

Grant, Annie Lois, et al.v. Raffensperger, Brad, E

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1 UNITED STATES DISTRICT COURT
2 FOR THE NORTHERN DISTRICT OF GEORGIA
3 ATLANTA DIVISION

4 ANNIE LOIS GRANT, et al.,

5 Plaintiffs,

6 v.

CIVIL ACTION FILE
NO. 1:22-CV-00122-SCJ

7 BRAD RAFFENSPERGER, in his
8 official capacity as the
9 Georgia Secretary of
10 State, et al.,

11 Defendants.

12 COAKLEY PENDERGRASS, et al.,

13 Plaintiffs,

14 v.

CIVIL ACTION FILE
NO. 1:21-CV-05339-SCJ

15 BRAD RAFFENSPERGER, et al.,
16 Defendants.

17 VIDEOTAPED ZOOM DEPOSITION OF
18 MAXWELL PALMER, Ph.D.

19 February 22, 2023

20 9:28 A.M.

21 Lee Ann Barnes, CCR-1852B, RPR, CRR, CRC
22
23
24
25

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(All appearances via Zoom)

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Plaintiffs

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(Original exhibits are attached to the original transcript.)

1 Deposition of MAXWELL PALMER, PH.D.

February 22, 2023

2
3 (Reporter disclosure made pursuant to
4 Article 8.B of the Rules and Regulations of the
5 Board of Court Reporting of the Judicial
6 Council of Georgia.)

7 VIDEOGRAPHER: All right. Good morning.
8 The time on the monitor is 9:28 a.m. Eastern
9 Standard Time. Today's date is February 22,
10 2023. This is the video-recorded deposition of
11 Dr. Maxwell Palmer in the matter of Annie Lois
12 Grant, et al. versus Brad Raffensperger,
13 et al., filed in the United States District
14 Court for the Northern District of Atlanta
15 [sic] Division. Case number is
16 121-CV05339-SCJ.

17 This deposition is being held remotely via
18 Zoom. Counsel, please introduce yourselves
19 after which our court reporter, Ms. Barnes,
20 will swear in the doctor.

21 MR. HAWLEY: My name is Jonathan Hawley.
22 I'm from Elias Law Group, and I represent the
23 Pendergrass and Grant Plaintiffs.

24 MR. JACOUTOT: Any other attorneys present
25 for the plaintiffs?

1 MR. HAWLEY: No, not the Pendergrass and
2 Grant Plaintiffs.

3 MR. JACOUTOT: Oh, okay. I'd like to get
4 everybody who's in the -- even in the Zoom room
5 on the record, if possible. I think we just
6 have one other individual, so if they wouldn't
7 mind putting themselves on the record. If not,
8 sometimes I know people walk away from the
9 camera. So if not, no big deal, but.

10 MR. CHEUNG: This is Ming Cheung. I'm
11 from the ACLU, and I represent the
12 Alpha Phi Alpha Plaintiffs.

13 MR. JACOUTOT: Okay. Great. Thank you.

14 And my name is Bryan Jacoutot. I
15 represent the State defendants and the
16 Secretary of State, Brad Raffensperger, and I'm
17 with the law firm Taylor English Duma.

18 So this will be the deposition -- oh, I'm
19 sorry. Does the court reporter want to swear
20 the witness at this time?

21 COURT REPORTER: Sure. Thank you.

22 MR. JACOUTOT: Sure.

23 (The witness was sworn.)

24 MR. JACOUTOT: Okay. This will be the
25 deposition of Dr. Maxwell Palmer taken by

1 defendant Secretary of State Brad Raffensperger
2 for the purposes of discovery and all purposes
3 allowed under the Federal Rules of Civil
4 Procedure and the Federal Rules of Evidence.

5 All objections except those going to form
6 of the question and responsiveness of the
7 answer are reserved until trial or first use of
8 the deposition.

9 Mr. Hawley, are those stipulations
10 agreeable to you?

11 MR. HAWLEY: Yes.

12 MR. JACOUTOT: And would you like to have
13 the deponent read and sign the deposition?

14 MR. HAWLEY: Please.

15 MR. JACOUTOT: Okay. Great.

16 MAXWELL PALMER, Ph.D., having been first duly
17 sworn, was examined and testified as follows:

18 EXAMINATION

19 BY-MR. JACOUTOT:

20 Q. So as I stated, my name is Brian Jacoutot,
21 and I represent the defendants, Secretary of State
22 Brad Raffensperger.

23 Mr. -- or Dr. Palmer, the purpose of this
24 is not to confuse you, so if I ask you a question
25 that you don't understand, will you agree that you

1 will let me know and I'll try to rephrase it?

2 A. Okay.

3 Q. And for the court reporter, please speak
4 clearly and loudly enough so that she can hear, and
5 please be sure to say audible "yes" or "no" instead
6 of "uh-uh" or "uh-huh." That's especially true when
7 we're doing it like this over Zoom. It's kind of
8 difficult for her to get everything down. So please
9 try and give those audible yes-or-no answers when I
10 ask you a question.

11 And if you need a break at any time, just
12 let me know. I only would ask that if I have a
13 question pending to you, if you would first answer
14 that question and then we can go off and take the
15 break.

16 Is that agreeable?

17 A. Yes.

18 Q. Okay. Can you please state your full name
19 for the record?

20 A. Maxwell Benjamin Palmer.

21 Q. And what is your current address?

22 A. Where I'm currently located now --

23 Q. Sure.

24 A. -- or home address?

25 I'm currently at my office at Boston

1 University at [REDACTED] in Boston,
2 Massachusetts.

3 Q. Okay. And are you on any medication right
4 now that might keep you from fully and truthfully
5 participating in this deposition?

6 A. No.

7 Q. And do you have any medical condition that
8 might keep you from fully and truth- -- truthfully
9 participating today?

