffensperger, (Georgia State House and Senate), racially polarized voting analysis, 2022.

Expert Witness, LULAC, et al. v. Abbott, et al., Voto Latino, et al. v. Scott, et al., Mexican American Legislative Caucus, et al. v. Texas, et al., Texas NAACP v. Abbott, et al., Fair Maps Texas, et al. v. Abbott, et al., US v. Texas, et al. (consolidated cases) challenges to Texas Congressional, State Senate, State House, and State Board of Education districting, 2022.

Expert Witness, Robinson/Galmon v. Ardoin, (Louisiana), racially polarized voting analysis, 2022.

Expert Witness, Christian Ministerial Alliance et al v. Arkansas, racially polarized voting analysis, 2022.

Expert Witness, Johnson v. Wisconsin Elections Commission, 2022.

Expert Witness, Rivera, et al. v. Schwab, Alonzo, et al. v. Schwab, Frick, et al. v. Schwab, (consolidated cases) challenge to Kansas congressional map, 2022.

Expert Witness, Grant v. Raffensperger, challenge to Georgia congressional map, 2022

Expert Witness, Brooks et al. v. Abbot, challenge to State Senate District 10, 2022.

Expert Witness, Elizondo v. Spring Branch ISD, 2022.

Expert Witness, Portugal v. Franklin County, et al., challenge to Franklin County, Washington at large County Commissioner's election system, 2022.

Consulting Expert, Gressman Math/Science Petitioners, Pennsylvania Congressional redistricting, 2022.

Consultant, Houston Community College – evaluation of election impact for redrawing of college board election districts, 2022.

Consultant, Lone Star College – evaluation of election impact for redrawing of college board election districts, 2022.

Consultant, Killeen ISD – evaluation of election impact for redrawing of school board election districts, 2022.

Consultant, Houston ISD – evaluation of election impact for redrawing of school board election districts, 2022.

Consultant, Brazosport ISD – evaluation of election impact for redrawing of school board election districts, 2022.

Consultant, Dallas ISD – evaluation of election impact for redrawing of school board election districts, 2022.

Consultant, Lancaster ISD – redrawing of all school board member election districts including demographic analysis and redrawing of election districts, 2021.

Consultant, City of Baytown – redrawing of all city council member election districts including demographic analysis and redrawing of election districts, 2021.

Consultant, Goose Creek ISD – redrawing of all board member election districts including demographic analysis and redrawing of election districts, 2021.

Expert Witness, Bruni et al. v. State of Texas, straight ticket voting analysis, 2020.

Consulting Expert, Sarasota County, VRA challenge to district map, 2020.

Expert Witness, Kumar v. Frisco ISD, TX, racially polarized voting analysis, 2019.

Expert Witness, Vaughan v. Lewisville ISD, TX, racially polarized voting analysis, 2019.

Expert Witness, Johnson v. Ardoin, (Louisiana), racially polarized voting analysis, 2019.

Expert Witness, Flores et al. v. Town of Islip, NY, racially polarized voting analysis, 2018.

Expert Witness, Tyson v. Richardson ISD, racially polarized voting analysis, 2018.

Expert Witness, Dwight v. State of Georgia, racially polarized voting analysis, 2018.

Expert Witness, NAACP v. East Ramapo Central School District, racially polarized voting analysis, 2018.

Expert Witness, Georgia NAACP v. State of Georgia, racially polarized voting analysis, 2018.

Exhibit
0003

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

ATLANTA DIVISION

ALPHA PHI ALPHA FRATERNITY INC., et al.; *Plaintiffs*, vs. BRAD RAFFENSPERGER, in his official capacity as Secretary of State of Georgia. *Defendant*.	Case No. 1:21-cv-05337-SCJ

EXPERT REPORT OF DR. LISA HANDLEY

December 23, 2022

Report on the 2022 Georgia State House and Senate Plans

Dr. Lisa Handley

I. Introduction

Scope of Project I was retained by plaintiffs in this case as an expert to conduct an analysis of voting patterns by race in several areas in the State of Georgia to determine whether voting in these areas is racially polarized. In addition, I was asked to assess the ability of Black voters to elect their candidates of choice in these areas, comparing the state legislative plans adopted by the Georgia State Legislature (Adopted State Senate and House Plans) to the illustrative plans (Illustrative State House and Illustrative State Senate Plans) drawn by plaintiffs' expert demographer, Bill Cooper, in this litigation.[1]

Summary Conclusion In the seven areas of Georgia that I studied for this project, voting is racially polarized. This polarization impedes the ability of Black voters to elect candidates of their choice to the state legislature unless districts are specifically drawn to provide Black voters with an opportunity to elect their preferred candidates. The Adopted State Senate and State House Plans thus fail to offer Black voters an opportunity to elect their preferred candidates in areas of the state where voting is racially polarized and where (as demonstrated by the Illustrative State Senate and State House Plans) additional majority Black opportunity districts could have been created. This failure dilutes the opportunity of Black voters to participate in the electoral process and to elect candidates of their choice to the Georgia State Legislature.

II. Professional Background and Experience

I have over thirty-five years of experience as a voting rights and redistricting expert. I have advised scores of jurisdictions and other clients on minority voting rights and redistricting-related issues. I have served as an expert in dozens of voting rights cases. My clients have included state and local jurisdictions, independent redistricting commissions (Arizona, Colorado, Michigan), the U.S. Department of Justice, national civil rights organizations, and such international organizations as the United Nations.

[1] I am being compensated at a rate of $300 an hour for work on this project.

I have been actively involved in researching, writing, and teaching on subjects relating to voting rights, including minority representation, electoral system design, and redistricting. I co-authored a book, *Minority Representation and the Quest for Voting Equality* (Cambridge University Press, 1992), and co-edited a volume, *Redistricting in Comparative Perspective* (Oxford University Press, 2008), on these subjects. In addition, my research on these topics has appeared in peer-reviewed journals such as *Journal of Politics*, *Legislative Studies Quarterly*, *American Politics Quarterly*, *Journal of Law and Politics*, and *Law and Policy,* as well as law reviews (e.g., *North Carolina Law Review*) and a number of edited books. I hold a Ph.D. in political science from The George Washington University.

I have been a principal of Frontier International Electoral Consulting since co-founding the company in 1998. Frontier IEC specializes in providing electoral assistance in transitional democracies and post-conflict countries. In addition, I am a Visiting Research Academic at Oxford Brookes University in Oxford, United Kingdom. Attached to the end of this report as Appendix E is a copy of my curriculum vitae.

III. Analyzing Voting Patterns by Race

An analysis of voting patterns by race serves as the foundation of two of the three 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 White voters 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.

Standard Statistical Techniques Three standard statistical techniques have been developed over time to estimate vote choices by race: homogeneous precinct analysis, ecological

regression, and ecological inference.[2] Two of these analytic procedures – homogeneous precinct analysis and ecological regression – were employed by the plaintiffs' expert in *Thornburg v. Gingles*, have the benefit of the Supreme Court's approval in that case, and have been used in most subsequent voting rights cases. The third technique, ecological inference, was developed after *Gingles* was decided and was designed, in part, to address some of the disadvantages associated with ecological regression analysis. Ecological inference analysis has been introduced and accepted in numerous district court proceedings and is generally accepted as the most accurate method for estimating voting patterns by race.

Homogeneous precinct (HP) analysis is the simplest technique. It involves comparing the percentage of votes received by each of the candidates in precincts that are racially or ethnically homogeneous. The general practice is to label a precinct as homogeneous if at least 90 percent of the voters or voting age population is composed of a single race. In fact, the homogeneous results reported are not estimates – they are the actual precinct results. However, most voters in Georgia do not reside in homogeneous precincts and voters who do reside in homogeneous precincts may not be representative of voters who live in more racially diverse precincts. For this reason, I refer to these percentages as estimates.

The second statistical technique employed, *ecological regression* (ER), uses information from all precincts, not simply the homogeneous ones, to derive estimates of the voting behavior of minorities and Whites. If there is a strong linear relationship across precincts between the percentage of minorities (or Whites) and the percentage of votes cast for a given candidate, this relationship can be used to estimate the percentage of minority (or White) voters supporting the candidate.

The third technique, *ecological inference* (EI), was developed by Professor Gary King. This approach also uses information from all precincts but, unlike ecological regression, it does not rely on an assumption of linearity. Instead, it incorporates maximum likelihood statistics to produce estimates of voting patterns by race. In addition, it utilizes the method of bounds, which

[2] For a detailed explanation of homogeneous precinct analysis and ecological regression see Bernard Grofman, Lisa Handley and Richard Niemi, *Minority Representation and the Quest for Voting Equality* (Cambridge University Press, 1992). See Gary King, *A Solution to the Ecological Inference Problem* (Princeton University Press, 1997) for a more detailed explanation of ecological inference.

uses more of the available information from the precinct returns than ecological regression.[3] Unlike ecological regression, which can produce percentage estimates of less than 0 or more than 100 percent, ecological inference was designed to produce only estimates that fall within the possible limits. However, EI does not guarantee that the estimates for all of the candidates add to 100 percent for each of the racial groups examined.

In conducting my analysis of voting patterns by race in recent elections in Georgia, I also used a more recently developed version of ecological inference, which I have labeled "EI RxC" in the summary tables found in the Appendices. Unlike the other methods discussed, this approach permits the analysis of more than two groups simultaneously. Georgia collects racial and ethnicity data on several groups – Black, White, Asian, American Indian, Hispanic, and "Other" voters – and I conducted the EI RxC analysis using three groups: Black voters, White voters, and all other voters combined. In the summary tables, I report estimates only for the two groups of interest: Black and White voters. Another advantage of EI RxC is that it produces generally accepted confidence intervals for each of the reported estimates.[4] I have included the 95% confidence intervals for each estimate listed in the summary tables in the Appendices.

Database 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 if this information is available; if it is not, then voting age population or citizen voting age population is used. Georgia collects voter registration data by race and reports turnout counts by race for all of the precincts in each election cycle. This information is included in the database.

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[3] The following is an example of how the method of bounds works: if a given precinct has 100 voters, of whom 75 are Black and 25 are White, and the Black candidate received 80 votes, then at least 55 of the Black voters voted for the Black candidate and at most all 75 did. (The method of bounds is less useful for calculating estimates for White voters, as anywhere between none of the Whites and all of the Whites could have voted for the candidate.)

[4] The 95% confidence intervals reported in the summary tables indicate that 95% of the simulated estimates produced via EI RxC fell within the range specified. The larger the confidence interval, the more uncertainty associated with the reported estimate. Factors that influence the size of the confidence interval include the number of precincts and the variation in the percentage of Black and White voters across the precincts in the area under investigation.

The precinct election results and the turnout by race counts for the primary and general elections in 2016, 2018, and 2020;[5] the runoff election in January 2021; and the 2022 general election were obtained from the Georgia Secretary of State's website or directly from the office of the Secretary of State.[6]

In order to incorporate census population and census geography into the database, the 2020 Census Block shapefiles, and total and voting age populations by race and ethnicity, were obtained from the Census FTP portal. The 2016, 2018, and 2020 precinct-level shapefiles were acquired from the Voting and Election Science Team at Harvard University and the 2020 precincts were joined to the January 2021 runoff election.[7]

Elections analyzed I have analyzed all recent (2016-2022) statewide general election and general runoff contests that included Black candidates for which precinct level data is currently available. The 14 general elections that meet this criteria are as follows:[8] the 2022 general election contests for U.S. Senate, Governor, Commissioners of Agriculture, Insurance, and Labor, and School Superintendent; the 2021 runoff for U.S. Senate (Special) and Public Service Commission District 4; the 2020 general elections for U.S. Senate (Special), and Public Service Commission Districts 1 and 4; and the 2018 general election contests for Governor, Commissioner of Insurance, and School Superintendent. I also analyzed the two contests in which Jon Ossoff ran – the 2021 runoff for U.S. Senate and the November 2020 general election for U.S. Senate – because my analysis of the 2020 Democratic primary for U.S. Senate, which included three Black candidates, indicates that Ossoff was clearly the candidate preferred by Black voters.

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[5] The 2016–2020 election results were processed and formatted by OpenElections.

[6] The turnout by race data for the primary election held in May 2022 was not made available in time for inclusion in this report, and I reserve the right to update my analysis to include that data at a later point in time.

[7] The 2022 precinct shapefiles have not been made available to date. The election returns for the 2016, 2018, 2020, and 2021 election cycles were disaggregated down to the level of the 2020 census block using the relevant shape files. This block-level dataset was then reaggregated up to the level of the in-cycle precincts, taking into account splits in the precincts by the adopted and illustrative plans. I reserve the right to update my analysis once the 2022 shapefiles have been provided.

[8] The turnout by race data for the December 2022 runoff election for U.S. Senate has not been made available to date. I reserve the right to update my analysis to include that data at a later point in time.

In addition to the 16 general and runoff elections examined, I also analyzed 11 recent (2016-2020) statewide Democratic primaries, including a primary runoff, that included Black candidates:[9] the 2020 Democratic primaries for U.S. Senate and Public Service Commission District 4; the 2018 Democratic primaries for Governor, Lieutenant Governor, Commissioner of Insurance, Commissioner of Labor, Secretary of State, School Superintendent, and Public Service Commission District 3; the 2018 Democratic primary runoff for School Superintendent; and the 2016 Democratic primary for U.S. Senate. Republican primaries were not examined because the overwhelming majority of Black voters who participate in primaries cast their ballots in Democratic rather than Republican primaries. As a consequence, Democratic primaries are far more probative than Republican primaries in ascertaining the candidates preferred by Black voters.[10]

Finally, I examined recent state legislative general elections that included both Black and White candidates in the seven areas of interest. The courts have considered elections for the office at issue – often referred to as endogenous elections – to be particularly probative. Because there has only been one set of state legislative elections (2022) under the Adopted Plans, I also analyzed biracial state legislative elections conducted between 2016 and 2020 in the state legislative districts under the previous state house and state senate plans that are located within the seven areas of interest. More specifically, a state legislative contest was analyzed if (1) the state house or state senate district was or is wholly contained within any areas of interest or overlapped with any of Illustrative or Adopted districts (listed in Table 1) being compared in the area, and (2) the contest included at least one Black and one White candidate.[11] In addition, all 2022 state legislative contests in the Adopted Plans identified as districts of interest (Table 1) were analyzed,

[9] Precinct level turnout by race data for the 2022 statewide Democratic primaries was not made available in time for inclusion in this report, and I reserve the right to update my analysis to include that data at a later point in time.

[10] In addition, producing reliable estimates for Black voters in Republican primaries would not have been possible.

[11] There was one state house election contest (State House District 147 in 2018) that met the criteria but the district contained less than ten precincts and reliable estimates of voting behavior by race could not be produced.

even if the contest did not include at least one Black and one White candidate.[12] In total, 16 recent state senate contests and 38 state house contests were analyzed.

Geographic areas analyzed I examined voting patterns in seven areas of Georgia where the Illustrative Plans create more majority Black voting age population (BVAP)[13] districts than the Adopted State Senate and House Plans.[14] The seven areas of interest, the set of Illustrative and Adopted districts being compared in each of these areas, and the counties encompassed by these areas,[15] are listed in Table 1. The districts that offer Black voters an opportunity to elect their candidates of choice in the Illustrative and Adopted Plans are bolded.

Table 1: Georgia Areas of Interest Analyzed

Area of Interest	Illustrative Districts	Adopted Districts	Counties
State Senate Districts			
Eastern Atlanta Metro Region (Map 1)	**10** **17** **43**	**10** 17 **43**	Dekalb, Henry, Morgan, Newton, Rockdale, Walton
Southern Atlanta Metro Region (Map 2)	**16** **28** **34** 39	16 28 **34** **44**	Clayton, Coweta, Douglas, Fayette, Heard, Henry, Lamar, Pike, Spalding

[12] There was one 2022 state house election contest (State House District 146) that contained less than ten precincts and reliable estimates of voting behavior by race could not be produced. Two of the 2022 contests analyzed were not biracial: two White candidates competed in State House District 74 and two Black candidates competed in State House District 153.

[13] BVAP has been calculated by counting all persons who are 18 or older who checked "Black or African American" on their census form. This includes persons who are single-race Black, or any part Black (i.e., persons of two or more races who indicate "Black" as one of the races), including those who marked both Hispanic and Black.

[14] The 2022 Adopted Plans create 14 majority BVAP state senate districts and 49 majority BVAP state house districts. The Illustrative Plans create 18 majority BVAP state senate districts and 54 majority BVAP state house districts. The seven areas of interest include three of the four additional state senate districts and all five of the additional state house districts offered by the Illustrative Plans.

[15] All counties that overlapped any of the Adopted or Illustrative districts being compared in the area of interest were included in the analysis if more than 10% of the county's population is encompassed by one of these districts.

Area of Interest	Illustrative Districts	Adopted Districts	Counties
East Central Georgia with Augusta (Map 3)	**22** **23** **26** 44	**22** 23 25 **26**	Baldwin, Bibb, Burke, Butts, Columbia, Emanuel, Glascock, Hancock, Henry, Houston, Jasper, Jefferson, Jenkins, Johnson, Jones, Lamar, McDuffie, Monroe, Morgan, Putnam, Richmond, Screven, Taliaferro, Twiggs, Walton, Warren, Washington, Wilkes, Wilkinson
State House Districts			
Southeastern Atlanta Metro Region (Map 4)	**74** **75** **78** **115** **116** **117** 118 134 135	74 **75** **78** **115** **116** 117 118 134 135	Butts, Clayton, Fayette, Henry, Jasper, Lamar, Monroe, Pike, Putnam, Spalding, Upson
Central Georgia (Map 5)	**128** **133** 144 155	**128** 133 149 155	Baldwin, Bibb, Bleckley, Dodge, Glascock, Hancock, Jefferson, Johnson, Jones, Laurens, McDuffie, Taliaferro, Telfair, Twiggs, Warren, Washington, Wilkes, Wilkinson
Southwest Georgia (Map 6)	152 **153** **171** 172 173	152 **153** 171 172 173	Colquitt, Cook, Decatur, Dougherty, Grady, Lee, Mitchell, Seminole, Stewart, Terrell, Thomas, Tift, Webster, Worth
Macon Region (Map 7)	**142** **143** **145**	**142** **143** 145	Bibb, Crawford, Houston, Peach, Twiggs

IV. Voting is Racially Polarized in the Seven Areas of Georgia Analyzed

Voting is racially polarized in all seven areas of Georgia that I examined. In all 16 of the recent general and general runoff elections I analyzed (including the two elections that included Jon Ossoff), Black voters were cohesive in supporting their preferred candidates in these areas. And in all 16 of these elections, White voters bloc voted against the candidates preferred by Black voters. In other words, in every recent general election contest that included a Black candidate, in

all seven of the areas studied, voting was racially polarized. The results of my analysis of statewide general and runoff elections by area of interest can be found in Appendices A1-A7, with a separate appendix for each area of interest.

Overall, the average percentage of Black vote for the 16 Black-preferred candidates is 96.1%. The average percentage of White vote for these 16 Black-preferred candidates across the seven areas is 11.2%. (When Ossoff is excluded, and only Black-preferred Black candidates are considered, the average White vote is slightly lower: 11.1%.) The highest average White vote for any of the 16 candidates is 14.4% for Raphael Warnock in his 2022 general election bid for re-election. While the percentage of White support for candidates preferred by Black voters varies across the areas, in five of the seven areas the average did not even reach 10%. White crossover voting was the highest in the Eastern Atlanta Metro Region (Map 1), but only about one third of White voters typically supported the Black-preferred Black candidates in this area.

Nearly every one of the 54 of the state legislative elections analyzed (53 of the 54 contests, or 98.1%) was racially polarized. The estimates of Black and White support for the state legislative candidates in these contests analyzed can be found in Appendices B1 (State Senate) and B2 (State House). Black voters were quite cohesive in supporting Black candidates in these state legislative contests: on average, 97.4% of Black voters supported their preferred Black state senate candidates, and 91.5% supported their preferred Black state house candidate. Very few White voters supported these candidates, however: Black-preferred Black state senate candidates garnered, on average, 10.1% of the White vote; Black-preferred Black state house candidates received, on average, 9.8% of the White vote. All but one of the successful Black state legislative candidates in contests analyzed for this report were elected from majority Black districts; the one exception was elected from a district that was majority minority in composition.[16]

My conclusion that voting is racially polarized in the seven areas of interest in Georgia rests on the results of my analysis of voting patterns in recent general and runoff elections – both

[16] Black-preferred Black candidates won state legislative contests in majority Black State Senate Districts 22 (2022), 34 (2022 and 2018), 41 (2022), and 43 (2022 and 2016); and in State House Districts 63 (2020), 75 (2022), 111 (2018), 116 (2022), 126 (2018), 128 (2018) and 153 (2022). The only district that elected a Black-preferred Black candidate that was not majority Black was District 109 in 2020. The district had a 42.18% BVAP but was only 46.9% non-Hispanic White in voting age population.

the statewide and the endogenous (state legislative) elections. General elections are clearly the barrier to electing candidates preferred by Black voters to the state legislature – at least outside of districts that provide Black voters with an opportunity to elect their preferred candidates. However, because there is typically a two-stage election process in the United States, I analyzed recent Democratic primary elections in the seven areas of interest as well. My analysis was limited to the 11 statewide Democratic primaries and Democratic runoffs that included Black candidates between 2016 and 2020 as turnout by race for the 2022 Democratic primary was not made available in time for inclusion in this report.[17] I found that the majority (55.8%) of the contests I analyzed were racially polarized. Moreover, in over 67% of the contests that were not polarized, it was because Black voters supported White candidates preferred by White voters (e.g., Jon Ossoff in the 2020 Democratic primary for U.S. Senate; John Barrow and Lindy Miller in their 2018 primary bids for Secretary of State and Public Service Commission District 3, respectively; and Jim Barksdale in the 2016 Democratic primary for U.S. Senate), rather than because White voters supported the Black candidate. Overall, White voters supported Black-preferred Black candidates in only 14.3% of the Democratic primary election contests analyzed. The results of my analysis of statewide Democratic primaries and Democratic runoffs by area of interest can be found in Appendices C1-C7, with a separate appendix for each area of interest.

Although many of the Democratic primary contests analyzed were racially polarized, because the majority of Whites who cast ballots in primaries choose to vote in Republican primaries, candidates supported by Black voters often win the Democratic nomination in districts that do not have significant Black populations. The barrier to elected legislative office for candidates preferred by Black voters is usually not the Democratic primary – it is the general election. Minus a substantial Black population in the district, Black voters are very unlikely to be able to elect their preferred candidates to the Georgia state legislature in the seven areas of interest I studied for this project.

[17] While I was able to analyze statewide Democratic primaries in the areas of interest, my attempt at analyzing state legislative Democratic primaries produced confidence intervals that were too wide to ascertain the candidates of choice of White voters. This was in large part due to the limited number of precincts in the legislative districts and the consistently low number of White voters turning out to vote in Democratic primaries in these precincts.

V. The State Senate and State House Plans Adopted in 2022 Dilute Black Voting Strength

The Adopted State Senate and House Plans fail to provide Black voters with opportunities to elect their preferred candidates that the Illustrative Plans would provide. In order to compare the opportunities provided by the Illustrative Plans to the Adopted Plans, a district-specific, functional analysis is necessary. This assessment depends not only upon the demographic composition of the district but the voting patterns in that district and whether the candidates preferred by minority voters can actually win in the district – this is what is meant by "functional."

Because no elections have taken place in the Illustrative districts of interest, election results from recent statewide elections were reconfigured to conform to the boundaries of the proposed district boundaries to make a determination about the "opportunity to elect" in these proposed districts. To perform this analysis, precinct election returns from these recent elections were disaggregated down to the level of the census block. The block-level election data was then reaggregated up, or recompiled, to the level of the Illustrative districts of interest to determine how the Black-preferred Black candidates would have fared in these districts. In order to be able to directly compare the opportunities provided by the Illustrative districts and the Adopted districts of interest, this exercise was also carried out for the Adopted districts of interest. (Of course, if there was a competitive 2022 election contest in the Adopted state legislative districts of interest, this information was also used to assess whether the Adopted district offered Black voters an opportunity to elect their candidate of choice.)

The best election contests to use for a functional analysis are recent elections that included a viable minority candidate supported by minority voters but not by White voters. While all 14 of the recent statewide general election contests that I analyzed that included Black candidates satisfy these conditions, the lack of precinct shapefiles for the 2022 precincts meant that only eight of these contests could be recompiled to use in my assessment:

Election Cycle	Office	Black Candidate
2021 Runoff	U.S. Senate (Special)	Raphael Warnock

Election Cycle	Office	Black Candidate
	Public Service Commission District 4	Daniel Blackman
2020 General	U.S. Senate (Special)	Raphael Warnock
	Public Service Commission District 1	Robert Bryant
	Public Service Commission District 4	Daniel Blackman
2018 General	Governor	Stacey Abrams
	Commissioner of Insurance	Janice Laws
	School Superintendent	Otha Thornton

After recompiling the election results for these contests to conform to the boundaries of the Adopted and Illustrative districts of interest, the average vote share received by the eight Black-preferred Black candidates in each district was calculated. I refer to this average as the general election effectiveness score (GE score). A score of less than .5 means that the average vote share that these eight Black-preferred Black candidates received in the district is less than 50%.

To provide an indication of how Black-preferred Black candidates would fare in Democratic primaries, seven recent statewide Democratic primaries were used to construct a Democratic primary effectiveness score (DPR score). The seven primaries chosen were the seven contests between 2016 and 2020 in which Black voters supported the Black candidate. In one of these seven contests, White voters also consistently supported the Black candidate (Daniel Blackman in the Democratic primary for Public Service Commission District 4 in 2020); in another contest, White voters often supported the Black candidate (Stacey Abrams in the 2018 Democratic primary for governor). The other five contests included in the index were consistently racially polarized. The primaries chosen, and the name of the Black candidate supported by Black voters in each of these primary contests, are as follows:

Election Cycle	Office	Black Candidate
2020 Democratic primary	Public Service Commission District 4	Daniel Blackman
2018 Democratic primary	Governor	Stacey Abrams
	Lieutenant Governor	Triana Arnold James

Election Cycle	Office	Black Candidate
	Commissioner of Insurance	Janice Laws
	Commissioner of Labor	Fred Quinn
	School Superintendent	Otha Thornton
2018 Democratic primary runoff	School Superintendent	Otha Thornton

In my comparisons of the Adopted and Illustrative Plans in the seven areas of interest, I considered the composition of the district (the percent BVAP), the GE score, and the DPR score (although, as expected, the primary was not an impediment to election in any of the districts examined) to ascertain whether the district was likely to provide Black voters with an opportunity to elect their candidates of choice. For the Adopted districts, I also considered the results of the 2022 state legislative election in my assessment.

As the plan comparison tables (Plan Comparison Tables 1-7), below, clearly demonstrate, Black voters would have a greater opportunity to elect their candidates of choice in the Illustrative districts than in the Adopted districts in the same area. Moreover, in each of these seven areas, the additional Black opportunity district in the Illustrative Plan was created by pulling in substantial population from at least one district in the Adopted Plan that fails to provide Black voters with an opportunity to elect their preferred candidates. (Appendix D identifies each of the additional Illustrative districts, the Adopted districts that overlap with each of these additional Illustrative districts, and the percentage of the population in the Illustrative district that was drawn from each of the Adopted districts.)

Assessment of seven geographic areas of interest This section provides a very brief description of the voting patterns and opportunities to elect under the Illustrative versus Adopted plans in each of the seven areas. Maps of the seven areas showing the Illustrative and Adopted districts of interest are followed by district comparison tables summarizing the opportunity to elect candidates of choice for Black voters (as reflected in the BVAP, GE and DPR scores listed for each district), as well as the actual results of any contested general elections in 2022 using the district lines adopted by the legislature. The districts that offer Black voters an opportunity to elect their candidates of choice to the state legislature are shaded pink in the maps and shaded

grey in the Comparison Tables. The number under each district number in each map is the percent BVAP of the district.

Eastern Atlanta Metro Region (Map Area 1) Voting is racially polarized in this area – in all 16 of the general elections analyzed, Black and White voters supported different candidates. The Adopted State Senate Plan includes two districts that offer Black voters an opportunity to elect their preferred candidates. The Illustrative Plan offers three Black opportunity districts in this area, as shown in Map 1 and Comparison Table 1.

Southern Atlanta Metro Region (Map Area 2) Voting is racially polarized in this area – in all 16 of the general elections, Black and White voters supported different candidates. The Adopted State Senate Plan includes two districts that offer Black voters an opportunity to elect their preferred candidates. The Illustrative Plan offers three Black opportunity districts in this area, as shown in Map 2 and Comparison Table 2.

East Central Georgia (Map Area 3) Voting is racially polarized in this area – in all 16 of the general elections, Black and White voters supported different candidates. The Adopted State Senate Plan includes two districts that offer Black voters an opportunity to elect their preferred candidates. The Illustrative Plan offers three Black opportunity districts in this area, as shown in Map 3 and Comparison Table 3.

Southeastern Atlanta Metro Region (Map Area 4) Voting is racially polarized in this area – in all 16 of the general elections, Black and White voters supported different candidates. The Adopted State House Plan includes four districts that offer Black voters an opportunity to elect their preferred candidates. The Illustrative Plan offers six Black opportunity districts in this area, as shown in Map 4 and Comparison Table 4.

Central Georgia (Map Area 5) Voting is racially polarized in this area – in all 16 of the general elections, Black and White voters supported different candidates. The Adopted State House Plan includes one district that offers Black voters an opportunity to elect their preferred candidates. The Illustrative Plan offers two Black opportunity districts in this area, as shown in Map 5 and Comparison Table 5.

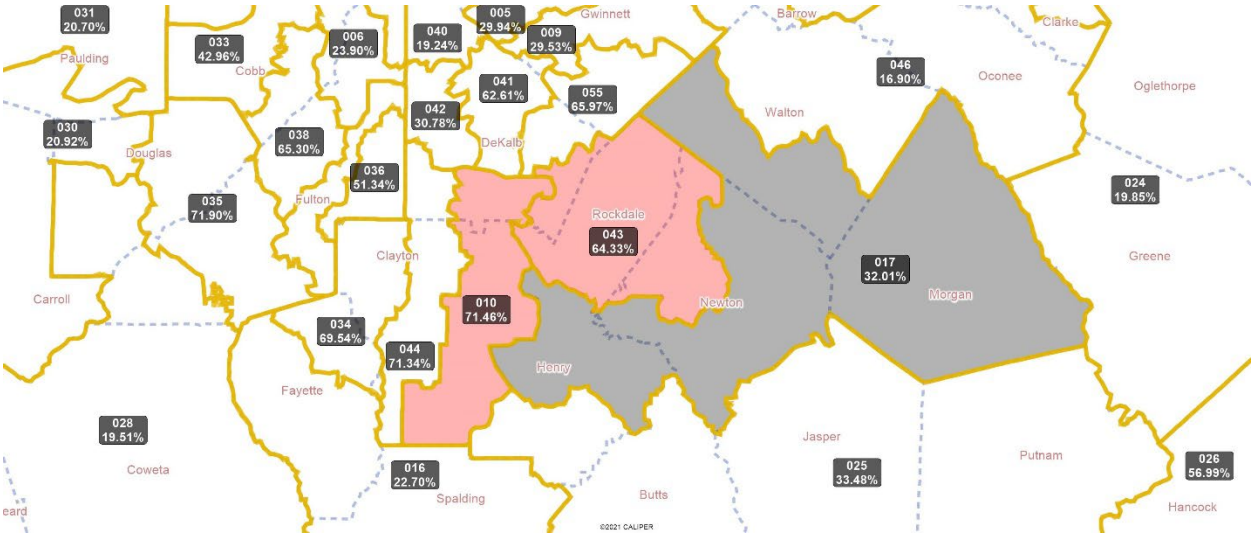
Southwest Georgia (Map Area 6) Voting is racially polarized in this area – in all 16 of the general elections, Black and White voters supported different candidates. The Adopted State House Plan includes one district that offers Black voters an opportunity to elect their preferred

candidates. The Illustrative Plan offers two Black opportunity districts in this area, as shown in Map 6 and Comparison Table 6.

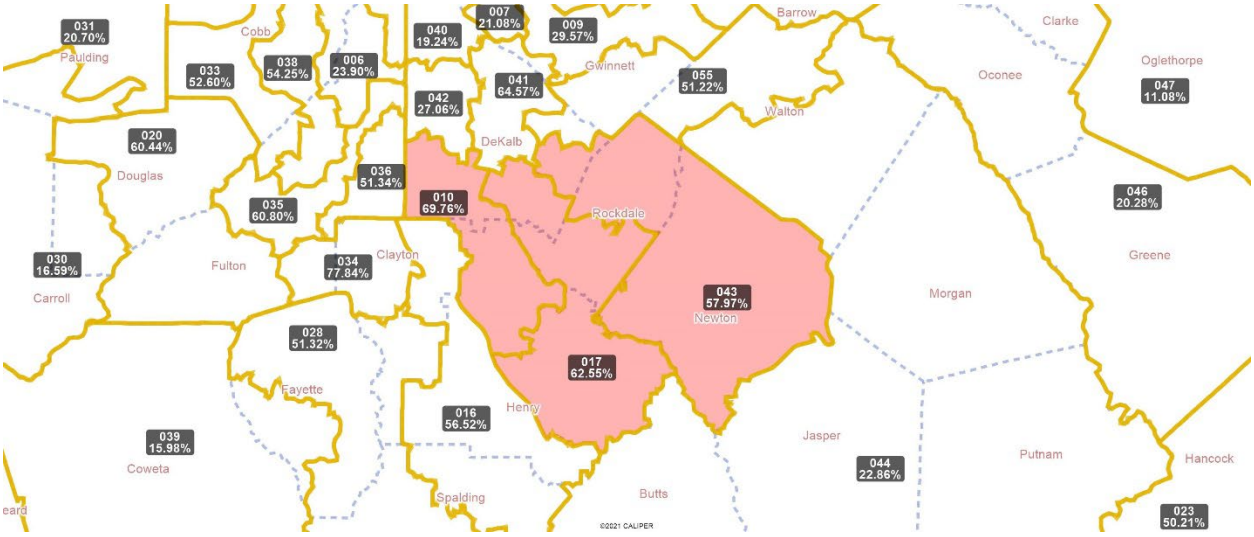
Macon Region (Map Area 7) Voting is racially polarized in this area – in all 16 of the general elections, Black and White voters supported different candidates. The Adopted State House Plan includes two districts that offers Black voters an opportunity to elect their preferred candidates. The Illustrative Plan offers three Black opportunity districts in this area, as shown in Map 7 and Comparison Table 7.

Map 1: Eastern Atlanta Metro Region

Map 1a: Adopted State Senate Districts 10, 17, and 43



Map 1b: Illustrative State Senate Districts 10, 17, and 43



Comparison Table for Map Area 1: Eastern Atlanta Metro Region

Comparison Table 1a: Adopted State Senate Districts

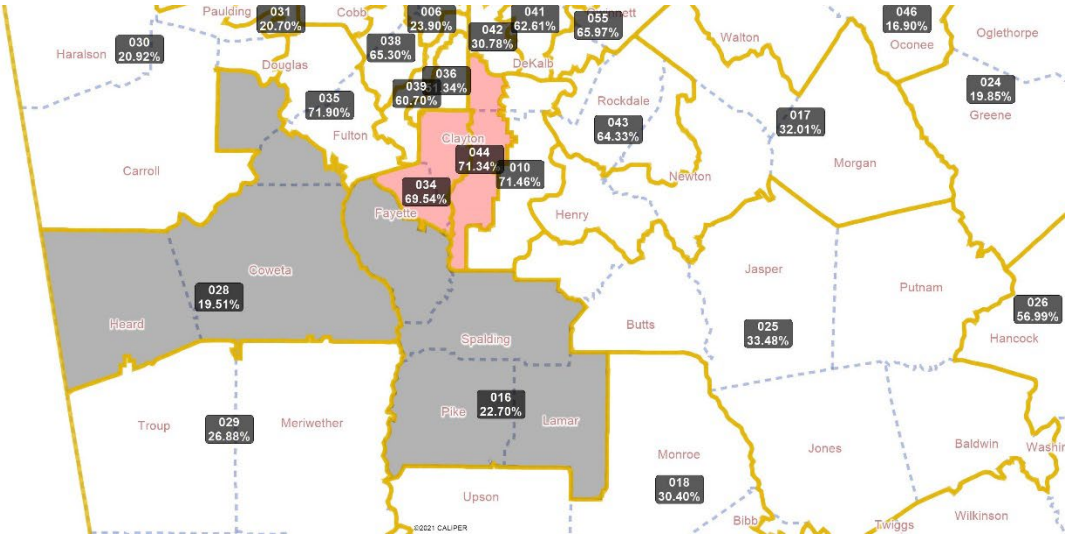
District	% BVAP	GE score	DPR score	Winner of 2022 General Election	Race	Party	Description of 2022 General Election
10	71.5	.775	.664	Emanuel Jones	B	D	No election contest
17	32.0	.366	.611	Brian Strickland	W	R	Racially polarized: White-preferred candidate defeated Black Democrat with 61.6% of vote
43	64.3	.706	.650	Tonya Anderson	B	D	Racially polarized: Black-preferred candidate defeated Black Republican with 75.1% of vote

Comparison Table 1b: Illustrative State Senate Districts

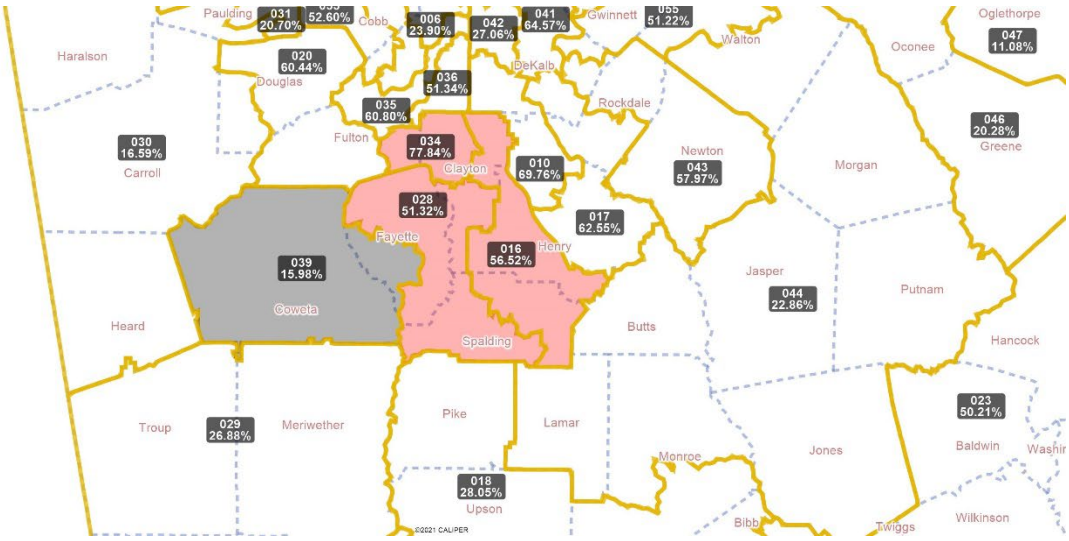
District	% BVAP	GE score	DPR score	Comments
10	69.8	.824	.630	District that would provide Black voters with an opportunity to elect candidates of choice
17	62.5	.654	.659	District that would provide Black voters with an opportunity to elect candidates of choice
43	58.0	.631	.641	District that would provide Black voters with an opportunity to elect candidates of choice

Map 2: Southern Atlanta Metro Region

Map 2a: Adopted State Senate Districts 16, 28, 34, and 44



Map 2b: Illustrative State Senate Districts 16, 28, 34, and 39



Comparison Table for Map Area 2: Southern Atlanta Metro Region

Comparison Table 2a: Adopted State Senate Districts

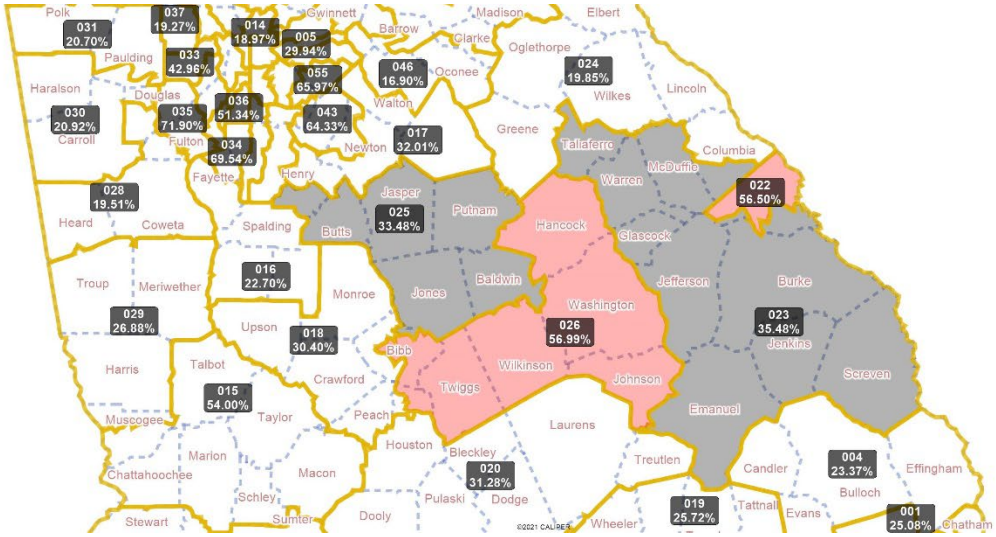
District	% BVAP	GE score	DPR score	Winner of 2022 General Election	Race	Party	Description of 2022 General Election
16	22.7	.325	.550	Marty Harbin	W	R	Racially polarized: White-preferred candidate defeated Black Democrat with 68.2% of vote
28	19.5	.295	.546	Matt Brass	W	R	No election contest
34	69.5	.808	.638	Valencia Seay	B	D	Racially polarized: Black-preferred candidate defeated White Republican with 83.7% of vote
44	71.3	.805	.620	Gail Davenport	B	D	No election contest

Comparison Table 2b: Illustrative State Senate Districts

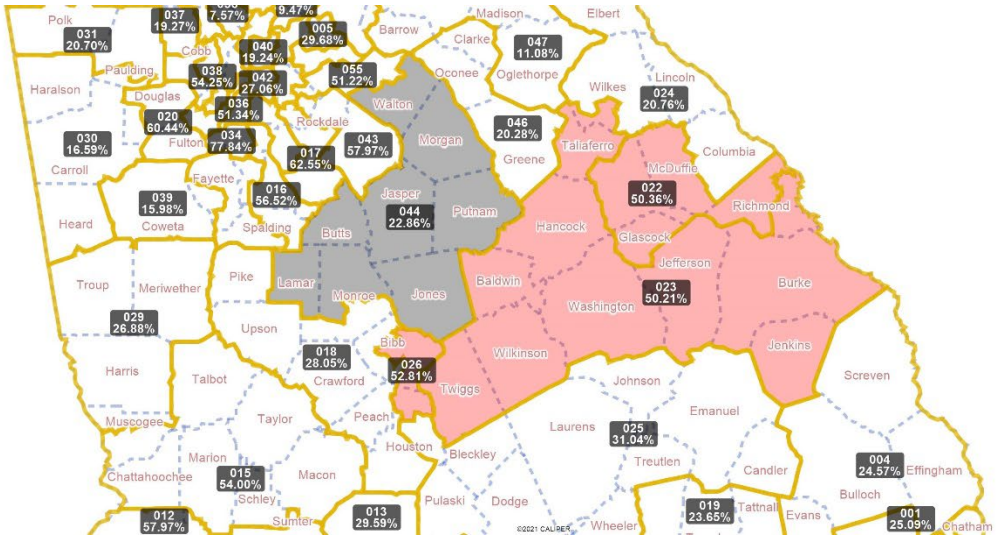
District	% BVAP	GE score	DPR score	Comments
16	56.5	.662	.637	District that would provide Black voters with an opportunity to elect candidates of choice
28	51.3	.588	.626	District that would provide Black voters with an opportunity to elect candidates of choice
34	77.8	.881	.641	District that would provide Black voters with an opportunity to elect candidates of choice
39	16.0	.292	.527	

Map 3: East Central Georgia

Map 3a: Adopted State Senate Districts 22, 23, 25, and 26



Map 3b: Illustrative State Senate Districts 22, 23, 26, and 44



Comparison Table for Map Area 3: East Central Georgia, with Augusta

Comparison Table 3a: Adopted State Senate Districts

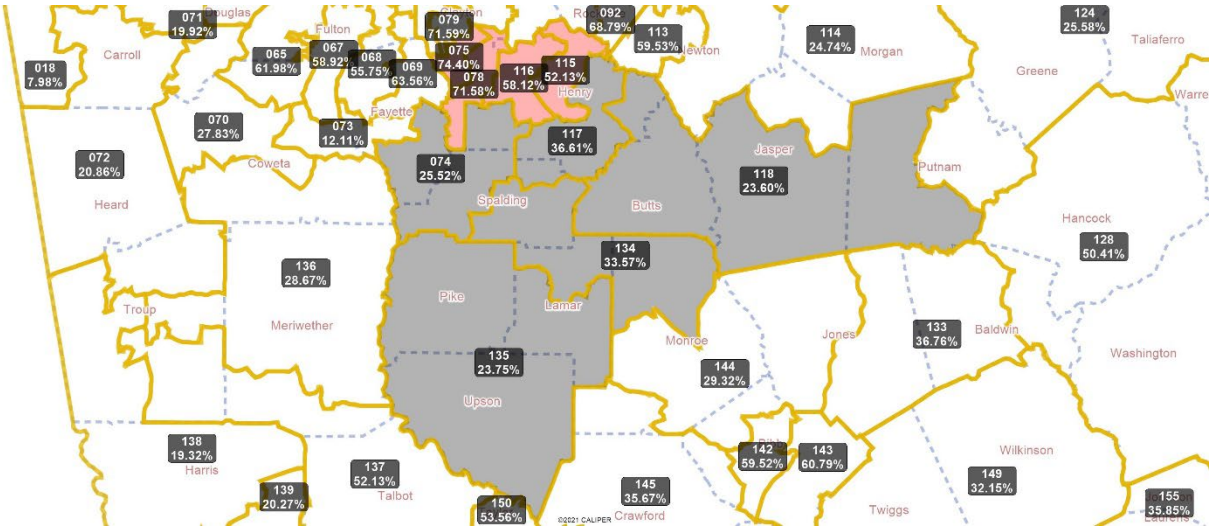
District	% BVAP	GE score	DPR score	Winner of 2022 General Election	Race	Party	Description of 2022 General Election
22	56.5	.668	.631	Harold Jones II	B	D	Racially polarized: Black-preferred candidate defeated White Republican with 70.4% of vote
23	35.5	.392	.601	Max Burns	W	R	No election contest
25	33.5	.385	.608	Rick Williams	W	R	Racially polarized: White-preferred candidate defeated Black Democrat with 61.7% of vote
26	57.0	.620	.613	David Lucas Sr	B	D	No election contest