10 A. No.

11 Q. Have you ever been arrested?

12 A. No.

13 Q. Okay. Have -- as -- have you been
14 involved in prior election-related lawsuits as a
15 party as distinct from being an expert in prior
16 election-related lawsuits?

17 A. No.

18 Q. Okay. Has anyone in your family?

19 A. No.

20 Q. Okay. And did you discuss this case with
21 anyone apart from your attorneys?

22 A. I talked about the preliminary injunction
23 hearing but not any of the more recent matters.

24 Q. Okay. How about this deposition? Did you
25 discuss this deposition with anyone apart from your

1 attorneys?

2 A. Only in terms of scheduling today.

3 Q. Okay. Did you review anything to prepare
4 for your deposition today?

5 A. Yes. I reviewed all of my reports for
6 this case, Dr. Alford's reports, as well as the
7 transcript from the -- or parts of the transcript
8 from the preliminary injunction hearing.

9 Q. Okay. Were the parts from the -- the PI
10 hearing the parts that you participated in,
11 essentially?

12 A. Yes.

13 Q. Okay. Before we get into your report and
14 CV, I do want to introduce into the record just
15 the -- the notice of deposition that you should have
16 received. I just want you to confirm that you did,
17 in fact, receive it and that's what caused you to
18 appear -- to appear today.

19 So have you used Exhibit Share before?

20 A. I don't believe so.

21 Q. Okay. Well, this will be a good test one,
22 then, because we're not really going to do anything
23 with it. But I will on my end -- I basically have a
24 private folder on my end that I'm going to -- as I
25 introduce the exhibits, it should show up in your

1 public folder. And it's supposed to, sort of, mimic
2 or mirror a -- a real deposition with me handing
3 them to you. So let me go ahead and do that now.
4 It's a little slower and sometimes cumbersome, but
5 we should be able to get it going soon.

6 And I'm going to show you what's been
7 marked Exhibit 1 to this deposition.

8 (Defendants' Exhibit 1 was marked for
9 identification.)

10 BY MR. JACOUTOT:

11 Q. And it should be in your public folder,
12 and sometimes you have to just refresh and it will
13 appear after that and other times it just shows up.

14 A. I see it now.

15 Q. Okay. Can you open that up for me?

16 A. Yes.

17 Q. At the top -- well, not at the top. At
18 the bottom of the case style, sort of at the bottom
19 of the page, it should say "Defendants' Notice to
20 Take the Expert Deposition of Maxwell Palmer, Ph.D."

21 A. Yes.

22 Q. And can you confirm that you received this
23 and that's what caused you to appear here today?

24 A. I did.

25 Q. Okay. Great. I think that's all we need

1 with that one.

2 So the next -- the next thing I want to
3 introduce is -- well, you have -- you have two
4 reports in this -- in these actions; right?

5 You have one for the Grant case and one
6 for the Pendergrass case; right?

7 A. Yes.

8 Q. Okay. Can you do me a favor and -- one
9 second. Okay.

10 Can you do me a favor? And I'm going to
11 introduce the -- your expert report in Grant first,
12 and we'll kind of -- we'll kind of use that one as
13 our go-to report. So I'm going to send that over to
14 you now. Just give me a moment.

15 (Defendants' Exhibit 2 was marked for
16 identification.)

17 BY MR. JACOUTOT:

18 Q. So this will be the expert report of
19 Dr. Maxwell Palmer in Grant versus Raffensperger
20 from December 12, 2022, and that will be marked as
21 Exhibit 2. And it should be on your screen now.

22 A. It's taking me a minute to load, but I see
23 it showing up in the folder.

24 Q. Okay.

25 A. I'm not yet seeing the document loading.

1 I just -- I see the option to click on it, and I'm
2 getting a black screen with a waiting circle.

3 Q. Okay. We can give it a minute before
4 we --

5 A. Oh, and now that's -- that's now working.
6 I'm sorry. It's working now.

7 Q. Okay. Yeah. No problem. It's -- like I
8 said, it can be a little cumbersome but it usually
9 gets the job done.

10 So can you confirm that this is the report
11 you filed in Grant versus Raffensperger on
12 December 2022?

13 A. It is.

14 Q. And can you also confirm for me that the
15 CV -- you attached the CV at the end of this report
16 and the end of the report from Pendergrass.

17 Are they the same CV?

18 A. I believe so. It should be.

19 Q. Okay. To the best of your knowledge it
20 is?

21 A. Yes.

22 Q. Okay. So, now, I know you testified
23 before because there's a number of cases listed in
24 your CV that say -- state exactly that but also
25 because my colleague Bryan -- Bryan Tyson took your

1 deposition in the Dwight case.

2 I think that was back in 2019; is that
3 right?

4 A. I believe so.

5 Q. Okay. So I would like to just kind of
6 scroll down to your CV in this Grant report which
7 begins -- it looks like page 26. Just let me know
8 when you've gotten there.

9 A. I'm there.

10 Q. Or it's 27 of the file.

11 Okay. And so we'll go into -- since it's
12 all listed here, we'll go into a little bit of your
13 educational background, your work background, and
14 then we can get into some of the cases that
15 you've -- that you've testified in.

16 So I see you have your Ph.D. in political
17 science from Harvard University in 20- -- and you
18 received that in 2014?

19 A. Yes.

20 Q. Okay. And you also got your master's in
21 political science from Harvard University in 2012?

22 A. Yes.

23 Q. Is there any sort of concentration within
24 political science for your master's or was it just,
25 sort of, that broad umbrella poly sci master's?

1 A. In the Ph.D. program at Harvard, the
2 master's degree in political science is just part of
3 the Ph.D. program. It's not a separate degree
4 program that you enroll in first.

5 Q. Okay. Okay. And you graduated from
6 undergrad in -- how do you pronounce that? Is that
7 Bowdoin?

8 A. Bowdoin.

9 Q. Bowdoin?

10 A. Yes. Bowdoin.

11 Q. Sorry. Bowdoin College from Maine 2008
12 undergrad?

13 A. Yes.

14 Q. Was there any gap, sort of, when you were
15 pursuing this educational path?

16 Like, did you graduate one program and
17 then go out to the workforce and come back or was it
18 straight through?

19 A. No. I worked as an economic consultant
20 in -- mostly in the energy sector for two years
21 between college and graduate school.

22 Q. And were you -- were you completely out
23 of -- out of school at that time or were you doing
24 any part-time program?

25 A. No. I was just employed at that time.

1 Q. Okay. And what did you do at that -- at
2 that -- in that position?

3 A. I was an analyst and I worked on questions
4 about energy regulation, particularly around
5 electric utilities and the rates that they could
6 charge, as well as questions about power plants and
7 forecasting energy prices.

8 Q. Okay. And, just for the record, I
9 apologize, some of this is repetitive from your 2019
10 deposition in Dwight. I know you've definitely
11 answered some of these questions before, but I need
12 to make sure that the answers remain the same and
13 that we have it on the record for this case. So it
14 will be a little repetitive, but given how much
15 you've testified, I'm sure you're used to it by now.

16 A. Yes.

17 Q. Okay. So apart from your position at
18 Charles River Associates and the academic employment
19 that you list in your CV, was there any other
20 employment that you engaged in after -- after
21 receiving your Ph.D.?

22 A. After receiving my Ph.D., I was directly
23 hired by Boston University.

24 Q. Okay. And you've been there full time,
25 essentially, ever since?

1 A. Yes.

2 Q. Okay. So let's go look at some of the
3 publications in the space that you have listed here.

4 As I was looking through it, I -- I
5 noticed there's a pretty fair amount of articles
6 about housing and you have a book about housing, as
7 well.

8 How's that housing-related work or does
9 that housing-related work relate to your work here
10 in elections -- in the elections space?

11 A. It's mostly a separate area of inquiry, a
12 separate focus on local and urban politics and
13 housing development. There's some intersection in
14 thinking about participation in the political
15 process. A lot of my work on housing thinks about
16 who participates in planning and zoning board
17 meetings or other organizing around the development
18 of housing which includes local elections in some
19 part. But that's actually the only overlap.

20 Q. Okay. And for -- for purposes of your
21 expert reports in -- in Grant and Pendergrass
22 actions, do you -- do you -- did you look into the
23 actual rate of participation in these elections that
24 you analyzed or was it -- well, I'll just leave it
25 at that question.

1 Did you look into the election
2 participation?

3 A. In these particular cases, no, or at least
4 not directly. The data I'm using does have data
5 about the number of voters participating in the
6 election.

7 Q. Okay. Thank you.

8 How about statist- -- in terms of
9 statistical analysis, do you use in the housing
10 article -- or, excuse me, in your work on housing,
11 do you use ecological inference ever in your work
12 there as a part -- form of statistical analysis or
13 do you use other forms of statistical analysis?

14 A. I use other forms of statistical analysis
15 but not ecological.

16 Q. Okay. By the way, is it ecological or --
17 or ecological (pronounced differently) or is it kind
18 of however you prefer it?

19 A. I always say ecological but I've heard it
20 both ways.

21 Q. Okay. Just curious. Because I don't want
22 to be saying it completely wrong all the time.

23 Okay. Let's -- let's turn to the
24 subsection here on your CV at the bottom of page 1
25 entitled "Refereed Articles."

1 Do you see that?

2 A. Yes.

3 Q. What's a -- can you explain a refereed
4 article?

5 A. A refereed article means a peer-review
6 article, one that is submitted to a journal, and as
7 part of the publication process, the journal editors
8 send it out to independent peer reviewers for their
9 opinions on it before it proceeds in the publication
10 process.

11 Q. Okay. And so that would be a, I guess, a
12 more stringent process for publication than the --
13 the -- the works that you have submitted under the
14 other two categories in your CV, "Other
15 Publications" and "Policy Reports"; is that right?

16 A. That's right. "Other Publication" refers
17 to work that is not -- does not go through the same
18 peer review process but is academic work. For
19 example, law journals do not have the same peer
20 review process as an academic journal. And then
21 policy reports tend to be work that's released
22 without any peer review.

23 Q. Okay. So this -- this section here of
24 refereed articles, is this a comprehensive list of
25 all of your peer-reviewed publications in your time

1 as an academic?

2 A. Yes.

3 Q. Okay. Have you ever submitted an article
4 for peer review and have had it rejected?

5 A. Yes.

6 Q. How many, would you say?

7 A. I wish I could count. Many. Almost every
8 article gets rejected at least once.

9 Q. Okay. So -- so when you submit an article
10 for peer review and it gets rejected, it can be --
11 is it often resubmitted to the --

12 A. So --

13 Q. -- to the --

14 (Simultaneous speakers - unclear.)

15 A. So articles -- if it's rejected, you can
16 then submit it to another journal. I've submitted
17 articles to one journal, had it be rejected and then
18 submitted it to another journal. It could also be
19 given what's called a revise and resubmit which is
20 when it's asked -- when you're required to make
21 revisions to the article and changes and then you
22 resubmit it for another round of peer review in the
23 publication process.

24 Q. Okay. And why might an article that you
25 submit get rejected?

1 A. Many reasons. Sometimes it's whether it's
2 a good fit at the journal. Sometimes it's sort of
3 the reviewers think it's interesting. Sometimes the
4 reviewers find mythological issues that they want to
5 be changed. Sometimes it might just be random.

6 Q. Okay. So pretty common, though, generally
7 speaking, to have a -- when -- when you're
8 submitting articles for peer review, that they're --
9 they're either rejected outright or rejected for
10 resubmission?

11 A. Almost any article -- almost every article
12 that I have published was first given a revise and
13 resubmit; that is, the journal asked for changes.
14 Sometimes significant; sometimes relatively minor.
15 And then, yes, it's very, very common to have
16 articles rejected. The top journals in political
17 science have extremely low acceptance rates.