Comparison Table 3b: Illustrative State Senate Districts

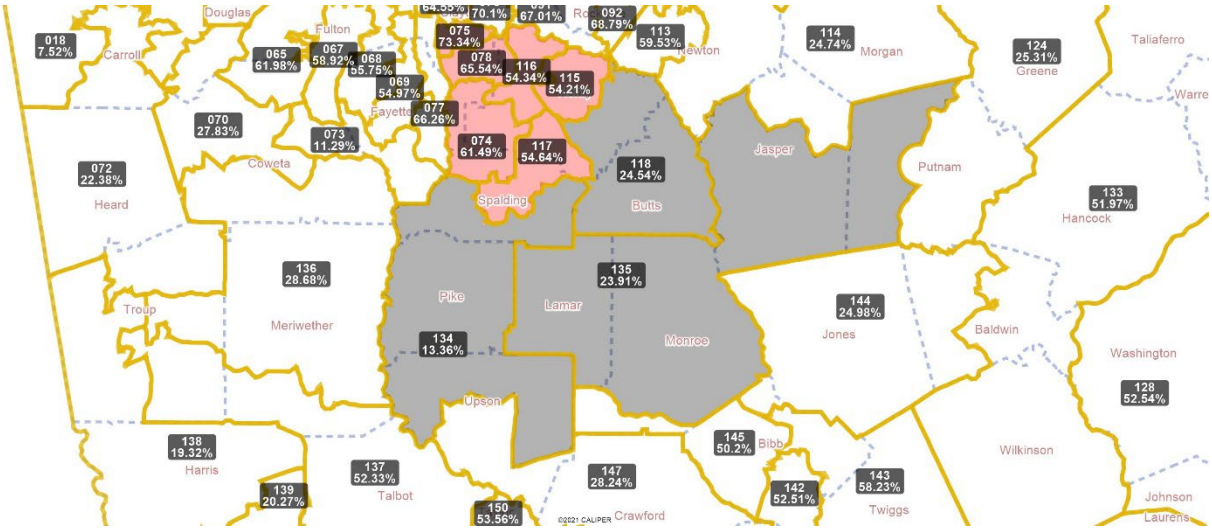
District	% BVAP	GE score	DPR score	Comments
22	50.4	.591	.625	District that would provide Black voters with an opportunity to elect candidates of choice
23	50.2	.524	.608	District that would provide Black voters with an opportunity to elect candidates of choice
26	52.8	.613	.630	District that would provide Black voters with an opportunity to elect candidates of choice
44	22.9	.261	.560	

Map 4: Southeastern Atlanta Metro Area

Map 4a: Adopted State House Districts 74, 75, 78, 115, 116, 117, 118, 134, 135



Map 4b: Illustrative State House Districts 74, 75, 78, 115, 116, 117, 118, 134, 135



Comparison Table for Map Area 4: Southeastern Atlanta Metro Region

Comparison Table 4a: Adopted State House Districts

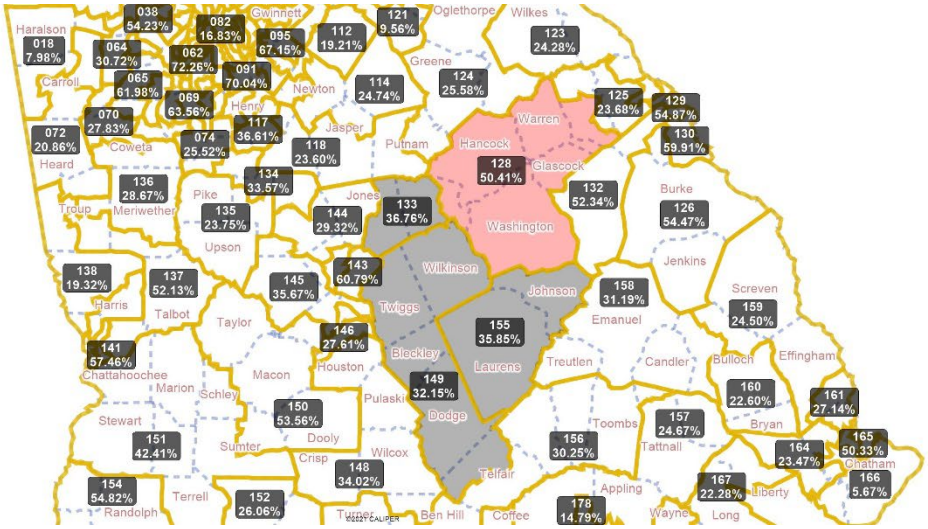
District	% BVAP	GE score	DPR score	Winner of 2022 General Election	Race	Party	Description of 2022 General Election
74	25.5	.351	.609	Karen Mathiak	W	R	Racially polarized: White-preferred candidate defeated White Democrat with 63.7% of vote
75	74.4	.849	.632	Mike Glanton	B	D	Racially polarized: Black-preferred candidate defeated White Republican with 88.6% of vote
78	71.6	.793	.624	Demetrius Douglas	B	D	No election contest
115	52.1	.568	.655	Regina Lewis-Ward	B	D	No election contest
116	58.1	.672	.657	El-Mahdi Holly	B	D	Racially polarized: Black-preferred candidate defeated White Republican with 73.3% of the vote
117	36.6	.436	.630	Lauren Daniel	W	R	Racially polarized: White-preferred candidate defeated Black Democrat with 50.7% of the vote
118	23.6	.257	.576	Clint Crowe	W	R	Racially polarized: White-preferred candidate won with 74.7% of the vote
134	33.6	.350	.555	David Knight	W	R	Racially polarized: White-preferred candidate defeated Black Democrat with 66.5% of the vote
135	23.8	.253	.558	Beth Camp	W	R	No election contest

Comparison Table 4b: Illustrative State House Districts

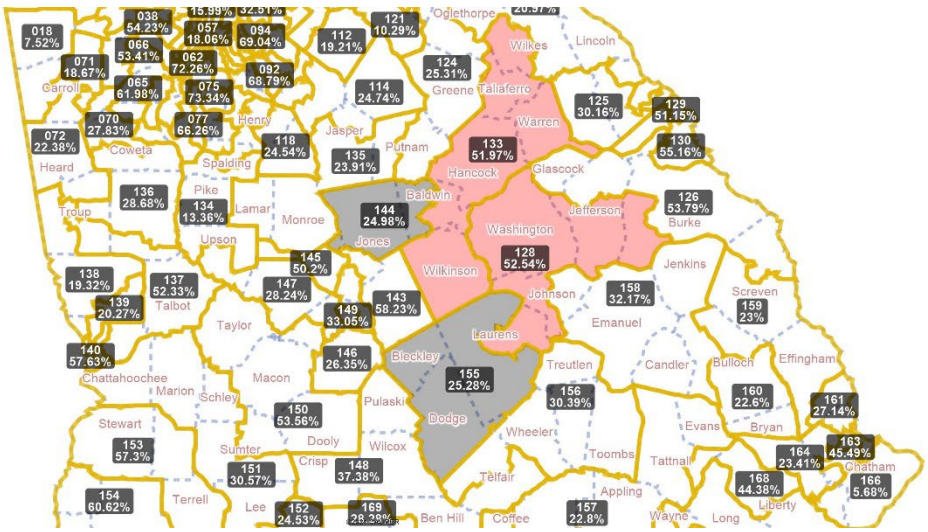
District	% BVAP	GE score	DPR score	Comments
74	61.5	.684	.654	District that would provide Black voters with an opportunity to elect candidates of choice
75	73.3	.854	.628	District that would provide Black voters with an opportunity to elect candidates of choice
78	65.5	.768	.620	District that would provide Black voters with an opportunity to elect candidates of choice
115	54.2	.579	.653	District that would provide Black voters with an opportunity to elect candidates of choice
116	54.3	.653	.653	District that would provide Black voters with an opportunity to elect candidates of choice
117	54.6	.593	.625	District that would provide Black voters with an opportunity to elect candidates of choice
118	24.5	.271	.594	
134	13.4	.193	.529	
135	23.9	.268	.548	

Map 5: Central Georgia

Map 5a: Adopted State House Districts 128, 133, 149, and 155



Map 5b: Illustrative State House Districts 128, 133, 144, 155



Comparison Table for Map Area 5: Central Georgia

Comparison Table 5a: Adopted State House Districts

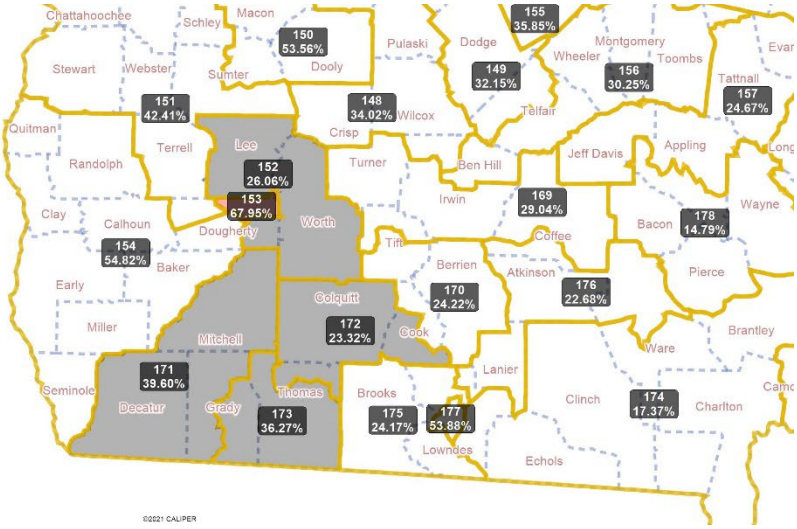
District	% BVAP	GE score	DPR score	Winner of 2022 General Election	Race	Party	Description of 2022 General Election
128	50.4	.476	.598	Mack Jackson	B	D	No election contest
133	36.8	.434	.620	Kenneth Vance	W	R	Racially polarized: White-preferred candidate defeated Black Democrat with 57.5% of vote
149	32.1	.318	.559	Danny Mathis	W	R	No election contest
155	35.9	.323	.598	Matt Hatchett	W	R	No election contest

Comparison Table 5b: Illustrative State House Districts

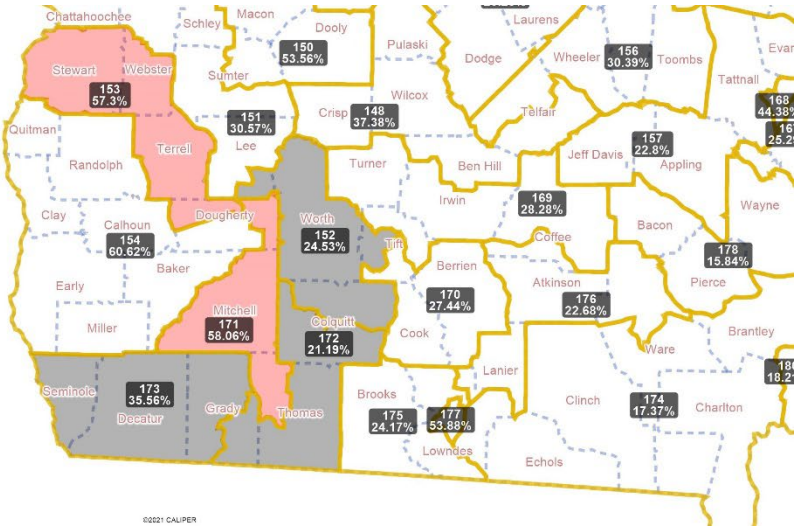
District	% BVAP	GE score	DPR score	Comments
128	52.5	.478	.585	District that would provide Black voters with an opportunity to elect candidates of choice
133	52.0	.543	.607	District that would provide Black voters with an opportunity to elect candidates of choice
144	25.0	.343	.586	
155	25.3	.241	.585	

Map 6: Southwest Georgia

Map 6a: Adopted State House Districts 152, 153, 171, 172, and 173



Map 6b: Illustrative State House Districts 152, 153, 171, 172, and 173



Comparison Table for Map Area 6: Southwest Georgia

Comparison Table 6a: Adopted State House Districts

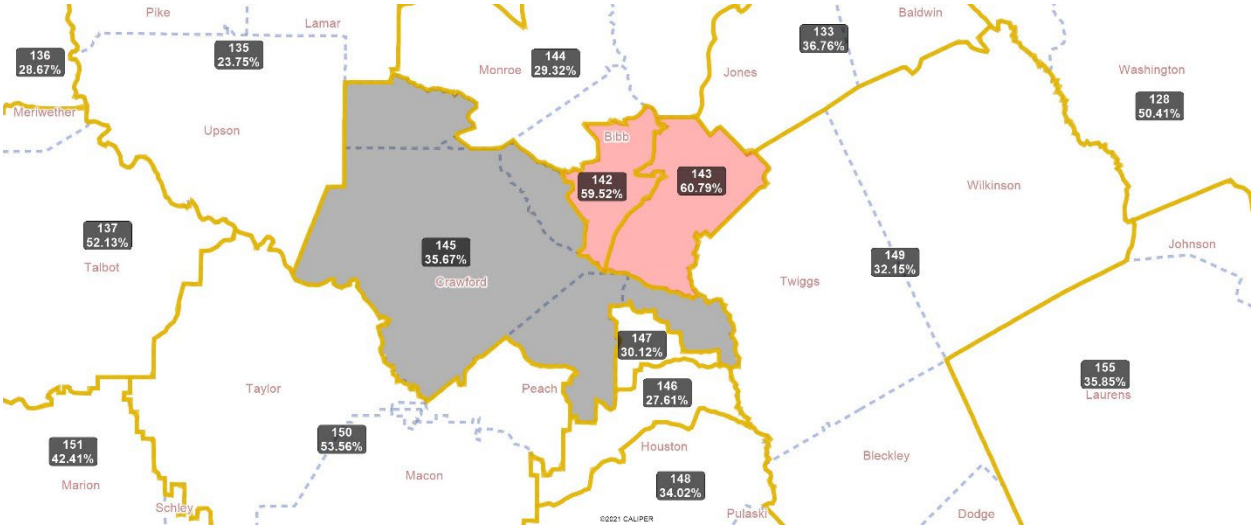
District	% BVAP	GE score	DPR score	Winner of 2022 General Election	Race	Party	Description of 2022 General Election
152	26.1	.281	.628	Bill Yearta	W	R	No election contest
153	67.9	.651	.657	David Sampson	B	D	Racially polarized: Black-preferred candidate defeated Black Republican with 65.1% of vote
171	39.6	.361	.606	Joe Campbell	W	R	No election contest
172	23.3	.248	.596	Sam Watson	W	R	No election contest
173	36.3	.373	.635	Darlene Taylor	W	R	Racially polarized: White-preferred candidate defeated Black Democrat with 64.0% of vote

Comparison Table 6b: Illustrative State House Districts

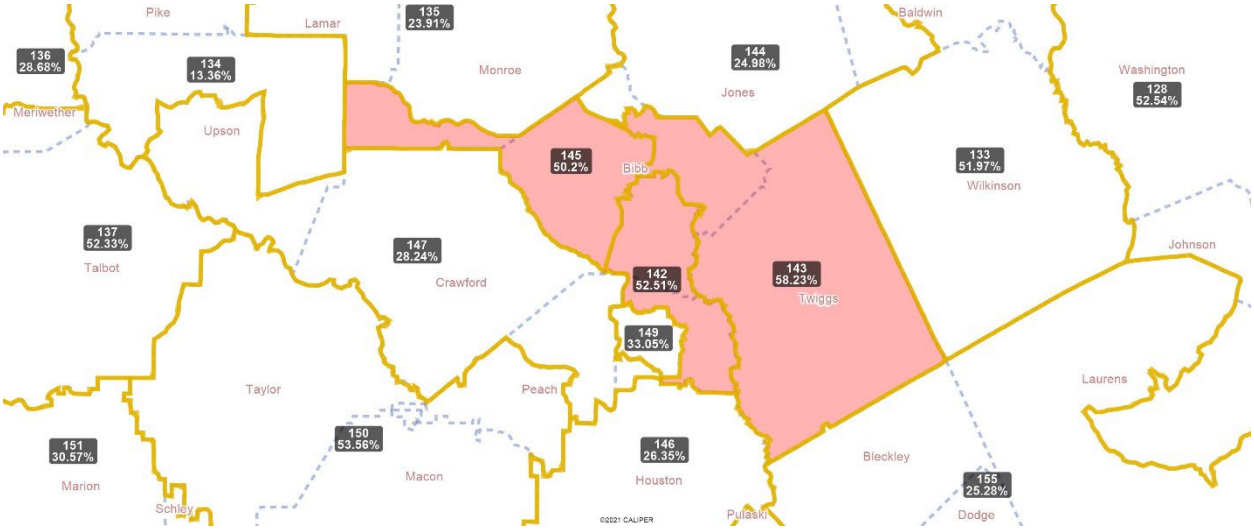
District	% BVAP	GE score	DPR score	Comments
152	24.5	.250	.610	
153	57.3	.548	.645	District that would provide Black voters with an opportunity to elect candidates of choice
171	58.1	.549	.645	District that would provide Black voters with an opportunity to elect candidates of choice
172	21.2	.250	.582	
173	35.6	.338	.604	

Map 7: Macon Region

Map 7a: Adopted State House Districts 142, 143, and 145



Map 7b: Illustrative State House Districts 142, 143, and 145



Comparison Table for Map Area 7: Macon Region

Comparison Table 7a: Adopted State House Districts

District	% BVAP	GE score	DPR score	Winner of 2022 General Election	Race	Party	Description of 2022 General Election
142	59.5	.638	.616	Miriam Paris	B	D	No election contest
143	60.8	.689	.627	James Beverly	B	D	No election contest
145	35.7	.398	.632	Robert Dickey	W	R	No election contest

Comparison Table 7b: Illustrative State House Districts

District	% BVAP	GE score	DPR score	Comments
142	52.5	.578	.647	District that would provide Black voters with an opportunity to elect candidates of choice
143	58.2	.668	.603	District that would provide Black voters with an opportunity to elect candidates of choice
145	50.2	.538	.619	District that would provide Black voters with an opportunity to elect candidates of choice

VI. Conclusion

My analysis of voting patterns by race determined that voting in all seven areas of Georgia that I examined is racially polarized. The Black community is quite cohesive in supporting their preferred candidates in all of these areas, and White voters in these areas consistently bloc vote to defeat the candidates supported by Black voters. These seven areas are all areas where additional Black opportunity districts could have been created but were not, as demonstrated by a comparison of the Adopted Plans to the Illustrative Plans.

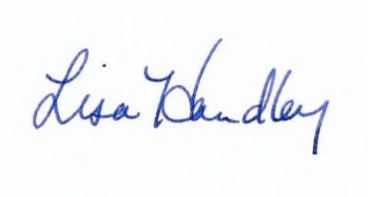
Racially polarized voting substantially impedes the ability of Black voters to elect candidates of their choice in the seven areas examined in this report unless districts are drawn to provide Black voters with this opportunity. The 2022 Adopted State Senate and House Plans dilute the voting strength of Black voters in Georgia by failing to create additional districts in these areas that offer Black voters an opportunity to elect their candidates of choice to the state legislature.

***

I reserve the right to modify and/or supplement my opinions, as well as to offer new opinions.

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

Respectfully submitted and executed on December 23, 2022.



Dr. Lisa Handley

APPENDIX A

APPENDIX A1
Eastern Atlanta Metro Region
Map Area 1
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2022 General												
US Senate												
Raphael Warnock	B	D	98.4	95.2, 99.0	99.4	102.3	-	40.0	38.6, 43.6	37.0	38.6	-
Herschel Walker	B	R	1.2	.6, 4.2	0.5	-2.9	-	59.3	55.6, 60.6	61.7	58.5	-
Chase Oliver	W	L	0.4	.3, .6	0.9	0.7	-	0.7	.5, .9	3.2	2.8	-
Governor												
Stacey Abrams	B	D	96.9	86.1, 99.0	99.3	102.5	-	37.4	34.5, 49.2	34.4	32.7	-
Brian Kemp	W	R	2.8	.8, 13.4	0.5	-2.9	-	62.3	50.3, 65.2	65.3	66.4	-
Shane Hazel	W	L	0.2	.2, .4	0.4	0.4	-	0.3	.2, .5	0.7	0.9	-
Commissioner of Agriculture												
Nakita Hemingway	B	D	98.6	94.5, 99.1	99.3	101.9	-	34.2	32.9, 40.2	32.3	30.3	-
Tyler Harper	W	R	1.0	.5, 5.0	0.5	-3.5	-	65.3	59.3, 66.7	66.5	67.0	-
David Raudabaugh	W	L	0.4	.3, .5	1.4	1.5	-	0.5	.4, .6	3.1	2.9	-
Commissioner of Insurance												
Janice Laws Robinson	B	D	98.7	98.1, 99.1	99.3	103.0	-	33.2	32.0, 34.5	32.9	31.6	-
John King	W	R	1.3	.9, 1.9	0.6	-2.8	-	66.8	65.5, 68.0	67.1	68.5	-
Commissioner of Labor												
William Boddie	B	D	98.5	97.1, 99.1	99.3	101.1	-	35.8	34.5, 39.6	33.5	32.1	-
Bruce Thompson	W	R	1.0	.5, 2.3	0.5	-3.3	-	63.7	59.8, 64.9	65.1	64.9	-
Emily Anderson	W	L	0.5	.3, .7	2.3	2.4	-	0.6	.4, .7	3.0	3.0	-
School Superintendent												
Alisha Thomas Searcy	B	D	98.7	98.1, 99.1	99.3	103.2	-	32.9	31.7, 34.2	32.7	31.0	-
Richard Woods	W	R	1.3	.9, 1.9	0.6	-3.1	-	67.1	65.8, 68.3	67.3	69.0	-

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	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2021 Runoffs												
US Special Senate												
Raphael Warnock	B	D	98.9	98.5, 99.3	99.6	103.7	-	34.6	33.9, 35.4	33.7	37.2	-
Kelly Loeffler	W	R	1.1	.7, 1.5	0.4	-3.7	-	65.4	64.5, 66.1	66.4	62.7	-
US Senate												
Jon Ossoff	W	D	98.9	98.5, 99.3	99.5	103.7	-	33.8	33.1, 34.6	32.9	36.3	-
David Perdue	W	R	1.1	.7, 1.5	0.5	-3.7	-	66.2	65.4, 66.9	67.0	63.7	-
Public Service Commission 4												
Daniel Blackman	B	D	98.9	98.4, 99.2	99.2	103.7	-	32.4	31.6, 33.3	32.7	34.7	-
Lauren McDonald Jr	W	R	1.1	.8, 1.6	0.5	-3.7	-	67.6	66.7, 68.4	67.4	65.3	-
2020 General												
US Senate												
Jon Ossoff	W	D	98.6	98.1, 98.8	99.3	100.6	-	34.1	32.9, 35.3	31.6	34.7	-
David Perdue	W	R	0.9	.6, 1.3	0.6	-2.6	-	65.3	64.1, 66.4	68.8	63.2	-
Shane Hazel	W	L	0.6	.4, .8	2.0	2.0	-	0.6	.5, .8	2.1	2.1	-
US Special Senate												
Raphael Warnock	B	D	74.9	74.0, 75.8	75.3	71.5	-	36.7	35.8, 37.6	27.2	30.1	-
Doug Collins	W	R	0.6	.4, .9	0.6	-1.1	-	22.6	21.9, 23.1	23.8	22.2	-
Kelly Loeffler	W	R	0.6	.4, .9	0.7	-2.6	-	38.9	38.2, 39.4	40.0	37.5	-
Others			23.8	23.0, 24.7	31.8	32.2	-	1.8	1.4, 2.3	8.7	10.3	-
Public Service Commission 1												
Robert Bryant	B	D	98.0	92.1, 98.8	99.3	100.0	-	33.8	32.1, 43.5	29.5	31.6	-
Jason Shaw	W	R	1.5	.7, 7.1	0.5	-2.9	-	65.4	55.5, 67.1	69.7	63.9	-
Elizabeth Melton	W	L	0.5	.4, .8	2.7	2.9	-	0.8	.7, 1.0	4.3	4.3	-