18 Q. Okay. So the first two of your refereed
19 articles, it looks like they deal with housing.

20 Is that fair to say?

21 A. Yes.

22 Q. And then the next one, I was -- how -- I
23 guess what is what would be the subject matter of
24 the "Still Muted: The Limited Partic-" -- excuse
25 me. "Still Muted: The Limited Participatory

1 Democracy of Zoom Public Meetings"?

2 A. That is focused on housing as well.

3 Q. Oh, okay. Is it fair to say that in this
4 list of CVs, the articles that you did with the,
5 kind of, initial author whose name is -- last line
6 is, it looks, like Einstein, are those all housing
7 related?

8 A. Most of them are but not all of them.

9 Q. Okay. Yeah. Okay. So I see here we've
10 got -- we'll move down your CV. There's another one
11 with Katherine Levine Einstein. It's entitled "Can
12 Mayors Lead on Climate Change? Evidence from Six
13 Years of Surveys."

14 Do you see that?

15 A. Yes.

16 Q. And so that -- is that also, sort of,
17 housing related or is that strictly climate change
18 related, would you say?

19 A. It's about local politics and the views of
20 big city mayors in the United States on climate
21 change.

22 Q. Okay. Let me pull my hard copy.

23 So the first election-related one that I
24 can see in these works that you've cited appears to
25 be -- and when I say "first" I mean -- I think you

1 have it -- it looks like you have it in
2 chronological order; is that right?

3 A. Yes.

4 Q. Okay. So the first one under the refereed
5 articles that I see that's election-related, at
6 least sort of obviously election-related, is the one
7 from 2017 that's entitled "This is how to get rid of
8 gerrymandered districts."

9 Do you see that? Oh, is that not refereed
10 or am I on other works? It might be in "Other
11 Works." I am.

12 A. That's in other work or...

13 Q. Yep. That is my fault. Sorry about that.
14 Oh, oh, it's this one, I think.

15 It is "Institutional Control of
16 Redistricting and the Geography of Representation,"
17 also from 2017.

18 A. If you're starting from the earliest one,
19 the first one would be at the very bottom, the one
20 with John Gerring on Demography and Democracy.

21 Q. Oh, that's the first one?

22 A. That's the earliest one, yes.

23 Q. Okay. And it looks like the latest one,
24 by my count, and I could be wrong because I'm going
25 mostly from the titles, but it looks like the latest

1 one is the 2017 one with Barry Edwards.

2 A. No. There's a few more recent ones.
3 There is the 2021 article with Justin
4 de Benedictis-Kessner, "Driving Turnout: The Effect
5 of Car Ownership on Electoral Participation."

6 And then the 2022 article of David Glick
7 on opportunity zones, is not about elections but
8 thinks about electoral factors in distributed
9 politics.

10 Q. Okay. Were you -- did you use an
11 ecological inference statistical analysis in any --
12 in any of those?

13 A. I used statistical analysis in all of
14 them. I did not use ecological inference in these
15 articles.

16 Q. Did you view or did you consider the issue
17 of racial polarization in any of those?

18 A. I didn't consider racial polarization. In
19 driving turnout, we do look at differences in
20 participation by race.

21 Q. Okay. But not differences in electoral
22 outcomes by race?

23 A. No.

24 Q. Okay. Any other elections-related
25 publications that you can identify from your CV

1 under "Refereed Articles"?

2 A. There's an article at the bottom of page 2
3 of my CV, "Do Mayors Run for Higher Office,"
4 thinking about when city mayors run for other
5 offices. And then under "Other Publications," I
6 have a law review article with Stephen Ansolabehere
7 on compactness in redistricting.

8 Q. But for refereed articles, the only other
9 one you can think of is the "Do Mayors Run for
10 Higher Office" article; is that right?

11 A. Yes. You already mentioned the one with
12 Barry Edwards on the institutional control of
13 redistricting.

14 Q. Yes.

15 And what did the article on mayors running
16 for higher office entail? I think you alluded to
17 it, but can you repeat that for me?

18 A. In a survey of big city mayors, we ask
19 them questions about what other offices they'd be
20 interested in running for and why. And we looked at
21 a phenomenon called progressive ambition where
22 politicians in one office might try to run for a
23 higher one with more power or responsibility and
24 looked at that pattern or what the patterns and
25 relationships looked like there among big city

1 majors.

2 Q. Okay. And for -- so when you say
3 "progressive ambition," you're -- you're speaking
4 more to the action, sort of, of growing ambition,
5 not -- not the political -- political ideology of
6 progressive, being progressive?

7 A. That's correct. Progressive ambition is a
8 term in the political science literature about
9 higher office. It has nothing to do with ideology.

10 Q. Okay. I just want to make sure.

11 Can you tell me, if we go down now to
12 "Other Publications," you have -- you have --
13 your -- your first one's a housing-related one, and
14 the next one is entitled "A Two Hundred-Year
15 Statistical History of the Gerrymander."

16 Can you, kind of, just describe for me
17 what that article was about?

18 A. In that article, we looked at the shapes
19 of every Congressional district going back to 1789
20 and measured several compactness scores for every
21 district to look at how the compactness of districts
22 has changed over time.

23 Q. Okay. And over time are districts getting
24 more compact or less compact, based on your
25 analysis?

1 A. Generally, less compact.

2 Q. And how do you -- do you -- do you define
3 compactness in this article?

4 A. So, forgive me, it's been a while since
5 I've read it.

6 We look at several different compactness
7 measures which are commonly used. We're not
8 inventing any new ones, but then we talk about this
9 problem that different compactness measures are
10 measured on different scale. Some might be zero to
11 one some might be zero to any positive number. It's
12 hard to interpret them. And so we standardize all
13 the scales relative to the compactness of the
14 original gerrymander, that sort of famous cartoon
15 drawing of a district that has, sort of, been
16 identified with the term "gerrymandering."

17 And we use that because people know what
18 that shape looks like. They sort of all agree it's
19 non-compact. And so when we do that, you can
20 interpret the numbers in our article as a score
21 greater than one I believe is less compact and then
22 a score less than one will be more compact than the
23 original gerrymandering. So it puts everything on
24 the same scale and makes it interpretable.

25 Q. Okay. So it combines or, I guess -- well,

1 let me -- I'll -- are you dealing with, like -- when
2 you say there's multiple scales, are you talking
3 with Polsby? Popper and things like that, Reock?

4 A. That's right.

5 Q. Okay. And the next article was written
6 with the same coauthor and another author named
7 Benjamin Schneer, and this was also -- this was
8 2016, same year.

9 It's entitled "'What has Congress done?'
10 In Governing in a Polarized Age: Elections, Parties,
11 and Political Representation in America."

12 Do you see that one?

13 A. Yes.

14 Q. What -- what's that article about?

15 A. That's about Congressional productivity,
16 and we look at how often Congress passes what we
17 would call major legislation, being important bills,
18 and the relationship the number of important bills
19 passed and divided government when either different
20 parties -- different chambers in Congress are
21 controlled by different parties or when the
22 President is of a different party than both chambers
23 of Congress.

24 Q. Okay. And so when it's -- when it
25 references governing in a polarized age, are you

1 referring there to partisan polarization?

2 A. I'm -- that's the title of the volume in
3 which we published a chapter. So I'm not referring
4 to anything there. The editors chose that title.

5 Q. Okay. Okay. And I see.

6 And the editors are listed there as well.
7 It looks like Alan Gerber --

8 A. Yeah.

9 Q. -- Alan Gerber and Eric Schickler? Okay.

10 A. Yes.

11 Q. Do either of those articles with your
12 coworker -- can you pronounce his last name for me?
13 Ansolabehere?

14 A. Ansolabehere.

15 Q. Ansolabehere.

16 Can you -- in either of those two articles
17 listed of the publications with him, did -- did you
18 perform any statistical analysis at all?

19 A. Yes.

20 Q. Any ecological inference?

21 A. No.

22 Q. Okay. What kind of statistical analysis
23 did you do for the gerrymandering article?

24 A. That was all geographic analysis, and so
25 we had to measure different properties of each

1 shape, calculate compactness statistics, and then
2 analyze them.

3 Q. Okay. We can skip "Policy Reports" and go
4 to "Current Projects" on page 5.

5 Let's see. It looks like under the first
6 one there, it looks like you have a forthcoming
7 publication dealing with partisan gerrymandering.

8 Is that right?

9 A. That's not forthcoming. We have a paper
10 that we've written that's currently in the review
11 process.

12 Q. Okay. How's -- how's that different from
13 forthcoming? Just out of curiosity.

14 A. Forthcoming means it's been accepted for
15 publication somewhere; that is, it will be published
16 but it has not yet been. And that -- the
17 publication process, even once the article is
18 accepted, can be slow. It can take over a year for
19 an article to have been accepted by a journal but
20 before it appears in print, and in that period we
21 call that forthcoming.

22 Q. Gotcha. Okay.

23 So for this one, can you kind of just give
24 me a glimpse about what it's about?

25 A. This paper is about partisan

1 gerrymandering, and it's about thinking about ways
2 to reduce partisan gerrymandering using partisan
3 politics. So the paper thinks about can we come up
4 with an institutional arrangement or a set of rules
5 where if a legislature were to use these rules, they
6 would produce a relatively nonpartisan or less
7 partisan map without requiring independent
8 commissions, neutral third parties, or other people
9 to adjudicate the process.

10 Q. Very interesting topic.

11 And how would you determine in an article
12 like this whether gerrymandering is partisan in
13 nature or racial in nature?

14 A. So we're not concerned with racial
15 gerrymandering in this paper. We're trying to
16 develop a theoretical concept and then evaluate if
17 it would work.

18 Q. Did you find that it -- it -- that it
19 would work, in your experience?

20 A. Yes. We used a variety of simulation
21 models to simulate how the process could work in
22 every state and found that almost everywhere, it
23 would substantially reduce partisan gerrymandering.

24 Q. Did your -- your report found that in --
25 in the Georgia elections that you analyzed, there

1 was racial polarization; right?

2 A. I found that there was racially polarized
3 voting in the areas of Georgia that I analyzed.

4 Q. Okay. Do you think that your solution
5 that you describe in this article for partisan
6 gerrymandering would potential -- if it -- if it
7 eliminates partisan gerrymandering in a state like
8 Georgia where -- where the racial polarization lines
9 up with party politics, do you think that
10 alleviating partisan gerrymandering also would
11 alleviate the potential for racial gerrymandering?

12 A. I'm not sure. We haven't investigated
13 that question.

14 Q. Is it something that you would potentially
15 consider investigating?

16 A. I don't know.

17 Q. Okay. Do you see part- -- in this
18 article, do you see partisan gerrymandering a lot in
19 the -- in the elections and maps that you analyzed?

20 A. So we're not directly focused on measuring
21 partisan gerrymandering in the current maps. Other
22 scholars have looked at that question.

23 What we look at and see is can we draw a
24 partisan gerrymander for each party in each state.
25 And so we run a simulation model where we take the

1 precincts and election results for a state and run
2 simulations to draw the biggest partisan gerrymander
3 we can for each party and then we apply our solution
4 to the simulations and see what would the results of
5 that process be instead.

6 Q. How -- how do you determine whether the
7 solution that you apply was effective in reducing
8 partisan gerrymandering?

9 A. So that's a complicated question and we
10 spend a lot of time in the article on it. The
11 simplest approach, though we take more complicated
12 ones in the appendix, is to just look at the number
13 of wins that each party can achieve.