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Map Area 1
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			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Public Service Commission 4												
Daniel Blackman	B	D	97.9	89.8, 99.0	99.4	101.1	-	33.8	32.0, 44.6	30.0	32.2	-
Lauren McDonald Jr	W	R	1.6	.6, 9.5	0.5	-3.0	-	65.5	54.6, 67.3	68.6	64.1	-
Nathan Wilson	W	L	0.5	.3, .7	1.8	1.9	-	0.8	.6, .9	3.9	3.9	-
2018 General												
Governor												
Stacey Abrams	B	D	99.1	98.8, 99.3	99.5	103.2	98.0	34.4	33.6, 35.2	34.3	33.8	-
Brian Kemp	W	R	0.6	.4, .9	0.4	-3.4	1.8	65.2	64.4, 66.0	64.7	64.6	-
Ted Metz	W	L	0.2	.2, .3	0.1	0.1	0.2	0.4	.3, .6	1.3	1.5	-
Commissioner of Insurance												
Janice Laws	B	D	98.9	98.6, 99.2	99.5	101.4	96.2	33.4	32.6, 34.4	31.2	30.8	-
Jim Beck	W	R	0.7	.4, .9	0.5	-3.0	2.3	65.8	64.9, 66.7	66.7	65.4	-
Donnie Foster	W	L	0.4	.3, .5	1.4	1.6	1.5	0.7	.6, .9	3.9	3.8	-
School Superintendent												
Otha Thornton	B	D	98.9	98.5, 99.3	99.4	102.9	96.9	30.6	29.6, 31.7	30.5	29.2	-
Richard Woods	W	R	1.1	.7, 1.5	0.5	-2.9	3.1	69.4	68.3, 70.4	69.4	70.7	-

APPENDIX A2
Southern Atlanta Metro Region
Map Area 2
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2022 General												
US Senate												
Raphael Warnock	B	D	98.5	98.2, 99.1	-	113.6	-	9.5	8.6, 10.4	7.5	6.2	-
Herschel Walker	B	R	1.0	.6, 1.3	-	-14.4	-	88.9	88.2, 89.7	89.6	90.8	-
Chase Oliver	W	L	0.4	.3, .7	-	0.7	-	1.6	1.0, 2.1	3.3	3.0	-
Governor												
Stacey Abrams	B	D	96.8	78.2, 99.2	99.1	113.2	-	6.6	3.0, 27.0	3.8	1.8	-
Brian Kemp	W	R	2.9	.5, 21.3	0.8	-13.5	-	93.1	72.5, 95.8	95.7	97.3	-
Shane Hazel	W	L	0.3	.2, .5	0.6	0.4	-	0.3	.2, .5	1.0	0.9	-
Commissioner of Agriculture												
Nakita Hemingway	B	D	98.3	97.0, 98.9	99.2	112.0	-	4.8	3.9, 6.6	3.0	1.0	-
Tyler Harper	W	R	1.2	.7, 2.4	0.8	-13.9	-	94.5	92.7, 95.5	95.1	96.6	-
David Raudabaugh	W	L	0.5	.3, .7	2.1	1.9	-	0.6	.4, .9	2.6	2.3	-
Commissioner of Insurance												
Janice Laws Robinson	B	D	98.8	98.3, 99.2	99.2	113.4	-	3.6	2.9, 4.3	3.8	2.0	-
John King	W	R	1.2	.8, 1.7	0.8	-13.4	-	96.4	95.7, 97.1	96.2	97.9	-
Commissioner of Labor												
William Boddie	B	D	98.4	97.9, 98.9	99.3	111.3	-	5.7	4.8, 6.4	3.5	2.1	-
Bruce Thompson	W	R	1.1	.6, 1.5	0.8	-14.1	-	93.7	93.0, 94.6	94.2	95.5	-
Emily Anderson	W	L	0.5	.4, .7	2.9	2.8	-	0.6	.5, .9	2.4	2.4	-
School Superintendent												
Alisha Thomas Searcy	B	D	98.8	98.3, 99.2	99.2	113.5	-	3.4	2.9, 4.1	3.7	1.9	-
Richard Woods	W	R	1.2	.8, 1.7	0.7	-13.5	-	96.6	95.9, 97.1	96.3	98.1	-

APPENDIX A2
Southern Atlanta Metro Region
Map Area 2
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2021 Runoffs												
US Special Senate												
Raphael Warnock	B	D	99.0	98.7, 99.3	99.3	114.4	-	8.5	8.0, 9.1	8.2	7.2	9.9
Kelly Loeffler	W	R	1.0	.6, 1.3	0.7	-14.4	-	91.5	90.9, 92.0	91.8	92.8	90.1
US Senate												
Jon Ossoff	W	D	98.9	98.5, 99.2	99.3	114.2	-	7.7	7.3, 8.3	7.5	6.6	9.6
David Perdue	W	R	1.1	.8, 1.5	0.7	-14.2	-	92.3	91.7, 92.7	92.5	93.4	90.4
Public Service Commission 4												
Daniel Blackman	B	D	98.9	98.5, 99.2	99.3	114.1	-	6.0	5.5, 6.6	6.2	5.2	8.9
Lauren McDonald Jr	W	R	1.1	.8, 1.5	0.7	-14.1	-	94.0	93.4, 94.5	94.1	94.8	91.1
2020 General												
US Senate												
Jon Ossoff	W	D	98.4	97.9, 98.8	99.3	110.7	-	9.1	8.3, 9.9	6.0	5.8	9.0
David Perdue	W	R	1.0	.7, 1.5	0.6	-12.9	-	90.2	89.4, 90.9	91.3	91.9	89.6
Shane Hazel	W	L	0.7	.5, .8	2.2	2.3	-	0.7	.6, 1.0	2.4	2.3	1.4
US Special Senate												
Raphael Warnock	B	D	70.4	67.0, 73.0	76.8	77.2	-	8.1	6.4, 9.8	5.2	5.5	7.0
Doug Collins	W	R	0.6	.4, .9	0.7	-5.4	-	33.7	33.2, 34.1	34.1	34.6	33.9
Kelly Loeffler	W	R	0.6	.4, .9	0.5	-8.7	-	51.9	51.5, 52.3	51.7	52.3	50.9
Others			28.4	25.7, 30.9	27.2	36.9	-	6.2	4.5, 7.9	7.5	7.6	8.2
Public Service Commission 1												
Robert Bryant	B	D	97.9	90.2, 98.8	99.4	110.0	-	8.1	6.7, 16.7	4.0	3.9	8.5
Jason Shaw	W	R	1.4	.6, 8.7	0.6	-13.1	-	90.5	82.3, 91.8	93.1	92.4	88.9
Elizabeth Melton	W	L	0.7	.5, 1.0	3.1	3.2	-	1.4	.9, 2.0	3.7	3.7	2.6

APPENDIX A2
Southern Atlanta Metro Region
Map Area 2
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Public Service Commission 4												
Daniel Blackman	B	D	97.5	83.3, 98.7	99.4	111.3	-	8.0	6.5, 20.1	4.2	4.2	8.6
Lauren McDonald Jr	W	R	1.9	.8, 15.9	0.7	-13.6	-	90.5	78.8, 91.8	92.9	92.5	88.8
Nathan Wilson	W	L	0.6	.4, .9	2.2	2.3	-	1.5	.9, 2.0	3.7	3.3	2.6
2018 General												
Governor												
Stacey Abrams	B	D	99.0	98.7, 99.2	99.2	112.5	-	5.7	5.2, 6.2	5.5	4.2	10.3
Brian Kemp	W	R	0.7	.5, 1.0	0.7	-12.7	-	93.7	93.2, 94.1	93.5	94.5	88.9
Ted Metz	W	L	0.3	.2, .4	0.4	0.2	-	0.6	.4, .8	1.4	1.4	0.7
Commissioner of Insurance												
Janice Laws	B	D	98.8	98.4, 99.0	99.4	110.2	-	6.2	5.6, 6.8	4.0	3.4	10.5
Jim Beck	W	R	0.7	.5, 1.1	0.7	-12.0	-	92.9	92.3, 93.5	93.4	93.7	87.7
Donnie Foster	W	L	0.5	.4, .7	1.8	1.9	-	0.8	.6, 1.2	3.2	2.9	1.8
School Superintendent												
Otha Thornton	B	D	98.9	98.5, 99.2	99.2	111.0	-	3.6	3.0, 4.3	3.8	2.9	10.2
Richard Woods	W	R	1.1	.8, 1.5	0.6	-11.0	-	96.4	95.7, 97.0	96.3	97.1	89.8

APPENDIX A3
East Central Region
Map Area 3
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
2022 General	**Race**	**Party**	**EI rxc**	**95% confidence interval**	**EI**	**ER**	**HP**	**EI rxc**	**95% confidence interval**	**EI**	**ER**	**HP**
US Senate												
Raphael Warnock	B	D	97.7	92.6, 98.8	99.1	108.8	-	9.5	8.5, 13.5	8.1	5.2	12.2
Herschel Walker	B	R	1.8	.7, 5.7	0.8	-9.6	-	90.0	86.0, 90.9	90.0	92.9	86.0
Chase Oliver	W	L	0.5	.4, .7	0.7	0.8	-	0.5	.4, .6	2.2	1.9	1.8
Governor												
Stacey Abrams	B	D	93.5	64.9, 99.0	99.1	108.1	-	9.4	5.3, 30.0	5.7	1.5	9.3
Brian Kemp	W	R	6.1	.7, 35.1	0.8	-8.6	-	90.3	69.7, 94.4	93.9	97.8	90.1
Shane Hazel	W	L	0.4	.3, .5	0.7	0.4	-	0.2	.2, .3	0.6	0.7	0.6
Commissioner of Agriculture												
Nakita Hemingway	B	D	97.7	92.2, 98.8	99.0	106.7	-	5.9	4.9, 10.5	5.0	1.3	9.1
Tyler Harper	W	R	1.6	.7, 6.0	0.8	-8.6	-	93.6	90.0, 94.6	93.7	96.9	89.3
David Raudabaugh	W	L	0.6	.4, .8	1.8	1.8	-	0.5	.4, .6	1.7	1.8	1.5
Commissioner of Insurance												
Janice Laws Robinson	B	D	98.6	98.1, 99.0	99.1	108.2	-	4.6	4.1, 5.0	5.6	1.9	10.0
John King	W	R	1.4	1.0, 1.9	0.8	-8.2	-	95.4	95.0, 95.9	94.4	98.1	90.0
Commissioner of Labor												
William Boddie	B	D	97.9	92.8, 98.8	99.1	106.8	-	6.2	5.4, 9.2	5.4	1.8	9.7
Bruce Thompson	W	R	1.5	.6, 6.4	0.7	-9.0	-	93.2	90.3, 94.1	92.9	96.3	88.8
Emily Anderson	W	L	0.7	.5, .9	2.8	2.3	-	0.5	.4, .7	1.6	1.9	1.5
School Superintendent												
Alisha Thomas Searcy	B	D	98.6	98.1, 99.0	99.3	107.9	-	4.4	3.9, 4.9	5.6	1.8	9.9
Richard Woods	W	R	1.4	1.0, 1.9	0.8	-7.8	-	95.7	95.1, 96.1	94.4	98.2	90.1

APPENDIX A3
East Central Region
Map Area 3
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2021 Runoffs												
US Special Senate												
Raphael Warnock	B	D	98.9	98.5, 99.2	99.3	109.5	97.0	8.3	8.0, 8.7	8.6	5.9	13.0
Kelly Loeffler	W	R	1.1	.8, 1.5	0.8	-9.5	3.0	91.7	91.3, 92.1	91.9	94.1	87.0
US Senate												
Jon Ossoff	W	D	98.9	98.5, 99.2	99.1	109.3	96.9	8.0	7.6, 8.4	8.3	5.8	12.7
David Perdue	W	R	1.1	.8, 1.5	0.8	-9.3	3.1	92.0	91.6, 92.4	91.7	94.2	87.3
Public Service Commission 4												
Daniel Blackman	B	D	98.9	98.5, 99.2	99.1	109.0	96.7	6.5	6.1, 6.9	7.1	4.6	11.9
Lauren McDonald Jr	W	R	1.1	.8, 1.5	0.7	-9.0	3.3	93.5	93.1, 93.9	92.9	95.4	88.1
2020 General												
US Senate												
Jon Ossoff	W	D	97.6	97.0, 98.1	99.0	105.0	-	7.8	7.3, 8.4	6.4	5.2	12.0
David Perdue	W	R	1.4	.9, 1.9	0.8	-7.4	-	91.6	91.0, 92.0	91.9	93.0	86.4
Shane Hazel	W	L	1.0	.8, 1.3	2.4	2.4	-	0.6	.5, .8	1.9	1.8	1.6
US Special Senate												
Raphael Warnock	B	D	66.4	65.2, 67.6	72.3	70.3	-	7.4	6.5, 8.3	4.0	4.2	8.7
Doug Collins	W	R	0.6	.5, .9	0.5	-3.4	-	34.3	34.0, 34.5	32.0	35.8	35.3
Kelly Loeffler	W	R	0.7	.5, .9	0.9	-6.0	-	51.5	51.1, 51.8	51.4	52.8	46.7
Others			32.3	31.0, 33.5	30.1	39.1	-	6.9	6.0, 7.7	6.9	7.2	9.3
Public Service Commission 1												
Robert Bryant	B	D	96.7	76.0, 98.3	99.1	105.4	-	7.9	6.4, 23.5	5.0	3.4	10.9
Jason Shaw	W	R	2.3	.8, 22.6	0.9	-8.3	-	91.3	75.7, 92.7	92.4	93.8	86.7
Elizabeth Melton	W	L	1.0	.7, 1.4	3.0	2.9	-	0.9	.7, 1.1	2.9	2.9	2.4

APPENDIX A3
East Central Region
Map Area 3
General and Runoff Elections

			Estimates of Voting Patterns by Race in Recent Statewide Elections									
			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Public Service Commission 4												
Daniel Blackman	B	D	96.2	73.8, 98.4	99.3	106.4	-	8.7	6.8, 26.7	5.4	3.6	11.1
Lauren McDonald Jr	W	R	3.0	.9, 25.2	0.9	-8.5	-	90.5	72.7, 92.4	92.1	93.8	86.7
Nathan Wilson	W	L	0.8	.6, 1.0	2.3	2.3	-	0.8	.7, .9	2.7	2.6	2.2
2018 General												
Governor												
Stacey Abrams	B	D	99.0	98.7, 99.2	99.3	107.8	96.0	6.7	6.3, 7.2	6.9	3.5	10.7
Brian Kemp	W	R	0.7	.5, .9	0.7	-8.2	3.7	92.9	92.5, 93.4	92.3	95.6	88.7
Ted Metz	W	L	0.4	.3, .5	0.5	0.3	0.3	0.3	.2, .4	0.8	0.9	0.6
Commissioner of Insurance												
Janice Laws	B	D	98.6	98.2, 98.9	99.0	105.3	94.2	6.5	6.1, 7.0	5.5	3.0	10.8
Jim Beck	W	R	0.9	.6, 1.2	0.8	-6.8	4.7	92.8	92.3, 93.3	92.8	94.8	87.6
Donnie Foster	W	L	0.6	.4, .7	1.5	1.5	1.1	0.7	.5, .8	2.2	2.2	1.6
School Superintendent												
Otha Thornton	B	D	98.8	98.4, 99.2	99.2	106.1	94.8	4.8	4.4, 5.4	5.6	2.8	10.6
Richard Woods	W	R	1.2	.8, 1.6	0.8	-6.1	5.2	95.2	94.6, 95.6	94.5	97.2	89.4

APPENDIX A4
Southeastern Atlanta Metro Region
Map Area 4
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

2022 General	Race	Party	Black Voters EI rxc	Black Voters 95% confidence interval	Black Voters EI	Black Voters ER	Black Voters HP	White Voters EI rxc	White Voters 95% confidence interval	White Voters EI	White Voters ER	White Voters HP
US Senate												
Raphael Warnock	B	D	98.4	97.9, 99.0	99.2	113.2	-	9.1	8.2, 10.0	7.5	6.9	16.4
Herschel Walker	B	R	1.1	.6, 1.5	0.8	-14.0	-	89.3	88.6, 90.1	89.9	90.3	81.1
Chase Oliver	W	L	0.4	.3, .7	0.8	0.8	-	1.6	1.1, 2.1	3.1	2.8	2.5
Governor												
Stacey Abrams	B	D	97.4	81.2, 99.1	99.2	112.8	-	6.1	4.3, 21.0	4.3	2.6	12.6
Brian Kemp	W	R	2.4	.6, 18.5	0.7	-13.1	-	93.5	78.7, 95.3	95.3	96.6	86.6
Shane Hazel	W	L	0.3	.2, .4	0.5	0.4	-	0.3	.3, .5	0.8	0.8	0.8
Commissioner of Agriculture												
Nakita Hemingway	B	D	98.6	98.0, 99.1	99.2	111.5	-	5.0	4.2, 5.6	3.8	2.1	12.3
Tyler Harper	W	R	0.9	.5, 1.4	0.7	-13.4	-	94.3	93.7, 95.1	95.0	95.8	85.9
David Raudabaugh	W	L	0.5	.3, .7	1.9	0.4	-	0.7	.5, .9	2.1	2.1	1.9
Commissioner of Insurance												
Janice Laws Robinson	B	D	98.8	98.3, 99.2	99.2	112.9	-	4.4	3.8, 5.1	4.5	3.1	13.4
John King	W	R	1.2	.8, 1.7	0.7	-12.9	-	95.6	94.9, 96.2	95.6	96.9	86.6
Commissioner of Labor												
William Boddie	B	D	98.4	97.8, 98.9	99.4	110.8	-	5.9	5.2, 6.5	4.3	3.2	13.1
Bruce Thompson	W	R	1.1	.6, 1.6	0.8	-13.6	-	93.5	92.9, 94.2	94.1	94.7	85.0
Emily Anderson	W	L	0.5	.4, .7	3.0	2.9	-	0.6	.4, .8	2.0	2.1	1.8
School Superintendent												
Alisha Thomas Searcy	B	D	98.8	98.2, 99.2	99.2	113.0	-	4.3	3.7, 5.0	4.3	3.0	13.3
Richard Woods	W	R	1.2	.8, 1.7	0.7	-13.0	-	95.7	95.0, 96.3	95.7	97.0	86.7

APPENDIX A4
Southeastern Atlanta Metro Region
Map Area 4
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2021 Runoffs												
US Special Senate												
Raphael Warnock	B	D	98.9	98.5, 99.2	99.2	113.7	-	8.1	7.6, 8.7	7.9	7.9	16.1
Kelly Loeffler	W	R	1.1	.8, 1.5	0.7	-13.7	-	91.9	91.3, 92.4	92.1	92.1	83.9
US Senate												
Jon Ossoff	W	D	98.9	98.4, 99.2	99.2	113.5	-	7.4	6.9, 8.0	7.4	7.5	15.9
David Perdue	W	R	1.1	.8 1.6	0.8	-13.6	-	92.6	92.0, 93.1	92.8	92.5	84.1
Public Service Commission 4												
Daniel Blackman	B	D	98.8	98.4, 99.2	99.3	113.4	-	6.0	5.5, 6.6	6.0	6.2	14.9
Lauren McDonald Jr	W	R	1.2	.8, 1.6	0.8	-13.5	-	94.0	93.4, 94.5	94.0	93.8	85.1
2020 General												
US Senate												
Jon Ossoff	W	D	98.3	97.8, 98.9	99.3	109.9	-	8.8	8.1, 9.5	6.6	6.9	15.0
David Perdue	W	R	1.0	.7, 1.5	0.6	-12.2	-	90.5	89.7, 91.2	91.2	91.0	83.1
Shane Hazel	W	L	0.6	.5, .9	2.3	2.3	-	0.7	.5, 1.0	2.0	2.1	2.0
US Special Senate												
Raphael Warnock	B	D	71.5	68.8, 74.0	76.9	76.9	-	8.7	7.3, 9.9	5.9	6.2	11.0
Doug Collins	W	R	0.7	.5, .9	0.1	-7.6	-	36.3	35.9, 36.7	37.1	38.7	45.3
Kelly Loeffler	W	R	0.7	.5, 1.0	0.6	-6.1	-	49.7	49.3, 50.2	48.4	48.0	34.7
Others			27.1	24.7, 29.9	27.1	36.9	-	5.3	4.1, 6.6	7.2	7.1	9.0
Public Service Commission 1												
Robert Bryant	B	D	97.8	90.5, 98.7	99.3	109.1	-	7.9	6.8, 15.8	5.2	5.3	13.9
Jason Shaw	W	R	1.5	.7, 8.6	0.6	-12.5	-	90.6	83.2, 91.6	91.7	91.4	83.4
Elizabeth Melton	W	L	0.7	.5, 1.1	3.2	3.3	-	1.5	1.0, 2.0	3.3	3.3	2.7

APPENDIX A4
Southeastern Atlanta Metro Region
Map Area 4
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Public Service Commission 4												
Daniel Blackman	B	D	97.9	89.3, 98.8	99.4	110.5	-	7.9	6.7, 15.5	5.3	5.5	14.3
Lauren McDonald Jr	W	R	1.6	.7, 9.9	0.6	-13.0	-	90.6	83.3, 91.8	91.8	91.4	83.2
Nathan Wilson	W	L	0.6	.4, .9	2.3	2.3	-	1.5	1.1, 2.0	3.1	3.0	2.5
2018 General												
Governor												
Stacey Abrams	B	D	98.9	98.6, 99.2	99.3	112.0	-	5.6	5.1, 6.1	5.5	5.0	14.0
Brian Kemp	W	R	0.8	.5, 1.1	0.7	-12.1	-	93.9	93.3, 94.4	93.6	93.8	85.2
Ted Metz	W	L	0.3	.2, .4	0.3	0.2	-	0.6	.4, .8	1.1	1.2	0.9
Commissioner of Insurance												
Janice Laws	B	D	98.7	98.3, 99.1	99.4	109.3	-	6.3	5.7, 6.9	4.6	4.7	14.5
Jim Beck	W	R	0.8	.5, 1.2	0.7	-11.3	-	92.9	92.3, 93.5	93.4	92.8	83.7
Donnie Foster	W	L	0.5	.3, .7	1.9	2.0	-	0.8	.6, 1.1	2.7	2.5	1.8
School Superintendent												
Otha Thornton	B	D	99.0	98.6, 99.3	99.4	110.4	-	4.4	3.8, 5.0	4.3	4.0	13.8
Richard Woods	W	R	1.0	.7, 1.4	0.5	-10.4	-	95.6	95.0, 96.2	95.7	96.0	86.2