14 And so we would first take a particular
15 state and simulate it and try to say what is the
16 maximum number of Democratic seats; that is, seats
17 where the Democrats get at least 50 percent of the
18 vote, but you can set higher thresholds. What's the
19 maximum number of seats the Democrats could win if
20 they got to unilaterally draw the map and all they
21 care about is the party.

22 And then we do the same for the
23 Republican. And we could say, well, here's a state
24 that's very competitive but either party could draw
25 a pretty large majority for themselves if left

1 unchecked.

2 And then we run our algorithm. Our
3 algorithm actually is run twice because it has two
4 stages, one step for each party to play a role. We
5 run it first and say Democrats go first and then
6 Republicans go second and vice versa. Then we look
7 at those results. And what we find is that unlike
8 unilateral gerrymandering where the outcomes can be
9 very different based on which party is in control,
10 under our defined procedure, the outcomes are
11 relatively similar to each other.

12 So you might imagine a state where there
13 might be a five-or-six seat swing from one party to
14 the other based on who draws the map. Under our
15 process, there might only be one such seat or none.

16 Q. Okay. Does it -- never mind.

17 Okay. So let me turn to your expert
18 testimony you have listed on page 8 of your CV.

19 And let me know when you're there.

20 A. I'm there.

21 Q. It looks like you have nine cases listed
22 here; is that right?

23 A. Yes.

24 Q. And then it looks like two other
25 committees or commissions that you're on.

1 A. I was in the Racially Polarized Voting
2 Consultant for the Virginia Redistricting
3 Commission, and then I just gave a little bit of
4 testimony on housing with the Mass- -- Massachusetts
5 legislature.

6 Q. Okay. And in all of these nine cases, it
7 looks like you list that, including the PI actions
8 in this case and -- and Grant and Pendergrass, you
9 represent that you are a testifying expert in all of
10 those?

11 A. Yes. Either in trial or in -- or in a
12 hearing or in deposition. Some didn't go to a
13 hearing.

14 Q. Okay. Yeah, but it did at least go to, I
15 guess, depositions?

16 A. Yes.

17 Q. Okay. Did you ever prepare an expert
18 report for an election case and not testify?

19 A. For an election case? There was a
20 successor case to the Bruni et al. v. Hughes case
21 where I -- that I think was a follow-on case to that
22 where I wrote a revised report and then I don't
23 believe that went further.

24 Q. Okay. Is that all you can think of,
25 sitting here today?

1 A. On -- on elections, yes.

2 Q. Okay. In all of these cases that you have
3 listed here, were you testifying as an expert for
4 Plaintiffs or -- well, let me ask you -- let me
5 rephrase that.

6 A. Can I -- can I just revise --

7 Q. Yeah.

8 A. Can I clarify something from your previous
9 question?

10 Q. Yeah, please.

11 A. I wrote -- I'm not sure if you want to
12 count this as elections or not, but I wrote a report
13 analyzing voter files for the purpose of a jury
14 challenge for a case in the Western District of
15 Pennsylvania. I did not have to testify in
16 deposition or in a hearing for that, but I exhibited
17 reports.

18 Q. Okay. Yeah. I appreciate that. That --
19 that's helpful.

20 So returning to the previous -- or the
21 question right before that digression, did -- did
22 you ever prepare an expert -- no. Sorry. That's
23 the one we just asked. Next one.

24 Are there any other cases you can think
25 of -- nope. That's the -- I'm getting my outline

1 all mixed up. Strike that.

2 Is it fair to say that you have never
3 testified for a jurisdiction that was defending a
4 Section 2 case?

5 A. That's correct.

6 Q. Okay. Okay. I'm about to get into
7 another -- I think we -- we can put the CV aside for
8 now.

9 MR. JACOUTOT: Do you guys mind taking a
10 five -- a quick five-minute break?

11 THE WITNESS: Sure.

12 MR. JACOUTOT: Or, Dr. Palmer, do you
13 mind?

14 THE WITNESS: That's fine.

15 VIDEOGRAPHER: All right. The time on the
16 monitor is 10:11 a.m. and we're going off the
17 record.

18 (Off the record.)

19 VIDEOGRAPHER: The time on the record is
20 10:17 a.m. and we are back on the record.
21 Sorry about that.

22 THE WITNESS: Before we move on, Bryan, I
23 remembered during the break there's one other
24 case where I filed a report where I haven't yet
25 had a deposition or a hearing. There is --

1 BY MR. JACOUTOT:

2 Q. Okay.

3 A. -- an Arkansas state case that was filed
4 this winter, I believe in January, where I submitted
5 an expert report.

6 Q. Okay. Do you -- do you happen to remember
7 the style of that case?

8 A. I don't. I have to go back and look.

9 Q. Okay. But it wasn't federal; it was
10 state, you said?

11 A. It was state court.

12 Q. Okay. Thank you.

13 You read my mind, actually. I was going
14 to ask if you had any testimony that you wanted to
15 change since the break, so perfect.

16 Okay. Let's move into your involvement
17 with this -- with this case. And I know we've had
18 the PI hearing on relatively rapid fast track
19 earlier last year.

20 But how did you first hear about the case,
21 including that time period?

22 A. I was first contacted by Abha Khanna at
23 Elias Law Group sometime in 2021.

24 Q. Okay. And have you worked Ms. Khanna
25 before this case?

1 A. Yes.

2 Q. And in -- in what cases did work with
3 Ms. Khanna -- or let me rephrase that.

4 In what cases did you work with Ms. Khanna
5 or the Elias Law Group.

6 A. Including Ms. Khanna and her colleagues at
7 their prior firm, I worked with her in Bethune-Hill
8 v. Virginia; Chestnut v. Merrill; Dwight v.
9 Raffensperger; Bruni, et al. v. Hughes; Caster v.
10 Merrill; Pendergrass; and then Grant here; and then
11 Galmon, et al. v. Ardoin in Louisiana.

12 Q. Okay. So quite frequently?

13 A. Yes.

14 Q. Okay. And what were you told you were
15 being hired for in this action?

16 A. I was told that there would be litigation
17 around the Congressional and State legislative maps
18 and I would be hired to perform a racially polarized
19 voting analysis.

20 COURT REPORTER: Racially -- I'm sorry --
21 polarized?

22 THE WITNESS: Racially polarized voting.

23 BY MR. JACOUTOT:

24 Q. Racially polarized analysis, you said?

25 A. Yes.

1 Q. Okay. Do you happen to recall when you
2 were first contacted for this case?

3 A. Sometime in 2021.

4 Q. 2021.

5 Would it have been at the end of the year
6 2021?

7 A. I think in the fall, but I'm not exactly
8 sure.

9 Q. In the fall. Okay.

10 Would it have been, let's say, before
11 November 2021?

12 A. Probably but I'm not exactly sure.

13 Q. Okay. Is there a way that you could find
14 out a precise date? Do you have any emails or
15 documentation to that effect?

16 A. I don't know if I have anything with the
17 exact date when I first learned about the case. I'm
18 sure I have a time sheet of when I started working
19 on it.

20 Q. Okay. And were you told what, if
21 anything, that the plaintiffs wanted to prove of
22 their position in this action as it relates to your
23 work?

24 A. I'm -- no. They asked me to perform an
25 analysis and come to conclusions.

1 Q. So they -- and you said that they asked
2 you to perform a racially polarized voting analysis?

3 A. Yes.

4 Q. Did they ask you not to perform any type
5 of an analysis?

6 MR. HAWLEY: Objection to the extent that
7 this covers privileged communications between
8 counsel and the expert.

9 To the extent that it doesn't, Dr. Palmer,
10 you can go ahead and answer.

11 THE WITNESS: Can you repeat the question,
12 please?

13 BY MR. JACOUTOT:

14 Q. Yeah.

15 You -- you mentioned that they asked you
16 to perform a racially pol- -- polarized voting
17 analysis.

18 And my question, subject to Mr. Hawley's
19 objection, is did they ask you not to perform any
20 type of analysis?

21 In other words, was there -- was there
22 anything that they asked you not to consider?

23 MR. HAWLEY: Same objection.

24 THE WITNESS: I don't believe so.

25

1 BY MR. JACOUTOT:

2 Q. Okay. And you indicate in your report, I
3 think, that you're being compensated at \$350 per
4 hour for your work here?

5 A. Yes.

6 Q. And have you been paid in this case yet?

7 A. Yes.

8 Q. How much would you say you've billed so
9 far --

10 A. I don't know.

11 Q. -- in terms of hours?

12 A. I'd have to look it up.

13 Q. More than 100 or less than 100?

14 A. Across the two cases, probably somewhere
15 around there, but I'd have to look.

16 (David Rollins-Boyd entered the Zoom
17 deposition.)

18 Q. And when you say the -- "the two cases,"
19 are you referring to the PI hearing and -- preparing
20 for and testifying in the PI hearing as one case and
21 what we're doing now as another case or are you
22 referring to Pendergrass and Grant as the two cases?

23 A. I meant Pendergrass and Grant, but it's
24 essentially the same.

25 Q. Okay. To what entity do you send your

1 bills for your work?

2 A. I send them to Elias Law Group.

3 Q. Okay. What is your, sort of, ordinary
4 hourly rate for a government entity that hires you?

5 A. Most recently it was \$350 an hour.

6 Q. Any -- any difference if it's a citizen
7 entity as opposed to a government entity?

8 A. I raised my rates in 2022 and again in
9 2023. So new matters would be at a higher rate, but
10 as this matter started in 2021, it's at that rate.

11 Q. Gotcha. Okay. And I believe also in your
12 reports that you list the facts you relied on to
13 perform your analysis; is that right?

14 A. I list all the data that I used.

15 Q. Okay. Did the plaintiffs' counsel provide
16 you with any facts or data that's not listed in your
17 report and that you considered in forming your
18 opinion?

19 A. No.

20 Q. Did plaintiffs' counsel tell you to make
21 any assumptions in writing your report that affected
22 the formulation of your opinion in the case?

23 A. Can you be more specific.

24 Q. Yeah. Did they -- I just -- did they ask
25 you to assume any facts or did -- yeah, I'll ask --

1 I'll ask it that way.

2 Did they ask you to assume any facts?

3 A. No.

4 Q. All right. We can move on to Dr. -- I
5 want to introduce Dr. Alford's report.

6 Have you -- I think you said at the
7 beginning of the deposition that you did review
8 Dr. Alford's report; is that right?

9 A. Yes.

10 MR. JACOUTOT: Okay. You know what, I'm
11 just noticing that this version contains my
12 highlights in it which isn't all that bad, but
13 I think there's also -- there could be notes.
14 So can you guys -- I'm sorry to take another
15 quick break. Can you guys give me two or three
16 minutes just to put up a clean version?

17 VIDEOGRAPHER: All right. The time on the
18 monitor is 10:27 a.m. Going off the record.

19 (Off the record.)

20 VIDEOGRAPHER: The time on the monitor is
21 10:35 a.m. We're back on the record.

22 BY MR. JACOUTOT:

23 Q. Okay. I'm going to share -- Dr. Palmer,
24 I'm going to share with you what I will be marking
25 as Exhibit 3. And this is going to be the report of

1 John -- Dr. John Alford filed on February 6, 2023.

2 (Defendants' Exhibit 3 was marked for
3 identification.)

4 BY MR. JACOUTOT:

5 Q. So let me know when that pops up for you.

6 A. Okay.

7 Q. Has it arrived on your side yet?

8 A. It just came through it. It might take a
9 minute to load.

10 Q. Yeah, yeah. That was what was causing me
11 a lot of challenges, too.

12 But do you mind taking a look at that and
13 just making sure that that's the same report from
14 Dr. Alford that you reviewed? And take your time.