APPENDIX A5
Central Georgia Region
Map Area 5
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2022 General												
US Senate												
Raphael Warnock	B	D	96.9	92.5, 98.8	99.2	108.1	-	11.2	9.6, 15.7	9.4	3.8	8.8
Herschel Walker	B	R	2.6	.7, 13.8	0.8	-8.8	-	88.4	83.9, 89.9	89.1	94.9	90.1
Chase Oliver	W	L	0.5	.3, .8	0.9	0.8	-	0.5	.3, .6	1.7	1.3	1.1
Governor												
Stacey Abrams	B	D	92.9	63.6, 98.9	99.1	107.1	-	9.5	5.2, 32.6	6.8	1.1	7.1
Brian Kemp	W	R	6.8	.7, 36.0	0.9	-7.6	-	90.2	67.2, 94.5	92.8	98.4	92.5
Shane Hazel	W	L	0.3	.2, .5	0.5	0.5	-	0.2	.1, .3	0.5	0.5	0.4
Commissioner of Agriculture												
Nakita Hemingway	B	D	97.6	85.6, 99.0	98.1	105.4	-	6.4	5.2, 15.0	6.2	1.2	7.4
Tyler Harper	W	R	1.8	.5, 13.7	2.0	-7.4	-	93.2	84.5, 94.4	92.2	97.5	91.5
David Raudabaugh	W	L	0.6	.4, .9	2.0	1.9	-	0.4	.3, .6	1.3	1.3	1.1
Commissioner of Insurance												
Janice Laws Robinson	B	D	98.5	97.7, 99.1	98.2	106.8	-	5.5	4.9, 6.2	7.0	1.5	7.7
John King	W	R	1.5	.9, 2.3	1.9	-6.8	-	94.5	93.8, 95.1	93.0	98.5	92.3
Commissioner of Labor												
William Boddie	B	D	97.4	84.7, 98.8	98.7	105.7	-	7.3	6.0, 16.3	6.8	1.5	7.4
Bruce Thompson	W	R	2.0	.6, 14.6	1.0	-7.9	-	92.2	83.2, 93.5	91.4	97.4	91.7
Emily Anderson	W	L	0.7	.4, 1.0	2.2	2.1	-	0.5	.3, .7	1.4	1.2	0.9
School Superintendent												
Alisha Thomas Searcy	B	D	98.3	97.4, 99.0	99.0	106.4	-	5.2	4.6, 6.0	6.7	1.4	7.7
Richard Woods	W	R	1.7	1.0, 2.6	0.9	-6.4	-	94.8	94.0, 95.4	93.3	98.7	92.3

APPENDIX A5
Central Georgia Region
Map Area 5
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2021 Runoffs												
US Special Senate												
Raphael Warnock	B	D	98.7	97.9, 99.2	99.2	108.0	-	10.3	9.6, 11.1	10.3	4.7	9.5
Kelly Loeffler	W	R	1.3	.8, 2.1	0.8	-8.1	-	89.7	88.9, 90.4	89.6	95.3	90.5
US Senate												
Jon Ossoff	W	D	98.7	97.9, 99.2	99.2	107.8	-	9.9	9.2, 10.6	9.9	4.7	9.6
David Perdue	W	R	1.3	.8, 2.1	0.8	-7.8	-	90.1	89.4, 90.8	90.2	95.3	90.4
Public Service Commission 4												
Daniel Blackman	B	D	98.8	98.2, 99.3	99.1	107.2	-	8.0	7.4, 8.7	8.5	3.6	8.9
Lauren McDonald Jr	W	R	1.2	.7, 1.8	0.8	-7.2	-	92.0	91.3, 92.6	91.5	96.3	91.1
2020 General												
US Senate												
Jon Ossoff	W	D	97.7	96.9, 98.3	98.7	103.0	-	9.3	8.5, 10.2	7.9	4.4	9.9
David Perdue	W	R	1.4	.9, 2.2	0.8	-5.3	-	90.1	89.2, 90.9	90.3	94.1	88.6
Shane Hazel	W	L	0.9	.6, 1.2	2.7	2.2	-	0.6	.4, .8	1.7	1.6	1.4
US Special Senate												
Raphael Warnock	B	D	68.2	66.2, 70.2	74.3	73.5	-	7.2	5.3, 9.3	3.4	3.1	6.8
Doug Collins	W	R	0.7	.4, 1.2	0.8	-3.5	-	36.9	36.4, 37.4	37.2	39.5	36.1
Kelly Loeffler	W	R	0.9	.5, 1.4	0.8	-3.9	-	47.3	46.7, 47.8	47.6	50.1	48.2
Others			30.2	28.1, 32.2	35.2	33.9	-	8.6	6.5, 10.5	6.9	7.2	9.0
Public Service Commission 1												
Robert Bryant	B	D	95.5	70.5, 98.5	98.8	103.8	-	10.4	7.8, 28.8	6.4	3.1	9.1
Jason Shaw	W	R	3.7	.7, 28.7	0.8	-6.5	-	88.9	70.5, 91.6	90.7	94.8	88.8
Elizabeth Melton	W	L	0.8	.6, 1.2	2.9	2.8	-	0.7	.4, .9	2.4	2.1	2.2

APPENDIX A5
Central Georgia Region
Map Area 5
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Public Service Commission 4												
Daniel Blackman	B	D	95.7	70.7, 98.6	98.8	104.3	-	10.5	8.1, 29.6	6.9	3.3	9.2
Lauren McDonald Jr	W	R	3.7	.8, 28.5	0.8	-6.7	-	88.8	67.7, 91.3	90.5	94.8	88.8
Nathan Wilson	W	L	0.7	.4, 1.0	2.5	2.2	-	0.7	.5, .9	2.4	2.0	2.0
2018 General												
Governor												
Stacey Abrams	B	D	98.9	98.4, 99.2	99.1	106.1	95.7	7.7	7.2, 8.3	8.2	3.1	8.7
Brian Kemp	W	R	0.8	.5, 1.2	0.9	-6.4	4.0	92.0	91.5, 92.5	91.2	96.4	90.8
Ted Metz	W	L	0.3	.2, .5	0.3	0.3	0.3	0.3	.2, .4	0.5	0.6	0.4
Commissioner of Insurance												
Janice Laws	B	D	98.5	97.9, 99.0	97.1	103.0	94.0	7.7	7.1, 8.4	6.9	3.3	9.0
Jim Beck	W	R	1.0	.6, 1.5	1.0	-4.7	4.9	91.8	91.1, 92.3	91.4	95.2	89.6
Donnie Foster	W	L	0.5	.4, .8	1.8	1.6	1.1	0.5	.4, .7	1.6	1.5	1.4
School Superintendent												
Otha Thornton	B	D	98.7	98.0, 99.2	98.8	103.8	94.6	5.8	5.3, 6.5	6.6	3.1	9.1
Richard Woods	W	R	1.3	.8, 2.0	1.1	-3.8	5.4	94.2	93.5, 94.7	93.3	96.7	90.9

APPENDIX A6
Southwest Georgia Region
Map Area 6
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2022 General												
US Senate												
Raphael Warnock	B	D	97.5	94.0, 98.9	99.1	104.5	96.5	6.7	5.5, 9.8	5.5	2.4	9.8
Herschel Walker	B	R	2.0	.6, 5.2	0.6	-5.3	2.9	92.9	94.9, 94.1	92.8	96.2	88.9
Chase Oliver	W	L	0.6	.3, .8	1.0	0.8	0.6	0.4	.3, .6	1.7	1.4	1.3
Governor												
Stacey Abrams	B	D	95.6	68.5, 99.0	99.2	103.8	95.5	5.2	2.6, 22.3	3.2	-0.2	7.6
Brian Kemp	W	R	4.1	.6, 31.1	0.9	-4.1	4.2	94.6	77.4, 97.2	96.4	99.8	91.9
Shane Hazel	W	L	0.4	.2, .5	0.5	0.3	0.3	0.2	.1, .3	0.5	0.5	0.5
Commissioner of Agriculture												
Nakita Hemingway	B	D	97.4	90.3, 98.5	99.1	101.8	94.1	3.4	2.2, 8.5	2.4	-0.5	7.5
Tyler Harper	W	R	2.0	.9, 9.0	0.8	-3.5	4.2	96.3	91.1, 97.5	96.6	99.4	91.5
David Raudabaugh	W	L	0.6	.4, .9	1.9	1.7	1.7	0.3	.2, .4	0.8	1.1	1.1
Commissioner of Insurance												
Janice Laws Robinson	B	D	98.4	97.6, 99.0	99.2	103.1	95.1	2.8	2.2, 3.6	3.1	0.2	8.1
John King	W	R	1.6	1.0, 2.4	0.8	-3.2	4.9	97.2	96.4, 97.8	96.9	99.9	91.9
Commissioner of Labor												
William Boddie	B	D	97.5	92.5, 98.6	99.0	102.0	94.2	3.9	2.8, 7.4	3.0	0.2	8.1
Bruce Thompson	W	R	1.8	.7, 6.8	0.8	-3.9	3.9	95.7	92.2, 96.8	95.6	98.6	90.8
Emily Anderson	W	L	0.7	.5, 1.0	2.0	1.9	1.9	0.3	.2, .5	1.2	1.2	1.1
School Superintendent												
Alisha Thomas Searcy	B	D	98.5	97.7, 99.1	98.8	103.0	95.2	2.3	1.8, 2.9	2.9	0.0	7.8
Richard Woods	W	R	1.5	.9, 2.3	1.0	-3.0	4.8	97.7	97.1, 98.2	97.0	100.0	92.2

APPENDIX A6
Southwest Georgia Region
Map Area 6
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2021 Runoffs												
US Special Senate												
Raphael Warnock	B	D	98.9	98.3, 99.4	99.3	105.7	97.3	5.5	5.0, 6.1	6.2	3.1	10.3
Kelly Loeffler	W	R	1.1	.6, 1.7	0.9	-5.7	2.7	94.5	93.9, 95.0	93.9	96.9	89.7
US Senate												
Jon Ossoff	W	D	98.9	98.2, 99.4	99.4	105.4	97.1	5.6	5.0, 6.3	6.2	3.0	10.2
David Perdue	W	R	1.1	.6, 1.8	0.6	-5.4	2.9	94.4	93.7, 95.0	93.8	97.0	89.8
Public Service Commission 4												
Daniel Blackman	B	D	98.8	98.1, 99.3	99.3	104.7	96.7	4.4	3.9, 5.2	5.2	2.2	9.4
Lauren McDonald Jr	W	R	1.2	.7, 1.9	0.7	-4.8	3.3	95.6	94.9, 96.1	94.8	97.8	90.6
2020 General												
US Senate												
Jon Ossoff	W	D	97.3	96.4, 98.1	99.0	100.9	93.4	6.1	5.1, 7.2	4.1	2.9	10.7
David Perdue	W	R	2.0	1.2, 2.9	0.8	-2.7	5.3	93.5	92.3, 94.4	94.3	95.6	87.8
Shane Hazel	W	L	0.7	.5, 1.1	1.7	1.7	1.3	0.4	.3, .6	1.5	1.4	1.5
US Special Senate												
Raphael Warnock	B	D	63.5	61.8, 65.3	69.3	67.0	67.3	2.1	1.1, 3.3	0.8	-0.5	5.6
Doug Collins	W	R	1.0	.6, 1.6	0.8	-2.1	1.3	39.9	39.3, 40.4	40.6	42.2	38.3
Kelly Loeffler	W	R	1.2	.7, 1.7	0.4	-2.6	1.9	46.7	46.0, 47.3	47.3	47.8	44.7
Others			34.3	32.5, 36.1	39.7	37.7	29.6	11.3	10.0, 12.5	9.1	10.5	11.4
Public Service Commission 1												
Robert Bryant	B	D	95.6	73.9, 98.1	98.6	100.7	93.2	6.6	4.3, 23.1	3.0	1.8	9.7
Jason Shaw	W	R	3.4	.9, 25.1	0.8	-3.3	4.8	92.9	76.4, 95.2	94.8	96.2	88.3
Elizabeth Melton	W	L	1.0	.7, 1.4	2.9	2.7	2.0	0.5	.3, .7	1.6	1.9	2.0

APPENDIX A6
Southwest Georgia Region
Map Area 6
General and Runoff Elections

			Estimates of Voting Patterns by Race in Recent Statewide Elections									
			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Public Service Commission 4												
Daniel Blackman	B	D	95.4	69.5, 98.6	99.1	101.6	93.5	7.3	4.7, 24.9	3.3	2.2	10.1
Lauren McDonald Jr	W	R	3.8	.8, 29.7	0.7	-3.8	4.4	92.3	74.7, 94.9	94.4	96.1	88.3
Nathan Wilson	W	L	0.7	.5, 1.1	2.5	2.1	2.1	0.4	.3, .6	1.9	1.7	1.7
2018 General												
Governor												
Stacey Abrams	B	D	98.9	98.5, 99.2	99.3	104.3	97.2	3.8	3.4, 4.3	4.9	1.7	9.3
Brian Kemp	W	R	0.8	.5, 1.2	0.6	-4.6	2.6	95.9	95.4, 96.4	94.8	97.8	90.1
Ted Metz	W	L	0.3	.2, .5	0.0	0.3	0.2	0.3	.2, .4	0.6	0.5	0.5
Commissioner of Insurance												
Janice Laws	B	D	98.0	97.5, 98.5	98.7	101.5	95.2	4.5	3.9, 5.1	3.2	1.9	9.5
Jim Beck	W	R	1.1	.7, 1.6	0.9	-3.4	3.3	95.0	94.4, 95.6	94.6	96.9	89.2
Donnie Foster	W	L	0.9	.6, 1.2	1.7	1.9	1.5	0.5	.3, .7	1.5	1.2	1.3
School Superintendent												
Otha Thornton	B	D	98.3	97.7, 98.8	98.9	101.8	95.6	2.4	1.9, 3.0	2.8	1.3	8.8
Richard Woods	W	R	1.7	1.2, 2.3	1.1	-1.8	4.4	97.6	97.0, 98.1	96.9	98.7	91.2

APPENDIX A7
Macon Metro Region
Map Area 7
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2022 General												
US Senate												
Raphael Warnock	B	D	96.3	92.7, 98.8	99.2	106.4	-	14.9	12.5, 19.6	10.7	8.5	-
Herschel Walker	B	R	3.1	.7, 9.7	0.8	-7.0	-	84.6	78.7, 87.1	87.0	89.3	-
Chase Oliver	W	L	0.6	.3, 1.0	1.0	0.5	-	0.5	.2, .8	2.4	2.2	-
Governor												
Stacey Abrams	B	D	89.6	57.7, 97.9	98.9	105.8	-	15.7	7.4, 39.0	7.2	3.9	-
Brian Kemp	W	R	10.0	1.7, 41.9	0.9	-6.2	-	84.1	60.7, 92.4	92.3	95.1	-
Shane Hazel	W	L	0.3	.2, .6	0.6	0.3	-	0.2	.1, .4	0.7	0.9	-
Commissioner of Agriculture												
Nakita Hemingway	B	D	96.3	87.9, 98.6	99.1	104.8	-	9.3	6.8, 18.3	6.7	3.6	-
Tyler Harper	W	R	3.1	.8, 11.5	0.8	-6.6	-	90.2	83.2, 92.7	91.8	94.5	-
David Raudabaugh	W	L	0.6	.3, 1.1	1.9	1.7	-	0.5	.2, .8	1.9	1.9	-
Commissioner of Insurance												
Janice Laws Robinson	B	D	97.9	96.0, 99.1	99.0	106.0	-	7.1	5.8, 9.0	7.3	4.4	-
John King	W	R	2.1	.9, 4.0	0.9	-5.9	-	92.9	91.0, 94.2	92.8	95.6	-
Commissioner of Labor												
William Boddie	B	D	96.5	84.0, 98.5	99.1	104.0	-	10.2	7.9, 22.8	7.1	4.6	-
Bruce Thompson	W	R	2.7	.8, 15.2	1.0	-6.4	-	89.3	76.5, 91.6	90.9	93.4	-
Emily Anderson	W	L	0.8	.4, 1.4	3.7	2.2	-	0.5	.2, .9	2.1	1.9	-
School Superintendent												
Alisha Thomas Searcy	B	D	98.0	96.3, 99.1	99.1	105.9	-	6.6	5.4, 8.2	7.0	3.9	-
Richard Woods	W	R	2.0	.9, 3.7	1.0	-5.9	-	93.4	91.8, 94.6	92.9	95.9	-

APPENDIX A7
Macon Metro Region
Map Area 7
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2021 Runoffs												
US Special Senate												
Raphael Warnock	B	D	98.0	96.4, 99.1	99.1	107.7	-	12.9	11.7, 14.7	11.3	8.2	-
Kelly Loeffler	W	R	2.0	.9, 3.6	0.9	-7.7	-	87.1	85.3, 88.3	88.7	91.8	-
US Senate												
Jon Ossoff	W	D	98.1	96.5, 99.1	99.1	107.4	-	12.4	11.2, 14.0	11.0	8.0	-
David Perdue	W	R	1.9	.9, 3.5	0.9	-7.5	-	87.6	86.0, 88.8	89.1	92.1	-
Public Service Commission 4												
Daniel Blackman	B	D	98.1	96.6, 99.1	99.1	107.1	-	10.8	9.6, 12.3	9.5	6.6	-
Lauren McDonald Jr	W	R	1.9	.9, 3.4	0.9	-7.1	-	89.2	87.7, 90.4	90.6	93.3	-
2020 General												
US Senate												
Jon Ossoff	W	D	97.5	96.0, 98.5	99.2	102.6	-	12.7	10.7, 15.2	8.7	7.5	-
David Perdue	W	R	1.6	.8, 2.9	1.4	-5.0	-	86.8	84.2, 88.7	89.3	90.6	-
Shane Hazel	W	L	0.9	.5, 1.4	3.0	2.5	-	0.6	.3, .9	2.4	2.0	-
US Special Senate												
Raphael Warnock	B	D	70.2	66.9, 73.4	74.4	74.5	-	13.0	9.4, 16.1	5.5	5.8	-
Doug Collins	W	R	1.1	.6, 2.0	1.0	-3.2	-	33.6	32.3, 34.6	34.7	36.4	-
Kelly Loeffler	W	R	1.1	.5, 2.0	1.2	-3.8	-	47.4	45.9, 48.5	48.2	50.0	-
Others			27.5	24.4, 30.8	33.8	32.5	-	5.9	3.0, 9.6	7.2	7.8	-
Public Service Commission 1												
Robert Bryant	B	D	96.3	78.3, 98.5	99.1	103.4	-	12.2	9.3, 29.4	6.3	4.9	-
Jason Shaw	W	R	2.8	.8, 20.6	1.0	-6.2	-	87.1	70.0, 90.0	90.3	91.9	-
Elizabeth Melton	W	L	0.9	.5, 1.4	2.8	2.9	-	0.7	.4, 1.1	3.4	3.2	-

APPENDIX A7
Macon Metro Region
Map Area 7
General and Runoff Elections

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Public Service Commission 4												
Daniel Blackman	B	D	94.8	73.6, 98.4	99.0	104.1	-	14.3	10.3, 33.9	6.8	5.6	-
Lauren McDonald Jr	W	R	4.5	1.7, 25.7	0.6	-6.4	-	85.1	65.4, 89.1	89.9	91.5	-
Nathan Wilson	W	L	0.7	.4, 1.1	2.4	2.2	-	0.6	.3, .9	3.4	2.8	-
2018 General												
Governor												
Stacey Abrams	B	D	98.2	97.1, 99.0	99.2	105.9	95.7	10.1	9.1, 11.4	8.2	5.9	-
Brian Kemp	W	R	1.4	.7, 2.5	0.9	-6.2	4.0	89.6	88.3, 90.6	90.6	93.0	-
Ted Metz	W	L	0.4	.2, .6	0.3	0.3	0.3	0.3	.2, .5	0.8	1.1	-
Commissioner of Insurance												
Janice Laws	B	D	97.9	96.7, 98.7	99.0	103.2	94.0	10.3	9.0, 11.8	6.8	5.5	-
Jim Beck	W	R	1.5	.7, 2.5	0.9	-4.7	4.9	89.2	87.7, 90.4	90.5	92.2	-
Donnie Foster	W	L	0.7	.4, 1.1	1.5	1.5	1.1	0.5	.3, .8	2.7	2.4	-
School Superintendent												
Otha Thornton	B	D	98.1	96.8, 99.0	99.1	104.3	94.6	7.3	6.2, 8.7	6.7	4.9	-
Richard Woods	W	R	1.9	1.0, 3.2	0.9	-4.4	5.4	92.7	91.3, 93.8	93.3	95.0	-

APPENDIX B

APPENDIX B1
Recent State Senate Contests in Areas of Interest

Estimates of Voting Patterns by Race in Recent State Legislative Elections

				Black Voters					White Voters				
	Race	Party	Vote	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
General Elections 2022													
State Senate 16													
Pingke Dubignon	B	D	31.8	95.8	91.7, 98.3	98.8	104.4	-	6.0	4.6, 8.0	6.0	2.2	-
Marty Harbin	W	R	68.2	4.2	1.7, 8.3	0.8	-4.5	-	94.0	92.0, 95.4	94.0	97.8	-
State Senate 17													
Kacy Morgan	B	D	38.4	97.6	95.1, 99.1	99.7	116.7	-	3.4	2.3, 5.2	3.9	1.1	-
Brian Strickland	W	R	61.6	2.4	.9, 4.9	0.3	-16.7	-	96.6	94.8, 97.7	96.4	99.0	-
State Senate 22													
Harold Jones II	B	D	70.4	98.0	96.4, 99.1	99.1	105.0	-	22.2	18.8, 26.3	18.2	20.5	-
Andrew Danielson	W	R	29.6	2.0	.9, 3.6	0.1	-5.0	-	77.8	73.7, 81.2	81.7	79.7	-
State Senate 25													
Valerie Rodgers	B	D	38.3	96.8	93.4, 98.9	95.7	113.0	-	7.7	5.9, 10.1	7.4	2.5	12.1
Rick Williams	W	R	61.7	3.2	1.1, 6.6	4.3	-13.1	-	92.3	89.9, 94.1	92.5	97.7	87.9
State Senate 34													
Valencia Seay	B	D	83.7	98.8	97.9, 99.4	100.0	107.7	-	11.1	6.1, 18.2	8.6	7.7	-
Tommy Smith	W	R	16.3	1.2	.6, 2.1	0.0	-7.7	-	88.9	81.8, 93.9	91.2	92.3	-
State Senate 41													
Kim Jackson	B	D	82.2	98.4	97.0, 99.3	99.6	100.6	-	55.2	49.9, 61.9	50.2	54.5	-
Jayre Jones	W	R	17.9	1.6	.7, 3.0	0.1	-0.6	-	44.8	38.1, 50.1	49.9	45.5	-
State Senate 43													
Tonya Anderson	B	D	75.1	99.0	98.0, 99.6	99.5	110.4	-	7.1	4.3, 11.4	5.5	6.2	-
Melanie Williams	B	R	25.0	1.0	.4, 2.0	0.7	-10.3	-	92.9	88.6, 95.7	94.8	93.9	-
General Elections 2020													
State Senate 16													
Cinquez Jester	B	D	31.8	96.8	93.8, 98.6	99.0	102.9	-	6.2	5.3, 7.5	6.0	4.3	-
Marty Harbin	W	R	68.2	3.2	1.4, 6.2	1.1	-3.2	-	93.8	92.5, 94.7	93.9	95.7	-
State Senate 20													
Julius Johnson	B	D	35.0	96.7	93.1, 98.9	98.6	107.0	-	2.5	1.3, 4.4	2.6	1.4	-
Larry Walker	W	R	65.0	3.3	1.1, 6.9	1.1	-7.2	-	97.5	95.5, 98.7	97.8	98.6	-

APPENDIX B1
Recent State Senate Contests in Areas of Interest

Estimates of Voting Patterns by Race in Recent State Legislative Elections

				Black Voters					White Voters				
	Race	Party	Vote	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
State Senate 23													
Ceretta Smith	B	D	40.7	98.0	96.6, 99.0	98.7	101.3	-	4.3	3.4, 5.5	4.8	2.7	8.4
Max Burns	W	R	59.3	2.0	1.0, 3.4	1.5	-1.4	-	95.7	94.5, 96.5	95.0	97.3	91.6
State Senate 25													
Veronica Brinson	B	D	32.3	95.7	90.6, 98.5	98.9	110.9	-	8.6	7.0, 11.0	7.5	3.4	13.1
Burt Jones	W	R	67.7	4.3	1.5, 9.4	0.7	-10.9	-	91.4	89.0, 93.1	92.5	96.5	86.9
State Senate 30													
Monteria Edwards	B	D	32.5	94.9	87.6, 98.6	99.2	132.0	-	6.7	4.9, 9.7	5.3	2.9	-
Mike Dugan	W	R	67.5	5.1	1.4, 12.4	0.0	-32.2	-	93.3	90.3, 95.1	94.6	97.2	-
General Elections 2018													
State Senate 17													
Phyllis Hatcher	B	D	45.5	97.1	94.1, 98.9	99.1	115.5	-	3.4	1.8, 5.8	2.9	1.1	-
Brian Strickland	W	R	54.5	2.9	1.1, 5.9	1.0	-15.5	-	96.6	94.2, 98.2	97.2	98.8	-
State Senate 34													
Valencia Seay	B	D	82.9	99.3	98.7, 99.7	99.5	107.5	-	8.5	4.5, 13.9	6.5	7.2	-
Tommy Smith	W	R	17.1	0.7	.3, 1.3	0.4	-7.6	-	91.5	86.1, 95.5	90.1	92.8	-
General Elections 2016													
State Senate 17													
Bill Blackmon	B	D	40.4	97.0	93.7, 99.0	99.4	116.6	-	3.3	1.9, 5.6	3.0	2.0	-
Richard Jeffares	W	R	59.6	3.0	1.0, 6.3	1.1	-16.6	-	96.7	94.4, 98.1	96.9	98.0	-
State Senate 43													
Tonya Anderson	B	D	70.4	98.8	97.6, 99.6	99.2	104.8	96.0	5.8	2.9, 10.1	3.2	2.3	-
Janice Van Ness	W	R	29.6	1.2	.4, 2.4	0.8	-4.8	4.0	94.2	89.9, 97.1	96.8	97.6	-

APPENDIX B2
Recent State House Contests in Areas of Interest

Estimates of Voting Patterns by Race in Recent State Legislative Elections

				Black Voters					White Voters				
	Race	Party	Vote	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
General Elections 2022													
State House 74													
William Harris	W	D	36.3	89.0	75.0, 96.6	96.7	103.1	-	7.7	3.3, 16.2	4.5	3.1	-
Karen Mathiak	W	R	63.7	11.0	3.4, 25.0	3.3	-3.0	-	92.3	83.8, 96.7	95.5	97.1	-
State House 75													
Mike Glanton	B	D	88.6	98.3	95.8, 99.7	99.9	108.3	-	33.2	8.7, 71.3	9.4	11.8	-
Della Ashley	W	R	11.5	1.7	.3, 4.2	0.1	-8.1	-	66.8	28.7, 91.3	89.8	88.4	-
State House 116													
El-Mahdi Holly	B	D	73.3	95.2	84.2, 99.6	99.4	115.3	-	30.5	10.1, 48.2	11.2	8.8	-
Bruce Bennington	W	R	26.7	4.8	.4, 15.8	1.8	-15.5	-	69.5	51.8, 89.8	89.2	91.2	-
State House 117													
Demetrius Rucker	B	D	49.3	88.9	71.6, 98.3	97.7	113.7	-	14.7	4.4, 31.1	5.7	3.0	-
Lauren Daniel	W	R	50.7	11.2	1.7, 28.4	1.3	-13.5	-	85.3	68.9, 95.6	94.5	97.0	-
State House 118													
Sharonda Bell	B	D	25.3	82.1	50.4, 97.6	97.6	104.7	-	8.2	3.2, 17.3	3.7	1.8	-
Clint Crowe	W	R	74.7	17.9	2.4, 49.6	1.5	-4.7	-	91.8	82.7, 96.8	96.3	98.0	-
State House 133													
Hoganne Harrison Walton	B	D	42.5	93.9	85.2, 98.7	99.1	110.6	-	13.2	9.2, 18.8	7.9	6.2	-
Kenneth Vance	W	R	57.5	6.1	1.3, 14.8	1.4	-10.6	-	86.8	81.2, 90.8	91.9	93.6	-
State House 134													
Anthony Dickson	B	D	33.5	92.4	84.8, 97.2	89.2	108.5	-	6.6	4.1, 10.4	6.2	-2.3	-
David Knight	W	R	66.5	7.6	2.8, 15.2	10.3	-8.5	-	93.4	89.6, 95.9	93.7	102.3	-
State House 144													
Nettie Conner	B	D	34.3	89.7	72.0, 98.3	99.3	120.0	-	11.2	6.7, 18.8	6.7	0.0	-
Dale Washburn	W	R	65.7	10.3	1.8, 28.0	1.2	-19.7	-	88.8	81.2, 93.3	93.9	100.0	-
State House 151													
Joyce Barlow	B	D	45.1	97.5	94.3, 99.3	98.5	108.6	-	4.1	2.3, 7.0	7.9	1.3	-
Mike Cheokas	W	R	54.9	2.5	.7, 5.7	1.3	-8.8	-	95.9	93.0, 97.7	91.9	99.2	-

APPENDIX B2
Recent State House Contests in Areas of Interest

Estimates of Voting Patterns by Race in Recent State Legislative Elections

				Black Voters					White Voters				
	Race	Party	Vote	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
State House 153													
David Sampson	B	D	65.1	96.9	91.4, 99.5	98.7	99.5	93.9	16.1	8.4, 26.4	7.5	8.1	-
Tracy Taylor	B	R	34.9	3.1	.5, 8.6	1.1	0.5	6.1	83.9	73.6, 91.6	92.3	92.0	-
State House 154													
John Hayes	B	D	43.6	87.2	83.7, 90.2	89.4	89.6	88.3	3.0	1.3, 5.6	1.7	-1.2	-
Gerald Greene	W	R	56.5	12.8	9.8, 16.3	10.6	10.3	11.7	97.0	94.3, 98.7	98.3	101.2	-
State House 169													
Mickey Brockington	B	D	25.4	88.0	68.1, 97.8	99.1	101.8	-	7.0	4.1, 12.4	5.4	0.0	-
Clay Pirkle	W	R	74.6	12.0	2.2, 31.9	0.8	-1.8	-	93.0	87.6, 95.9	94.9	100.0	-
State House 173													
Keith Jenkins Sr	B	D	36.0	97.3	93.0, 99.4	99.2	103.6	-	5.4	3.2, 8.7	4.6	1.7	-
Darlene Taylor	W	R	64.0	2.7	.6, 7.0	0.4	-3.8	-	94.6	91.3, 96.8	95.4	98.3	-
General Elections 2020													
State House 33													
Kerry Dornell Hamm	B	D	26.1	90.0	77.6, 97.1	-	91.0	-	7.2	4.9, 10.8	6.7	5.4	14.4
Rob Leverett	W	R	73.9	10.0	2.9, 22.4	-	9.4	-	92.8	89.2, 95.1	93.3	94.6	85.6
State House 63													
Debra Bazemore	B	D	78.8	98.1	95.7, 99.5	99.4	101.0	-	23.4	15.3, 33.4	16.1	17.4	-
David Callahan	W	R	21.2	1.9	.5, 4.3	0.6	-1.2	-	76.6	66.6, 84.7	83.0	82.7	-
State House 109													
Regina Lewis-Ward	B	D	51.8	92.8	81.1, 98.5	97.6	118.2	-	9.9	2.5, 24.1	4.3	2.7	-
Dale Rutledge	W	R	48.2	7.2	1.5, 18.9	0.9	-18.1	-	90.1	75.9, 97.5	95.6	97.0	-
State House 110													
Ebony Carter	B	D	44.2	89.8	76.5, 96.5	95.5	116.4	-	8.0	1.4, 19.8	3.0	-2.9	-
Clint Crowe	W	R	55.8	10.2	3.5, 23.5	4.4	-16.5	-	92.0	80.2, 98.6	97.0	103.1	-
State House 129													
Sharonda Bell	B	D	26.3	77.3	57.6, 92.0	98.1	92.7	-	11.1	7.6, 15.6	3.9	1.3	-
Susan Holmes	W	R	69.6	15.6	2.4, 34.2	14.0	9.0	-	87.9	83.5, 91.3	92.6	94.1	-
Joe Reed	W	I	4.2	7.1	2.3, 13.2	1.2	-2.8	-	0.9	.2, 2.1	2.4	4.4	-

APPENDIX B2
Recent State House Contests in Areas of Interest

Estimates of Voting Patterns by Race in Recent State Legislative Elections

				Black Voters					White Voters				
	Race	Party	Vote	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
State House 130													
Sheila Henley	B	D	41.6	95.7	88.3, 99.3	99.3	106.5	-	8.4	4.9, 14.1	5.7	3.2	-
David Knight	W	R	58.4	4.3	.7, 11.7	0.7	-6.5	-	91.6	85.9, 95.1	94.4	96.7	-
State House 144													
Mary Whipple-Lue	B	D	30.9	93.7	86.8, 98.2	97.6	98.5	-	2.4	.7, 5.8	1.7	0.2	-
Danny Mathis	W	R	69.1	6.3	1.8, 13.2	1.3	1.5	-	97.6	94.2, 99.3	98.4	99.7	-
State House 145													
Quentin Howell	B	D	43.8	91.3	79.7, 98.2	97.6	109.9	-	17.0	11.7, 24.1	9.8	8.4	-
Ricky Williams	W	R	56.2	8.7	1.8, 20.3	1.5	-9.9	-	83.0	75.9, 88.3	90.0	91.8	-
State House 151													
Joyce Barlow	B	D	48.2	91.2	87.1, 94.4	90.2	89.8	-	4.2	1.9, 7.9	3.7	3.6	-
Gerald Greene	W	R	51.8	8.8	5.6, 12.9	9.7	10.2	-	95.8	92.1, 98.2	96.2	96.3	-
State House 155													
Lethia Jones Kittrell	B	D	27.8	89.4	69.2, 98.3	98.7	100.6	-	6.4	2.7, 13.3	3.1	2.1	-
Clay Pirkle	W	R	72.2	10.6	1.7, 30.8	1.8	-0.2	-	93.6	86.7, 97.3	96.9	97.9	-
State House 170													
Andre Oliver	B	D	24.2	86.7	74.9, 94.4	94.5	94.4	-	5.3	2.6, 9.4	2.6	2.9	11.0
Penny Houston	W	R	75.8	13.3	5.6, 25.1	5.5	5.5	-	94.7	90.6, 97.4	97.4	97.1	89.0
State House 173													
Booker Gainor	B	D	40.6	94.9	88.9, 98.2	97.0	103.0	-	10.9	7.8, 15.2	8.2	5.6	-
Darlene Taylor	W	R	59.4	5.1	1.8, 11.1	3.1	-3.1	-	89.1	84.8, 92.2	91.9	94.4	-
General Elections 2018													
State House 109													
Regina Lewis-Ward	B	D	48.5	92.4	79.7, 98.9	-	116.6	-	10.3	3.6, 22.1	5.0	1.3	-
Dale Rutledge	W	R	51.5	7.6	1.1, 20.3	-	-16.6	-	89.7	77.9, 96.4	95.2	98.5	-
State House 111													
El-Mahdi Holly	B	D	56.6	94.4	83.9, 98.8	96.8	123.8	-	9.4	2.2, 24.5	7.0	-8.0	-
Geoff Cauble	W	R	43.4	5.6	1.2, 16.0	3.2	-23.6	-	90.6	75.5, 97.8	92.9	107.9	-

APPENDIX B2
Recent State House Contests in Areas of Interest

Estimates of Voting Patterns by Race in Recent State Legislative Elections

				Black Voters					White Voters				
	Race	Party	Vote	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
State House 126													
Gloria Frazier	B	D	69.5	98.9	97.4, 99.7	98.9	107.9	-	4.6	2.3, 8.5	4.8	2.4	-
William Harris	W	R	30.5	1.1	.3, 2.6	0.8	-7.9	-	95.4	91.5, 97.7	95.1	97.6	-
State House 128													
Mack Jackson	B	D	57.0	97.4	93.1, 99.4	98.7	101.0	-	16.1	12.9, 20.7	14.9	9.6	8.8
Jackson Williams	W	R	43.0	2.6	.6, 6.9	1.0	-1.0	-	83.9	79.3, 87.1	85.0	90.5	91.2
State House 151													
Joyce Barlow	B	D	46.5	90.6	87.0, 93.4	91.2	88.8	-	3.3	1.5, 6.2	2.4	2.6	-
Gerald Greene	W	R	53.5	9.4	6.6, 13.0	8.8	11.2	-	96.7	93.8, 98.5	97.7	97.4	-
State House 152													
Marcus Batten	B	D	26.0	94.5	86.8, 98.5	98.7	102.7	-	4.0	2.0, 7.1	3.7	1.2	8.9
Ed Rynders	W	R	74.0	5.5	1.5, 13.2	0.7	-2.7	-	96.0	92.9, 98.0	96.2	98.9	91.1
State House 175													
Treva Gear	B	D	28.5	80.2	63.3, 87.3	74.9	93.0	-	6.5	3.1, 13.8	5.3	4.7	-
John Lahood	W	R	71.5	19.8	12.7, 36.7	25.1	7.4	-	93.5	86.2, 96.5	94.4	95.1	-
General Elections 2016													
State House 73													
Rahim Talley	B	D	35.5	93.1	83.9, 98.1	98.4	105.2	-	3.9	1.1, 9.4	2.2	1.5	-
Karen Mathiak	W	R	64.5	6.9	1.9, 16.1	1.6	-5.2	-	96.1	90.6, 98.9	97.7	98.5	-
State House 111													
Darryl Payton	B	D	48.3	91.0	76.3, 98.1	99.4	120.7	-	8.9	2.1, 23.1	5.7	-4.2	-
Brian Strickland	W	R	51.7	9.0	1.9, 23.7	0.8	-20.4	-	91.1	76.9, 97.9	94.4	104.5	-
State House 144													
Joyce Denson	B	D	32.3	93.5	84.4, 98.3	96.0	96.1	-	6.0	3.0, 10.4	4.1	4.4	13.1
James Bubber Epps	W	R	67.7	6.5	1.7, 15.6	4.1	4.0	-	94.0	89.6, 97.0	95.7	95.5	86.9
State House 145													
Floyd Griffin	B	D	43.4	97.3	95.1, 98.8	99.3	107.9	-	10.9	9.5, 12.7	8.7	6.6	14.6
Ricky Williams	W	R	56.6	2.7	1.2, 4.9	1.0	-8.1	-	89.1	87.3, 90.5	91.3	93.4	85.4

APPENDIX B2
Recent State House Contests in Areas of Interest

Estimates of Voting Patterns by Race in Recent State Legislative Elections

				Black Voters					White Voters				
	Race	Party	Vote	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
State House 151													
Kenneth Zachary	B	I	37.9	71.9	67.4, 75.1	76.0	72.7	-	4.1	1.5, 8.3	1.8	3.4	-
Gerald Greene	W	R	62.1	28.1	24.9, 32.6	24.0	27.3	-	95.9	91.7, 98.5	98.2	96.5	-
State House 173													
Tommy Hill	B	D	38.9	94.1	88.0, 97.8	97.1	99.7	-	9.3	6.3, 13.1	6.7	5.6	13.3
Darlene Taylor	W	R	61.1	5.9	2.2, 12.0	3.2	0.4	-	90.7	86.9, 93.7	93.3	94.5	86.7

APPENDIX C

APPENDIX C1
Eastern Atlanta Metro Region
Map Area 1
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2020 Democratic Primary												
US Senate												
James Knox	B	D	4.1	3.9, 4.3	4.1	4.3	3.3	0.5	.3, .6	0.6	-0.7	-
Jon Ossoff	W	D	60.0	59.0, 61.0	60.7	60.6	62.5	54.3	51.9, 56.1	53.4	53.9	-
Marckeith DeJesus	B	D	3.9	3.6, 4.1	4.3	4.5	3.3	0.6	.4, .8	0.7	0.7	-
Maya Dillard Smith	B	D	9.7	9.3, 10.1	10.9	10.8	8.5	0.9	.6, 1.4	1.3	1.3	-
Sarah Riggs Amico	W	D	11.9	11.3, 12.7	12.6	13.0	11.4	5.5	4.4, 7.6	6.1	5.8	-
Teresa Pike Tomlinson	W	D	7.4	6.8, 8.0	5.9	3.5	8.4	37.8	36.6, 39.0	37.0	38.1	-
Tricia Carpenter McCracken	W	D	3.0	2.8, 3.1	3.0	3.2	2.6	0.4	.3, .6	0.0	0.3	-
Public Service Commission 4												
Daniel Blackman	B	D	78.2	76.6, 80.3	79.6	79.2	77.5	59.3	55.9, 63.4	58.6	57.3	-
John Noel	W	D	21.8	19.7, 23.4	20.4	20.8	22.5	40.7	36.6, 44.1	41.4	42.6	-
2018 Democratic Primary												
Governor												
Stacey Abrams	B	D	90.3	88.9, 91.5	88.7	87.4	87.5	73.0	69.8, 76.0	64.0	62.5	-
Stacey Evans	W	D	9.7	8.5, 11.1	11.3	12.6	12.5	27.0	24.0, 30.2	36.0	37.5	-
Lieutenant Governor												
Sarah Riggs Amico	W	D	43.6	42.8, 44.4	38.8	38.3	43.0	97.6	96.8, 98.3	94.0	93.9	-
Triana Arnold James	B	D	56.4	55.5, 57.2	61.2	61.2	57.0	2.4	1.7, 3.2	6.0	6.1	-
Commissioner of Insurance												
Cindy Zeldin	W	D	25.8	24.5, 26.8	23.4	20.8	28.2	86.1	83.3, 88.3	83.7	82.5	-
Janice Laws	B	D	74.2	73.2, 75.5	76.6	79.2	71.8	13.9	11.7, 16.7	16.3	17.5	-
Commissioner of Labor												
Fred Quinn	B	D	53.5	51.8, 55.4	54.7	54.7	53.5	31.5	27.8, 35.8	31.7	32.3	-
Richard Keatley	W	D	46.5	44.6, 48.2	45.3	45.3	46.5	68.5	64.2, 72.2	68.3	67.7	-

APPENDIX C1
Eastern Atlanta Metro Region
Map Area 1
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Secretary of State												
Dee Dawkins-Haigler	B	D	41.8	40.8, 42.7	41.5	40.8	41.0	25.5	23.4, 27.3	22.4	21.4	-
John Barrow	W	D	38.9	38.0, 39.6	35.3	35.8	39.2	70.7	68.9, 72.3	67.3	68.0	-
Rakeim Hadley	B	D	19.3	18.5, 20.2	23.2	23.3	19.8	3.9	2.1, 5.7	10.2	10.6	-
School Superintendent												
Otha Thornton	B	D	50.4	49.3, 51.6	52.6	52.2	49.8	21.3	18.9, 24.0	23.0	22.8	-
Sam Mosteller	B	D	17.5	16.6, 18.3	17.3	18.0	17.7	21.5	19.4, 23.3	22.1	22.9	-
Sid Chapman	W	D	32.2	31.1, 33.1	30.3	29.7	32.6	57.2	54.7, 59.3	54.7	54.3	-
Public Service Commission 3												
Johnny White	B	D	18.6	18.0, 19.2	19.6	19.7	18.1	1.4	.9, 2.2	1.4	1.6	-
Lindy Miller	W	D	64.0	62.9, 65.0	62.2	62.2	63.3	83.4	81.1, 85.7	81.6	81.2	-
John Noel	W	D	17.4	16.4, 18.4	18.2	18.1	18.7	15.2	12.9, 17.4	17.1	17.2	-
2018 Democratic Runoff												
School Superintendent												
Otha Thornton	B	D	69.6	68.3, 71.0	71.9	71.3	68.3	28.1	25.9, 30.8	28.8	29.4	30.3
Sid Chapman	W	D	30.4	29.0, 31.7	28.2	28.7	31.7	71.9	69.2, 74.1	71.3	70.6	69.7
2016 Democratic Primary												
US Senate												
Cheryl Copeland	B	D	45.5	44.4, 46.6	46.9	47.6	45.1	23.8	21.9, 25.8	24.8	25.0	22.9
Jim Barksdale	W	D	52.8	51.6, 53.9	51.2	50.6	52.5	69.4	67.4, 71.3	67.5	67.6	69.8
John Coyne	W	D	1.7	1.3, 2.1	2.4	1.8	2.4	6.7	5.8, 7.6	8.1	7.5	7.3

APPENDIX C2
Southern Atlanta Metro Region
Map Area 2
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2020 Democratic Primary												
US Senate												
James Knox	B	D	3.9	3.4, 4.4	4.1	4.2	-	2.9	1.9, 4.0	1.5	2.5	-
Jon Ossoff	W	D	61.0	59.0, 62.5	57.7	57.5	-	59.0	55.5, 62.2	55.5	56.7	-
Marckeith DeJesus	B	D	3.6	3.0, 4.3	4.5	4.6	-	1.3	.8, 2.1	1.5	1.4	-
Maya Dillard Smith	B	D	10.1	9.3, 11.0	11.5	11.5	-	1.6	.9, 2.6	0.7	0.4	-
Sarah Riggs Amico	W	D	12.6	11.6, 13.6	12.3	12.6	-	13.3	11.1, 15.6	11.9	13.4	-
Teresa Pike Tomlinson	W	D	6.1	4.8, 7.4	6.6	6.6	-	20.5	17.9, 23.2	27.9	23.9	-
Tricia Carpenter McCracken	W	D	2.7	2.2, 3.1	3.0	3.0	-	1.5	.9, 2.3	2.0	1.6	-
Public Service Commission 4												
Daniel Blackman	B	D	79.2	76.5, 84.1	80.8	80.8	-	53.8	48.4, 61.0	54.5	52.8	-
John Noel	W	D	20.8	15.9, 23.5	19.1	19.2	-	46.2	39.0, 51.6	45.6	47.2	-
2018 Democratic Primary												
Governor												
Stacey Abrams	B	D	90.3	87.5, 92.7	88.6	88.6	84.7	53.0	47.9, 58.1	48.0	48.2	-
Stacey Evans	W	D	9.7	7.3, 12.6	11.4	11.4	15.3	47.0	41.9, 52.1	52.1	51.8	-
Lieutenant Governor												
Sarah Riggs Amico	W	D	41.4	38.8, 43.8	37.3	38.1	44.0	91.6	87.3, 95.1	89.1	90.8	-
Triana Arnold James	B	D	58.6	56.3, 61.2	62.7	62.0	56.0	8.4	4.9, 12.7	11.3	9.2	-
Commissioner of Insurance												
Cindy Zeldin	W	D	21.3	18.9, 24.6	23.2	23.5	26.7	56.0	50.7, 61.8	59.0	57.2	-
Janice Laws	B	D	78.7	75.4, 81.1	76.8	76.5	73.3	44.0	38.2, 49.3	41.0	42.7	-
Commissioner of Labor												
Fred Quinn	B	D	50.1	47.9, 52.4	51.4	51.3	50.0	41.4	35.8, 46.7	43.9	43.7	-
Richard Keatley	W	D	49.9	47.6, 52.1	48.5	48.7	50.0	58.6	53.3, 64.2	56.1	56.3	-

APPENDIX C2
Southern Atlanta Metro Region
Map Area 2
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Secretary of State												
Dee Dawkins-Haigler	B	D	31.1	29.1, 33.2	33.8	33.0	30.9	22.4	18.1, 26.8	26.6	26.0	-
John Barrow	W	D	42.7	41.0, 44.0	38.3	39.8	44.0	70.6	66.1, 74.9	66.0	66.5	-
Rakeim Hadley	B	D	26.2	24.4, 28.0	27.4	27.2	25.1	7.1	3.8, 10.5	7.8	7.6	-
School Superintendent												
Otha Thornton	B	D	48.3	47.0, 50.0	52.5	51.7	47.3	20.0	16.1, 24.2	25.2	21.8	-
Sam Mosteller	B	D	16.9	15.5, 18.0	15.8	16.4	18.1	29.5	25.0, 33.1	28.1	27.9	-
Sid Chapman	W	D	34.8	33.6, 35.9	32.4	32.0	34.6	50.4	46.5, 54.4	46.6	50.2	-
Public Service Commission 3												
Johnny White	B	D	16.0	14.4, 17.6	17.5	17.5	15.9	5.4	2.9, 8.2	7.5	7.1	-
Lindy Miller	W	D	69.4	67.3, 71.4	66.5	66.3	67.7	78.8	74.5, 82.9	74.7	75.4	-
John Noel	W	D	14.6	12.9, 16.3	16.1	16.1	16.4	15.8	12.2, 19.5	18.5	17.4	-
2018 Democratic Runoff												
School Superintendent												
Otha Thornton	B	D	68.1	66.3, 70.0	71.9	69.9	68.4	23.0	16.9, 29.6	25.9	23.9	24.5
Sid Chapman	W	D	31.9	30.0, 33.8	28.1	30.1	31.6	77.0	70.4, 83.1	74.2	76.2	75.5
2016 Democratic Primary												
US Senate												
Cheryl Copeland	B	D	49.6	47.9, 51.1	49.7	48.9	48.6	30.1	24.6, 35.8	31.3	32.4	-
Jim Barksdale	W	D	49.6	47.9, 51.2	48.0	49.4	49.3	65.7	59.9, 71.3	64.8	63.0	-
John Coyne	W	D	0.9	.6, 1.3	0.3	1.7	2.1	4.2	2.7, 5.9	6.7	4.8	-

APPENDIX C3
East Central Region
Map Area 3
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2020 Democratic Primary												
US Senate												
James Knox	B	D	6.6	6.2, 7.0	6.5	6.9	7.7	12.4	11.0, 13.7	10.8	12.4	-
Jon Ossoff	W	D	46.1	45.1, 47.1	46.8	46.3	40.8	38.4	36.0, 40.7	41.6	43.0	-
Marckeith DeJesus	B	D	4.6	4.2, 5.1	5.3	5.3	5.1	2.6	1.8, 3.6	2.9	3.3	-
Maya Dillard Smith	B	D	15.0	14.3, 15.5	15.1	14.5	16.8	5.2	3.8, 6.6	4.5	3.6	-
Sarah Riggs Amico	W	D	14.8	14.2, 15.4	14.1	14.7	14.5	15.7	13.8, 17.5	14.9	14.0	-
Teresa Pike Tomlinson	W	D	9.0	8.4, 9.7	8.2	8.4	11.0	21.3	19.7, 23.0	20.8	19.1	-
Tricia Carpenter McCracken	W	D	3.8	3.4, 4.3	3.8	3.9	4.0	4.5	3.5, 5.5	4.7	4.6	-
Public Service Commission 4												
Daniel Blackman	B	D	75.0	74.0, 76.0	76.3	74.5	74.6	53.2	50.5, 55.9	56.3	56.4	-
John Noel	W	D	25.0	24.0, 26.0	23.6	25.5	25.4	46.8	44.1, 49.5	44.1	43.6	-
2018 Democratic Primary												
Governor												
Stacey Abrams	B	D	80.9	80.0, 82.0	82.2	83.3	77.1	47.7	44.3, 51.2	48.2	41.6	30.9
Stacey Evans	W	D	19.1	18.0, 20.0	17.8	16.7	22.9	52.3	48.8, 55.7	51.7	58.4	69.1
Lieutenant Governor												
Sarah Riggs Amico	W	D	44.9	43.6, 46.1	42.7	44.2	47.7	84.6	80.8, 88.1	83.1	79.9	67.7
Triana Arnold James	B	D	55.1	53.9, 56.4	57.1	55.8	52.3	15.4	11.9, 19.2	17.0	20.1	32.3
Commissioner of Insurance												
Cindy Zeldin	W	D	19.4	18.1, 20.6	19.4	20.2	18.9	52.9	49.3, 56.5	54.2	50.9	38.9
Janice Laws	B	D	80.7	79.4, 81.9	80.7	79.9	81.1	47.1	43.5, 50.7	46.0	49.1	61.1
Commissioner of Labor												
Fred Quinn	B	D	55.7	54.2, 57.1	55.7	56.5	54.1	42.4	38.3, 46.6	40.3	40.5	40.9
Richard Keatley	W	D	44.3	42.9, 45.8	44.3	43.5	45.9	57.6	53.5, 61.7	60.0	59.5	59.1

APPENDIX C3
East Central Region
Map Area 3
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Secretary of State												
Dee Dawkins-Haigler	B	D	25.8	24.6, 26.9	27.0	24.4	21.3	14.1	10.7, 17.6	14.6	17.0	11.3
John Barrow	W	D	58.9	57.8, 59.9	55.6	60.1	66.3	81.0	77.2, 84.9	78.2	76.4	85.8
Rakeim Hadley	B	D	15.4	14.4, 16.4	17.8	15.6	12.3	4.9	2.9, 7.9	4.6	6.6	2.8
School Superintendent												
Otha Thornton	B	D	47.6	46.7, 48.6	50.0	49.2	45.6	20.7	17.6, 23.8	24.8	20.9	17.2
Sam Mosteller	B	D	18.6	17.9, 19.4	18.2	18.3	19.4	30.3	27.6, 33.1	29.0	29.4	31.2
Sid Chapman	W	D	33.7	32.8, 34.6	32.3	32.5	35.0	49.0	45.8, 52.2	46.4	49.6	51.6
Public Service Commission 3												
Johnny White	B	D	22.3	21.6, 23.0	23.0	23.7	22.1	9.7	7.4, 12.1	6.7	9.7	26.1
Lindy Miller	W	D	57.4	56.5, 58.4	57.7	56.7	57.5	69.4	66.1, 72.6	72.8	69.4	50.0
John Noel	W	D	20.3	19.4, 21.0	19.8	19.6	20.4	20.9	18.2, 23.7	20.4	20.9	23.9
2018 Democratic Runoff												
School Superintendent												
Otha Thornton	B	D	72.8	71.2, 74.3	75.1	73.8	70.6	26.3	21.5, 31.5	25.5	24.2	24.0
Sid Chapman	W	D	27.2	25.7, 28.8	25.0	26.2	29.4	73.7	68.5, 78.5	75.0	75.8	76.0
2016 Democratic Primary												
US Senate												
Cheryl Copeland	B	D	48.3	47.1, 49.6	49.8	49.0	48.0	23.2	21.6, 24.9	24.3	24.5	22.4
Jim Barksdale	W	D	48.2	46.9, 49.5	47.0	47.7	48.5	70.3	68.6, 71.9	69.2	70.2	71.7
John Coyne	W	D	3.4	3.0, 3.9	3.6	3.3	3.4	6.5	5.8, 7.2	5.4	5.2	5.9

APPENDIX C4
Southeastern Atlanta Metro Region
Map Area 4
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2020 Democratic Primary												
US Senate												
James Knox	B	D	3.8	3.3, 4.2	4.2	4.3	-	2.2	1.4, 3.2	2.3	2.3	2.6
Jon Ossoff	W	D	61.4	59.7, 62.9	58.1	57.4	-	59.4	56.5, 62.0	57.1	56.2	57.7
Marckeith DeJesus	B	D	3.3	2.8, 3.9	4.5	4.5	-	0.9	.5, 1.4	0.9	1.0	1.0
Maya Dillard Smith	B	D	9.7	8.8, 10.6	11.4	11.2	-	1.8	.9, 3.0	2.2	2.2	2.6
Sarah Riggs Amico	W	D	13.0	12.0, 13.8	12.5	13.0	-	13.2	11.3, 15.1	13.3	12.7	11.8
Teresa Pike Tomlinson	W	D	6.4	5.2, 7.6	6.7	6.6	-	20.9	18.7, 23.2	24.1	23.8	21.4
Tricia Carpenter McCracken	W	D	2.6	2.0, 2.9	3.0	2.9	-	1.6	.8, 2.3	1.8	1.8	2.9
Public Service Commission 4												
Daniel Blackman	B	D	78.9	76.2, 82.4	80.4	80.0	-	55.0	50.3, 60.3	54.6	55.1	58.7
John Noel	W	D	21.1	17.6, 23.8	19.6	20.0	-	45.0	39.7, 49.7	45.4	44.9	41.3
2018 Democratic Primary												
Governor												
Stacey Abrams	B	D	88.1	85.7, 90.6	88.5	87.7	84.2	49.2	44.5, 54.1	46.2	47.9	54.0
Stacey Evans	W	D	11.9	9.4, 14.3	11.6	12.3	15.8	50.8	45.9, 55.5	53.7	52.0	46.0
Lieutenant Governor												
Sarah Riggs Amico	W	D	42.7	40.2, 44.9	38.9	40.1	44.2	87.3	83.1, 91.2	86.2	87.8	82.1
Triana Arnold James	B	D	57.3	55.1, 59.9	61.0	59.9	55.8	12.7	8.8, 16.9	13.8	12.3	17.9
Commissioner of Insurance												
Cindy Zeldin	W	D	22.3	19.9, 25.2	23.5	23.6	26.8	54.7	49.5, 59.7	56.7	56.3	55.4
Janice Laws	B	D	77.7	75.1, 80.2	76.5	76.4	73.2	45.4	40.3, 50.5	43.4	43.8	44.6
Commissioner of Labor												
Fred Quinn	B	D	50.5	48.1, 53.1	52.0	52.2	50.3	43.1	38.2, 48.2	45.0	43.5	42.5
Richard Keatley	W	D	49.5	46.9, 51.9	48.0	47.8	49.7	56.9	51.8, 61.9	55.0	56.5	57.5

APPENDIX C4
Southeastern Atlanta Metro Region
Map Area 4
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Secretary of State												
Dee Dawkins-Haigler	B	D	31.2	29.2, 33.1	33.1	31.8	31.8	25.1	21.3, 29.0	28.4	28.4	33.2
John Barrow	W	D	44.8	43.4, 46.0	40.8	42.8	43.5	67.0	63.0, 70.8	62.9	62.9	54.2
Rakeim Hadley	B	D	24.0	22.2, 25.8	26.0	25.4	24.7	7.9	5.1, 10.9	8.1	8.7	12.6
School Superintendent												
Otha Thornton	B	D	47.1	45.9, 48.6	51.7	50.5	46.8	19.0	15.7, 22.5	23.8	21.5	24.4
Sam Mosteller	B	D	17.2	16.1, 18.2	16.5	16.4	18.3	31.5	28.2, 34.8	29.5	31.0	31.1
Sid Chapman	W	D	35.6	34.4, 36.6	33.0	33.2	34.9	49.6	45.8, 53.3	47.4	47.7	44.5
Public Service Commission 3												
Johnny White	B	D	15.6	14.1, 17.0	16.9	17.2	15.8	7.6	5.1, 10.2	9.2	8.6	11.0
Lindy Miller	W	D	69.7	67.8, 71.5	66.7	66.8	67.5	77.1	73.2, 80.8	73.4	74.7	71.0
John Noel	W	D	14.7	13.0, 16.4	16.2	16.0	16.7	15.4	12.2, 18.7	17.9	16.7	18.0
2018 Democratic Runoff												
School Superintendent												
Otha Thornton	B	D	68.0	65.8, 70.6	70.5	67.5	67.9	25.3	19.6, 31.1	27.6	29.1	32.7
Sid Chapman	W	D	32.0	29.4, 34.3	29.4	32.5	32.1	74.8	68.9, 80.4	72.2	70.9	67.3
2016 Democratic Primary												
US Senate												
Cheryl Copeland	B	D	48.1	46.1, 50.0	48.1	47.7	48.2	34.4	29.8, 39.4	36.7	36.4	39.5
Jim Barksdale	W	D	50.8	48.8, 52.7	49.4	50.7	49.4	60.5	55.5, 65.1	60.9	57.7	55.2
John Coyne	W	D	1.1	.8, 1.6	1.7	1.7	2.4	5.1	3.5, 6.8	6.0	5.9	5.3

APPENDIX C5
Central Georgia Region
Map Area 5
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2020 Democratic Primary												
US Senate												
James Knox	B	D	6.6	5.8, 7.5	5.9	5.7	6.7	17.3	14.9, 19.7	17.2	18.6	-
Jon Ossoff	W	D	42.5	41.1, 43.9	41.3	44.3	38.8	34.9	31.4, 38.5	35.7	36.2	-
Marckeith DeJesus	B	D	3.7	3.0, 4.5	4.2	4.2	4.2	3.6	2.1, 5.2	4.4	4.7	-
Maya Dillard Smith	B	D	17.1	16.1, 18.0	17.4	14.9	18.7	5.8	3.5, 8.0	6.2	5.3	-
Sarah Riggs Amico	W	D	16.2	15.1, 17.3	16.4	16.7	15.9	14.5	11.7, 17.5	13.2	15.5	-
Teresa Pike Tomlinson	W	D	11.2	10.2, 12.2	11.3	11.1	12.4	18.7	16.1, 21.2	17.9	13.8	-
Tricia Carpenter McCracken	W	D	2.7	2.0, 3.3	2.7	3.2	3.3	5.2	3.7, 6.8	6.4	5.9	-
Public Service Commission 4												
Daniel Blackman	B	D	75.1	73.0, 77.2	74.0	71.6	75.4	59.0	53.5, 64.5	60.8	63.0	-
John Noel	W	D	24.9	22.8, 27.1	25.9	28.4	24.6	41.0	35.5, 46.5	39.4	36.9	-
2018 Democratic Primary												
Governor												
Stacey Abrams	B	D	81.9	80.0, 83.7	81.4	83.7	78.7	45.7	39.7, 52.0	46.7	38.5	30.8
Stacey Evans	W	D	18.1	16.3, 19.9	18.6	16.2	21.3	54.3	48.0, 60.3	52.9	61.4	69.2
Lieutenant Governor												
Sarah Riggs Amico	W	D	47.3	45.4, 49.3	47.8	48.4	49.5	77.2	70.1, 83.8	73.7	76.5	69.5
Triana Arnold James	B	D	52.7	50.7, 54.6	52.2	51.6	50.5	22.8	16.3, 29.9	25.6	23.5	30.5
Commissioner of Insurance												
Cindy Zeldin	W	D	23.1	21.1, 25.0	23.9	25.5	23.5	46.8	40.1, 53.5	46.1	43.1	33.3
Janice Laws	B	D	76.9	75.0, 78.8	76.1	74.5	76.5	53.2	46.6, 59.9	54.0	56.9	66.7
Commissioner of Labor												
Fred Quinn	B	D	56.7	54.3, 59.0	57.0	59.0	55.6	36.7	28.8, 45.0	35.2	31.3	38.4
Richard Keatley	W	D	43.3	41.0, 45.7	43.0	40.8	44.4	63.3	55.0, 71.2	65.1	68.6	61.6

APPENDIX C5
Central Georgia Region
Map Area 5
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Secretary of State												
Dee Dawkins-Haigler	B	D	26.4	24.9, 27.8	26.7	25.9	26.6	12.8	8.3, 17.8	12.8	10.8	8.0
John Barrow	W	D	58.7	57.1, 60.4	57.6	59.3	57.8	80.1	74.6, 85.2	80.6	84.3	88.5
Rakeim Hadley	B	D	14.9	13.6, 16.1	17.9	14.9	15.5	7.1	3.7, 11.0	1.0	5.1	3.4
School Superintendent												
Otha Thornton	B	D	48.6	46.8, 50.2	48.8	48.6	46.9	19.9	14.5, 25.5	18.1	12.4	16.7
Sam Mosteller	B	D	19.2	17.7, 20.8	18.5	18.8	20.6	29.8	24.5, 35.1	32.7	31.3	30.8
Sid Chapman	W	D	32.2	30.5, 33.9	31.1	32.6	32.5	50.3	44.5, 56.1	46.8	56.6	52.6
Public Service Commission 3												
Johnny White	B	D	20.5	19.1, 21.9	20.7	20.4	20.2	14.4	9.8, 19.2	14.2	18.4	27.0
Lindy Miller	W	D	58.1	56.3, 60.0	59.1	58.4	57.8	65.0	59.0, 71.0	61.0	58.9	47.3
John Noel	W	D	21.4	19.9, 22.8	21.4	21.2	21.9	20.6	15.7, 25.6	20.5	22.8	25.7
2018 Democratic Runoff												
School Superintendent												
Otha Thornton	B	D	72.1	70.1, 73.9	73.8	75.7	69.8	23.4	14.8, 32.8	21.0	20.0	13.9
Sid Chapman	W	D	27.9	26.1, 29.9	26.2	24.4	30.2	76.6	67.2, 85.2	79.2	79.9	86.1
2016 Democratic Primary												
US Senate												
Cheryl Copeland	B	D	49.9	48.0, 51.8	50.2	50.6	46.7	23.1	21.1, 25.3	22.4	22.7	23.3
Jim Barksdale	W	D	47.2	45.3, 49.1	46.6	46.6	50.2	71.2	69.0, 73.2	71.0	70.9	71.0
John Coyne	W	D	2.9	2.1, 3.7	3.8	2.7	3.0	5.7	4.8, 6.7	5.5	6.3	5.7

APPENDIX C6
Southwest Georgia Region
Map Area 6
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2020 Democratic Primary												
US Senate												
James Knox	B	D	8.4	7.5, 9.4	8.5	8.2	8.2	15.4	12.0, 18.7	13.9	15.7	-
Jon Ossoff	W	D	49.6	48.2, 50.9	48.8	47.4	53.3	22.7	18.4, 26.9	24.4	23.8	-
Marckeith DeJesus	B	D	4.8	3.9, 5.6	7.2	6.4	4.6	3.6	1.9, 5.9	0.0	3.2	-
Maya Dillard Smith	B	D	12.8	11.7, 13.8	10.4	12.8	11.1	7.2	4.2, 10.6	5.2	6.0	-
Sarah Riggs Amico	W	D	11.6	10.6, 12.6	11.0	12.5	11.0	15.8	12.3, 19.3	15.8	17.6	-
Teresa Pike Tomlinson	W	D	10.0	9.0, 11.1	8.8	9.6	8.2	29.0	25.1, 32.7	30.6	25.3	-
Tricia Carpenter McCracken	W	D	2.8	2.1, 3.5	1.9	3.2	3.6	6.4	4.3, 8.5	7.3	8.5	-
Public Service Commission 4												
Daniel Blackman	B	D	73.5	71.6, 75.4	73.8	74.3	70.9	69.0	63.0, 75.1	64.3	64.4	-
John Noel	W	D	26.5	24.6, 28.4	26.2	25.8	29.1	31.0	24.9, 37.0	36.4	35.6	-
2018 Democratic Primary												
Governor												
Stacey Abrams	B	D	83.5	82.0, 85.0	83.0	83.5	81.1	49.1	41.9, 56.3	50.7	46.6	-
Stacey Evans	W	D	16.5	15.0, 18.0	16.9	16.4	18.9	50.9	43.7, 58.1	49.1	53.4	-
Lieutenant Governor												
Sarah Riggs Amico	W	D	38.1	36.4, 39.8	38.1	39.6	39.2	75.3	67.4, 82.6	72.6	75.2	-
Triana Arnold James	B	D	61.9	60.3, 63.6	61.8	60.5	60.8	24.7	17.4, 32.6	27.2	24.8	-
Commissioner of Insurance												
Cindy Zeldin	W	D	18.9	17.3, 20.4	19.7	20.8	19.3	50.6	43.6, 57.5	45.7	49.8	-
Janice Laws	B	D	81.2	79.6, 82.7	80.3	79.2	80.7	49.4	42.6, 56.5	54.3	50.3	-
Commissioner of Labor												
Fred Quinn	B	D	57.0	55.3, 58.7	56.8	53.9	57.9	49.5	41.8, 57.2	48.9	50.1	-
Richard Keatley	W	D	43.0	41.4, 44.7	43.3	46.1	42.1	50.5	42.8, 58.2	52.5	49.7	-

APPENDIX C6
Southwest Georgia Region
Map Area 6
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Secretary of State												
Dee Dawkins-Haigler	B	D	28.4	27.0, 29.8	26.5	27.2	27.6	24.6	18.7, 30.9	26.6	22.5	-
John Barrow	W	D	49.1	47.6, 50.6	48.1	48.6	49.7	61.6	54.7, 68.1	61.0	66.0	-
Rakeim Hadley	B	D	22.5	22.0, 23.7	23.3	24.2	22.7	13.8	8.7, 19.1	10.2	11.5	-
School Superintendent												
Otha Thornton	B	D	50.2	48.7, 51.7	50.4	49.3	49.3	25.9	19.7, 32.3	24.5	18.9	-
Sam Mosteller	B	D	17.6	16.4, 18.9	17.4	18.8	17.5	24.7	19.1, 30.3	25.0	24.3	-
Sid Chapman	W	D	32.1	30.7, 33.6	32.0	32.0	33.1	49.3	42.9, 55.8	49.1	57.0	-
Public Service Commission 3												
Johnny White	B	D	36.1	34.7, 37.4	36.0	32.6	37.6	15.3	10.0, 21.0	16.2	16.8	-
Lindy Miller	W	D	45.8	44.2, 47.4	45.3	48.6	43.6	63.4	56.2, 70.3	63.6	60.0	-
John Noel	W	D	18.1	16.8, 19.4	16.7	18.8	18.8	21.3	15.6, 27.2	24.7	23.2	-
2018 Democratic Runoff												
School Superintendent												
Otha Thornton	B	D	65.6	63.6, 67.6	66.7	67.7	64.0	27.3	19.1, 35.7	24.7	23.3	25.6
Sid Chapman	W	D	34.4	32.4, 36.4	33.3	32.5	36.0	72.7	64.3, 81.0	75.0	77.0	74.4
2016 Democratic Primary												
US Senate												
Cheryl Copeland	B	D	47.9	45.5, 50.3	45.4	48.7	45.8	39.0	35.5, 42.7	42.4	39.9	36.5
Jim Barksdale	W	D	48.8	46.4, 51.3	50.3	47.8	50.5	53.6	49.8, 57.2	51.5	53.2	55.0
John Coyne	W	D	3.3	2.4, 4.4	2.9	3.5	3.7	7.4	5.8, 8.8	8.5	7.0	8.5

APPENDIX C7
Macon Metro Region
Map Area 7
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
2020 Democratic Primary												
US Senate												
James Knox	B	D	5.5	4.7, 6.3	6.3	5.7	6.1	6.8	4.5, 9.1	5.7	7.9	-
Jon Ossoff	W	D	42.2	40.5, 43.8	39.6	40.9	38.6	40.5	35.4, 45.8	42.0	40.2	-
Marckeith DeJesus	B	D	3.5	2.5, 4.4	4.3	4.4	4.1	3.6	1.8, 5.8	5.2	4.7	-
Maya Dillard Smith	B	D	20.3	19.2, 21.4	21.1	20.5	20.7	5.2	2.5, 8.3	3.5	1.3	-
Sarah Riggs Amico	W	D	16.1	14.7, 17.4	16.1	16.4	15.6	14.1	10.3, 18.0	14.0	15.2	-
Teresa Pike Tomlinson	W	D	10.2	9.0, 11.3	10.0	9.0	11.8	26.4	22.6, 30.0	25.6	26.1	-
Tricia Carpenter McCracken	W	D	2.3	1.5, 3.0	3.0	3.0	3.2	3.4	1.7, 5.4	4.6	4.6	-
Public Service Commission 4												
Daniel Blackman	B	D	80.6	77.5, 83.5	78.9	79.2	77.6	56.9	48.1, 65.6	57.0	55.9	-
John Noel	W	D	19.4	16.5, 22.5	21.1	20.8	22.4	43.1	34.4, 51.9	43.3	44.2	-
2018 Democratic Primary												
Governor												
Stacey Abrams	B	D	84.5	82.0, 86.9	83.2	84.2	80.2	51.3	41.5, 61.6	53.2	52.4	-
Stacey Evans	W	D	15.5	13.1, 18.0	16.7	15.9	19.8	48.7	38.4, 58.5	46.4	47.7	-
Lieutenant Governor												
Sarah Riggs Amico	W	D	46.8	44.1, 49.8	47.7	47.0	49.8	79.6	67.4, 90.0	74.7	76.2	-
Triana Arnold James	B	D	53.2	50.2, 55.9	52.4	53.1	50.2	20.4	10.0, 32.6	25.2	24.0	-
Commissioner of Insurance												
Cindy Zeldin	W	D	20.9	18.3, 23.6	21.6	21.6	22.3	56.9	46.5, 67.0	56.5	55.1	-
Janice Laws	B	D	79.1	76.4, 81.7	78.4	78.4	77.7	43.1	33.0, 53.6	43.7	44.9	-
Commissioner of Labor												
Fred Quinn	B	D	54.0	51.1, 57.0	53.1	54.0	53.1	39.8	28.1, 51.7	44.1	41.5	-
Richard Keatley	W	D	46.0	43.1, 48.9	47.0	46.1	46.9	60.2	48.3, 71.9	56.0	58.5	-

APPENDIX C7
Macon Metro Region
Map Area 7
Democratic Primaries and Runoffs

Estimates of Voting Patterns by Race in Recent Statewide Elections

			Black Voters					White Voters				
	Race	Party	EI rxc	95% confidence interval	EI	ER	HP	EI rxc	95% confidence interval	EI	ER	HP
Secretary of State												
Dee Dawkins-Haigler	B	D	30.7	28.5, 32.8	31.9	30.9	29.4	17.0	9.2, 25.3	15.5	17.0	-
John Barrow	W	D	50.2	47.9, 52.5	47.4	49.3	53.5	70.4	60.9, 79.5	76.8	70.5	-
Rakeim Hadley	B	D	19.1	17.1, 21.1	17.9	19.9	17.0	12.7	5.8, 20.2	11.0	12.5	-
School Superintendent												
Otha Thornton	B	D	54.4	51.9, 56.8	53.1	53.9	50.1	30.8	21.5, 40.3	33.9	33.5	-
Sam Mosteller	B	D	18.8	16.8, 20.8	19.6	19.7	20.0	27.6	19.7, 35.3	26.4	26.9	-
Sid Chapman	W	D	26.8	24.6, 29.0	27.7	26.5	29.9	41.6	33.0, 50.2	37.9	39.8	-
Public Service Commission 3												
Johnny White	B	D	20.5	18.8, 22.2	21.3	22.3	20.4	7.1	3.0, 12.8	8.2	6.5	-
Lindy Miller	W	D	59.0	57.0, 61.2	57.7	56.3	59.3	76.2	67.6, 84.1	74.4	76.9	-
John Noel	W	D	20.4	18.4, 22.3	21.0	21.4	20.3	16.7	9.8, 24.3	17.0	16.3	-
2018 Democratic Runoff												
School Superintendent												
Otha Thornton	B	D	71.5	69.0, 74.0	72.0	74.5	67.7	36.8	22.2, 51.2	35.8	30.2	-
Sid Chapman	W	D	28.5	26.0, 31.0	27.9	25.5	32.3	63.2	48.8, 77.8	64.3	69.8	-
2016 Democratic Primary												
US Senate												
Cheryl Copeland	B	D	51.5	49.0, 53.9	51.6	52.1	45.9	26.4	23.7, 29.3	26.0	26.4	-
Jim Barksdale	W	D	46.1	43.7, 48.7	45.5	45.2	51.5	68.3	65.4, 70.9	68.1	67.5	-
John Coyne	W	D	2.4	1.5, 3.4	2.8	2.7	2.6	5.3	4.1, 6.5	6.2	6.2	-

APPENDIX D

APPENDIX D

The eight additional majority Black Illustrative districts I focus on in this report were all drawn by pulling in population from at least one district in the Adopted Plan that fails to provide Black voters with an opportunity to elect their preferred candidates. The two tables below, Table A and Table B, identify all of the Adopted Plan districts that overlap with each of the additional Illustrative districts and the percent of the Illustrative district population that was drawn from each of the overlapping Adopted districts. The final three columns indicate which of the Adopted districts are Black opportunity districts and which are not by reporting the percent BVAP, and the GE and DPR scores of the overlapping Adopted districts.

Table A: Illustrative and Adopted State Senate District Overlaps

Illustrative State Senate District	Overlaps with Adopted State Senate Districts	Percent of Illustrative District Derived from Adopted District	Effectiveness of Adopted Districts		
			% BVAP	GE score	DPR score
17	010	20.2%	71.5%	0.775	0.664
	017	37.8%	32.0%	0.366	0.611
	025	6.1%	33.5%	0.385	0.608
	041	3.3%	62.6%	0.796	0.576
	043	30.7%	64.3%	0.706	0.650
	055	2.0%	66.0%	0.764	0.655
28	016	44.4%	22.7%	0.325	0.550
	034	26.0%	69.5%	0.808	0.638
	044	29.6%	71.3%	0.850	0.620
23	022	18.6%	56.5%	0.668	0.631
	023	32.6%	35.5%	0.392	0.601
	024	1.7%	19.9%	0.288	0.600
	025	23.0%	33.5%	0.385	0.608
	026	24.0%	57.0%	0.620	0.613

Table B: Illustrative and Adopted State House District Overlaps

Illustrative State House District	Overlaps with Adopted State House Districts	Percent of Illustrative District Derived from Adopted District	Effectiveness of Adopted Districts		
			% BVAP	GE score	DPR score
074	074	42.2%	25.5%	0.351	0.609
	075	8.8%	74.4%	0.849	0.632
	078	46.4%	71.6%	0.793	0.624
	116	2.5%	58.1%	0.672	0.657
117	074	7.7%	25.5%	0.351	0.609
	116	8.9%	58.1%	0.672	0.657
	117	40.7%	36.6%	0.436	0.630
	134	42.8%	33.6%	0.350	0.555
133	123	10.9%	24.3%	0.293	0.643
	124	2.7%	25.6%	0.368	0.552
	128	32.5%	50.4%	0.476	0.598
	133	38.8%	36.8%	0.434	0.620
	149	15.1%	32.1%	0.318	0.559
171	152	3.4%	26.1%	0.281	0.628
	153	31.2%	67.9%	0.651	0.657
	171	36.1%	39.6%	0.361	0.606
	172	2.4%	23.3%	0.248	0.596
	173	26.8%	36.3%	0.373	0.635
145	142	65.2%	59.5%	0.638	0.616
	144	26.3%	29.3%	0.356	0.583
	145	8.4%	35.7%	0.398	0.632

APPENDIX E

Lisa R. Handley

CURRICULUM VITAE

Professional Experience

Dr. Handley has over thirty years of experience in the areas of redistricting and voting rights, both as a practitioner and an academician, and is recognized nationally and internationally as an expert on these subjects. She has advised numerous clients on redistricting and has served as an expert in dozens of redistricting and voting rights court cases. Her clients have included the U.S. Department of Justice, civil rights organizations, independent redistricting commissions and scores of state and local jurisdictions. Internationally, Dr. Handley has provided electoral assistance in more than a dozen countries, serving as a consultant on electoral system design and redistricting for the United Nations, UNDP, IFES, and International IDEA. In addition, Dr. Handley served as Chairman of the Electoral Boundaries Commission in the Cayman Islands.

Dr. Handley has been actively involved in research, writing and teaching on the subjects of redistricting and voting rights. She has co-written a book, Minority Representation and the Quest for Voting Equality (Cambridge University Press, 1992) and co-edited a volume (Redistricting in Comparative Perspective, Oxford University Press, 2008) on these subjects. Her research has also appeared in peer-reviewed journals such as *Journal of Politics*, *Legislative Studies Quarterly*, *American Politics Quarterly*, *Journal of Law and Politics*, and *Law and Policy,* as well as law reviews and edited books. She has taught political science undergraduate and graduate courses related to these subjects at several universities including the University of Virginia and George Washington University. Dr. Handley is a Visiting Research Academic at Oxford Brookes University in the United Kingdom.

Dr. Handley is the President of Frontier International Consulting, a consulting firm that specializes in providing electoral assistance in transitional and post-conflict democracies. She also works as an independent election consultant both in the United States and internationally.

Education

Ph.D. The George Washington University, Political Science, 1991

Present Employment

President, Frontier International Electoral Consulting LLC (since co-founding company in 1998).

Senior International Electoral Consultant, Technical assistance for clients such as the UN, UNDP and IFES on electoral system design and boundary delimitation

Visiting Research Academic, Centre for Development and Emergency Practice (CENDEP), Oxford Brookes University

U.S. Clients since 2000

American Civil Liberties Union – expert testimony in Voting Right Act challenges in several states, expert testimony in Ohio partisan gerrymander challenge and challenge to Commerce Department inclusion of citizenship question on 2020 census form

Lawyers Committee for Civil Rights Under Law – expert testimony in challenges to statewide judicial elections in Texas and Alabama

US Department of Justice – expert witness testimony in several Section 2 and Section 5 cases

Alaska: Redistricting Board (2001 and 2011) – redistricting consultation, expert witness testimony

Arizona: Independent Redistricting Board (2001 and 2021) – redistricting consultation

Boston (2022): City Attorney General, redistricting consultation

Colorado: Redistricting Commission (2021), Redistricting Board (2001 and 2011) – redistricting consultation

Connecticut: State Senate and State House of Representatives (2001 and 2011) – redistricting consultation

Florida: State Senate (2000) – redistricting consultation

Kansas: State Legislative Research Department (2001, 2011, 2021) – redistricting consultation

Louisiana: Louisiana Legislative Black Caucus (2001) – expert witness testimony

Massachusetts: State Senate (2001 and 2011) – redistricting consultation

Maryland: Attorney General (2001) – redistricting consultation

Michigan: Michigan Independent Citizens Redistricting Commission (2021) – redistricting consultation

Miami-Dade County, Florida: County Attorney (2001 and 2011) – redistricting consultation

Nassau County, New York: Redistricting Commission (2001) – redistricting consultation

New Mexico: State House (2001) – redistricting consultation, expert witness testimony

New York: State Assembly (2001), State Senate (2021) – redistricting consultation

New York City: Redistricting Commission and Charter Commission (2001, 2011, 2022) – redistricting consultation and Section 5 submission assistance

New York State Court: Expert to the Special Master (drew congressional lines for state court)

Rhode Island: State Senate and State House (2001 and 2021) – redistricting consultation

International Clients since 2000

United Nations

- Afghanistan – electoral system design and district delimitation expert
- Bangladesh (UNDP) – redistricting expert
- Sierra Leone (UNDP) – redistricting expert
- Liberia (UNMIL, UN peacekeeping mission) – redistricting expert
- Democratic Republic of the Congo (MONUC, UN peacekeeping mission) – election feasibility mission, electoral system design and redistricting expert
- Kenya (UN) – electoral system design and redistricting expert
- Haiti (UN) – election feasibility mission, electoral system design and redistricting expert
- Zimbabwe (UNDP) – redistricting expert
- Lead Writer on the topic of boundary delimitation (redistricting) for ACE (Joint UN, IFES and IDEA project on the Administration and Cost of Elections Project)

International Foundation for Election Systems (IFES)

- Afghanistan – district delimitation expert
- Sudan – redistricting expert
- Kosovo – electoral system design and redistricting expert
- Nigeria – redistricting expert
- Nepal – redistricting expert
- Georgia – electoral system design and district delimitation expert
- Yemen – redistricting expert
- Lebanon – electoral system design and redistricting expert
- Malaysia – electoral system design and redistricting expert
- Myanmar – electoral system design and redistricting expert
- Ukraine – electoral system design and redistricting expert
- Pakistan – consultant for developing redistricting software
- Principal consultant for the Delimitation Equity Project – conducted research, wrote reference manual and developed training curriculum
- Writer on electoral boundary delimitation (redistricting), Elections Standards Project
- Training – developed training curriculum and conducted training workshops on electoral boundary delimitation (redistricting) in Azerbaijan and Jamaica

International Institute for Democracy and Electoral Assistance (International IDEA):

- Consultant on electoral dispute resolution systems
- Technology consultant on use of GIS for electoral district delimitation
- Training – developed training material and conducted training workshop on electoral boundary delimitation (redistricting) for African election officials (Mauritius)
- Curriculum development – boundary delimitation curriculum for the BRIDGE Project

Other international clients have included The Cayman Islands; the Australian Election Commission; the Boundary Commission of British Columbia, Canada; and the Global Justice Project for Iraq.

Publications

***Books**:*

Does Torture Prevention Work? Liverpool University Press, 2016 (served as editor and author, with Richard Carver)

Comparative Redistricting in Perspective, Oxford University Press, 2008 (first editor, with Bernard Grofman).

Delimitation Equity Project: Resource Guide, Center for Transitional and Post-Conflict Governance at IFES and USAID publication, 2006 (lead author).

Minority Representation and the Quest for Voting Equality, Cambridge University Press, 1992 (with Bernard Grofman and Richard Niemi).

***Academic Journal Articles**:*

"Drawing Electoral Districts to Promote Minority Representation" Representation, forthcoming, published online DOI:10.1080/00344893.2020.1815076.

"Evaluating national preventive mechanisms: a conceptual model," Journal of Human Rights Practice, Volume 12 (2), July 2020 (with Richard Carver).

"Minority Success in Non-Majority Minority Districts: Finding the 'Sweet Spot'," Journal of Race, Ethnicity and Politics, forthcoming (with David Lublin, Thomas Brunell and Bernard Grofman).

"Has the Voting Rights Act Outlived its Usefulness: In a Word, "No," Legislative Studies Quarterly, volume 34 (4), November 2009 (with David Lublin, Thomas Brunell and Bernard Grofman).

"Delimitation Consulting in the US and Elsewhere," Zeitschrift für Politikberatung, volume 1 (3/4), 2008 (with Peter Schrott).

"Drawing Effective Minority Districts: A Conceptual Framework and Some Empirical Evidence," North Carolina Law Review, volume 79 (5), June 2001 (with Bernard Grofman and David Lublin).

"A Guide to 2000 Redistricting Tools and Technology" in The Real Y2K Problem: Census 2000 Data and Redistricting Technology, edited by Nathaniel Persily, New York: Brennan Center, 2000.

"1990s Issues in Voting Rights," Mississippi Law Journal, 65 (2), Winter 1995 (with Bernard Grofman).

"Minority Turnout and the Creation of Majority-Minority Districts," American Politics Quarterly, 23 (2), April 1995 (with Kimball Brace, Richard Niemi and Harold Stanley).

"Identifying and Remedying Racial Gerrymandering," Journal of Law and Politics, 8 (2), Winter 1992 (with Bernard Grofman).

"The Impact of the Voting Rights Act on Minority Representation in Southern State Legislatures," Legislative Studies Quarterly, 16 (1), February 1991 (with Bernard Grofman).

"Minority Population Proportion and Black and Hispanic Congressional Success in the 1970s and 1980s," American Politics Quarterly, 17 (4), October 1989 (with Bernard Grofman).

"Black Representation: Making Sense of Electoral Geography at Different Levels of Government," Legislative Studies Quarterly, 14 (2), May 1989 (with Bernard Grofman).

"Minority Voting Equality: The 65 Percent Rule in Theory and Practice," Law and Policy, 10 (1), January 1988 (with Kimball Brace, Bernard Grofman and Richard Niemi).

"Does Redistricting Aimed to Help Blacks Necessarily Help Republicans?" Journal of Politics, 49 (1), February 1987 (with Kimball Brace and Bernard Grofman).

***Chapters in Edited Volumes**:*

"Effective torture prevention," Research Handbook on Torture, Sir Malcolm Evans and Jens Modvig (eds), Cheltenham: Edward Elgar, 2020 (with Richard Carver).

"Redistricting" in Oxford Handbook of Electoral Systems, Erik Herron Robert Pekkanen and Matthew Shugart (eds), Oxford: Oxford University Press, 2018.

"Role of the Courts in the Electoral Boundary Delimitation Process," in International Election Remedies, John Hardin Young (ed.), Chicago: American Bar Association Press, 2017.

"One Person, One Vote, Different Values: Comparing Delimitation Practices in India, Canada, the United Kingdom, and the United States," in Fixing Electoral Boundaries in India, edited by Mohd. Sanjeer Alam and K.C. Sivaramakrishman, New Delhi: Oxford University Press, 2015.

"Delimiting Electoral Boundaries in Post-Conflict Settings," in Comparative Redistricting in Perspective, edited by Lisa Handley and Bernard Grofman, Oxford: Oxford University Press, 2008.

"A Comparative Survey of Structures and Criteria for Boundary Delimitation," in Comparative Redistricting in Perspective, edited by Lisa Handley and Bernard Grofman, Oxford: Oxford University Press, 2008.

"Drawing Effective Minority Districts: A Conceptual Model," in Voting Rights and Minority Representation, edited by David Bositis, published by the Joint Center for Political and Economic Studies, Washington DC, and University Press of America, New York, 2006.

"Electing Minority-Preferred Candidates to Legislative Office: The Relationship Between Minority Percentages in Districts and the Election of Minority-Preferred Candidates," in Race and Redistricting in the 1990s, edited by Bernard Grofman; New York: Agathon Press, 1998 (with Bernard Grofman and Wayne Arden).

"Estimating the Impact of Voting-Rights-Related Districting on Democratic Strength in the U.S. House of Representatives," in Race and Redistricting in the 1990s, edited by Bernard Grofman; New York: Agathon Press, 1998 (with Bernard Grofman).

"Voting Rights in the 1990s: An Overview," in Race and Redistricting in the 1990s, edited by Bernard Grofman; New York: Agathon Press, 1998 (with Bernard Grofman and Wayne Arden).

"Racial Context, the 1968 Wallace Vote and Southern Presidential Dealignment: Evidence from North Carolina and Elsewhere," in Spatial and Contextual Models in Political Research, edited by Munroe Eagles; Taylor and Francis Publishing Co., 1995 (with Bernard Grofman).

"The Impact of the Voting Rights Act on Minority Representation: Black Officeholding in Southern State Legislatures and Congressional Delegations," in The Quiet Revolution: The Impact of the Voting Rights Act in the South, 1965-1990, eds. Chandler Davidson and Bernard Grofman, Princeton University Press, 1994 (with Bernard Grofman).

"Preconditions for Black and Hispanic Congressional Success," in United States Electoral Systems: Their Impact on Women and Minorities, eds. Wilma Rule and Joseph Zimmerman, Greenwood Press, 1992 (with Bernard Grofman).

***Electronic Publication**:*

"Boundary Delimitation" Topic Area for the Administration and Cost of Elections (ACE) Project, 1998. Published by the ACE Project on the ACE website (www.aceproject.org).

***Additional Writings of Note**:*

Amicus brief presented to the US Supreme Court in Gill v. Whitford, Brief of Political Science Professors as Amici Curiae, 2017 (one of many social scientists to sign brief)

Amicus brief presented to the US Supreme Court in Shelby County v. Holder, Brief of Historians and Social Scientists as Amici Curiae, 2013 (one of several dozen historians and social scientists to sign brief)

Amicus brief presented to the US Supreme Court in Bartlett v. Strickland, 2008 (with Nathaniel Persily, Bernard Grofman, Bruce Cain, and Theodore Arrington).

Recent Court Cases

Pending cases:

- Louisiana: *Nairne, et al., v. Ardoin* (Docket Number: 3:22-cv-00178-SDD-SDJ) (Middle District of Louisiana)

- Louisiana: *Robinson, et al., v. Ardoin* (Docket Number: 3:22-cv-0211-SDD-SDJ) (Middle District of Louisiana)

- Georgia: *Alpha Phi Alpha Fraternity, Inc., et al., v. Raffensperger, et al*. (Docket Number: 1:21-CV-05337-SCJ) (Northern District of Georgia)

- Arkansas: *Arkansas State Conference NAACP, et al., v. Arkansas Board of Apportionment, et al.* (Case Number: 4:21-cv-01239-LPR) (Eastern District of Arkansas, Eighth Circuit Court of Appeals)

- Ohio: *League of Women Voters of Ohio, et al., v. Ohio Redistricting Commission, et al.* (Case Number: 2021-1193) (Supreme Court of Ohio); *League of Women Voters of Ohio, et al., v. Governor DeWine* (Case Number: 2021-1449) (Supreme Court of Ohio)

Ohio Philip Randolph Institute v. Larry Householder (2019) – partisan gerrymander challenge to Ohio congressional districts; testifying expert for private plaintiffs on minority voting patterns

State of New York v. U.S. Department of Commerce (2018-2019) – challenge to inclusion of citizenship question on 2020 census form; testifying expert on behalf of private plaintiffs

U.S. v. City of Eastpointe (settled 2019) – minority vote dilution challenge to City of Eastpointe, Michigan, at-large city council election system; testifying expert on behalf of U.S. Department of Justice

Alabama NAACP v. State of Alabama (decided 2020) – minority vote dilution challenge to Alabama statewide judicial election system; testifying expert on behalf of private plaintiffs

Lopez v. Abbott (2017-2018) – minority vote dilution challenge to Texas statewide judicial election system; testifying expert on behalf of private plaintiffs

Personhuballuah v. Alcorn (2015-2017) – racial gerrymandering challenge to Virginia congressional districts; expert for the Attorney General and Governor of the State of Virginia

Perry v. Perez (2014) – Section 2 case challenging Texas congressional and state house districts; testifying expert for the U.S. Department of Justice

Jeffers v. Beebe (2012) – Arkansas state house districts; testifying expert for the Plaintiffs

State of Texas v. U.S. (2011-2012) – Section 5 case challenging Texas congressional and state house districts; testifying expert for the U.S. Department of Justice