15 A. It is.

16 Q. Okay. And just as an initial matter,
17 would you agree with -- would you agree that
18 Dr. Alford is an expert on the areas touched by his
19 report?

20 A. I agree that he's been accepted by Courts
21 as an expert in these areas.

22 Q. Sure. You wouldn't classify him as an
23 expert yourself?

24 A. I don't know.

25 Q. Okay. And let's move to Dr. Alford's

1 report with the section entitled "Dr. Palmer's
2 Reports."

3 And if you can go to the top of page 3 --

4 A. Okay.

5 Q. -- can you -- it states there that
6 "However, despite having this data identified in his
7 reports and the associated opportunity to analyze
8 it, there is no discussion of the impact, if any,
9 that the race of the candidate might have on the
10 behavior of black or white voters in these
11 contests."

12 Do you see that?

13 A. I do.

14 Q. And are you -- would you agree with me
15 that when he's referring to, quote, this data, he's
16 referring to the -- the race of the candidates that
17 you've identified in your reports, using an
18 asterisk?

19 A. Yes.

20 Q. Okay. And do you agree that in your
21 reports, there is no discussion of the impact, if
22 any, that the race of the candidate might have on
23 the behavior of black or white voters in the
24 contests you analyzed?

25 A. Yes.

1 Q. Okay. Next he -- he goes -- Dr. Palmer --
2 excuse me, Dr. Alford goes on to say "Also,
3 Dr. Palmer provides no party labels in the -- in
4 these tables and does not mention the party of the
5 candidates in his discussion of the results of his
6 analysis."

7 Do you see that?

8 A. Yes.

9 Q. Do you agree that's an accurate -- that's
10 an accurate depiction of your report?

11 A. Yes.

12 Q. So I'm just curious.

13 Why did you decline to put the party
14 identifier in your report?

15 A. It's not necessary for the analysis that I
16 am doing.

17 Q. So it's, in your opinion, the party of the
18 candidate has no bearing on whether polarization is
19 present in an election contest?

20 A. In my opinion, the party of the candidate
21 is not necessary to determine if there is racial
22 polarization in that contest.

23 Q. You recall testifying in this action in
24 the preliminary injunction hearing?

25 A. Yes.

1 Q. And do you recall that one of the defenses
2 being put forward by defendants was that partisan
3 polarization better explains the diverging voter
4 behavior of black and white voters in Georgia
5 election contest than does race?

6 A. I recall that from Dr. Alford's reports
7 but not from anything else.

8 Q. And you -- and you, obviously, read
9 Dr. Alford's reports before the PI hearing; right?

10 A. Yes.

11 Q. And that -- that point of view was present
12 in his PI expert report; right?

13 A. Yes.

14 Q. And knowing that, you still didn't -- you
15 still didn't find partisan identifier worth even
16 placing in your -- in your report at all?

17 A. I didn't find it necessary to include in
18 my report.

19 Q. Okay. So would it be fair to say that
20 ignoring party affiliation when analyzing racial
21 polarization is a better way to conduct an analysis,
22 in your opinion, than accounting for it?

23 A. I don't understand the question.

24 Q. Yeah. Let me -- maybe I'll rephrase.

25 In your opinion, is it better to ignore

1 party affiliation when analyzing racial polarization
2 than to consider it?

3 A. In my opinion, party affiliation is not
4 part of the ecological inference model that we use
5 to estimate both chairs from each group and identify
6 if polarization exists.

7 Q. So -- so it's just entirely unnecessary in
8 your opinion to -- to examine party affiliation when
9 conducting a racial polarization analysis?

10 A. If the purpose of the analysis is to
11 identify if contests are racially polarized, then
12 party is unnecessary.

13 Q. What if the purpose of the analysis was to
14 identify why contests are racially polarized, would
15 it be necessary at that point, in your opinion?

16 A. That is an entirely different question
17 that my report does not touch on.

18 Q. Right.

19 And so you cannot offer any opinion as to
20 the reason for the racial polarization that you
21 identified in your report?

22 A. I offer no opinion in my report on the
23 reason for the racially polarized voting, and with
24 the data I have available, I don't believe it's
25 possible to identify the reason for the polarization

1 that I find.

2 Q. So, then, you're not in any position to
3 dispute Dr. Alford's report to the extent it
4 attempts to shine light on the reason for the racial
5 polarization in your analysis because you didn't
6 consider it at all; right?

7 A. No, I disagree with that. I can dispute
8 it because I don't believe that his approach
9 actually identifies the reason for the polarization.

10 MR. JACOUTOT: Can the court reporter read
11 back the -- the witness' response there for me?

12 COURT REPORTER: One moment, please.

13 (Whereupon, the record was read by the
14 reporter as follows:

15 Answer, "No, I disagree with
16 that. I can dispute it because I don't believe
17 that his approach actually identifies the
18 reason for the polarization.")

19 BY MR. JACOUTOT:

20 Q. So what -- given the fact that you do not
21 consider the reason for racial polarization in your
22 report, what about Dr. Alford's report makes you
23 comfortable to say that he has identified an
24 inaccurate reason in his report?

25 A. First, my understanding of political

1 behavior and voting behavior as a political
2 scientist, and, second, my understanding of
3 political methodology.

4 Q. Okay. Well, let's walk -- let's walk
5 through his -- his report in a little more detail
6 and maybe I can pull out some more -- some more
7 particulars on that.

8 You see -- let's see. Let me see if I can
9 find this for you.

10 All right. On page 3 of his report
11 Dr. Alford says -- and he's referring to both your
12 Pendergrass and Grant reports. He says "The pattern
13 of polarization is quite striking."

14 Do you see that?

15 A. Yes.

16 Q. So he agrees with you about the existence
17 of polarization, it's fair to say; right?

18 A. Yes.

19 Q. And his -- he goes on to say -- see if I
20 can find it. Make sure we're on the same page.

21 Also on page 3 at the top of the last
22 paragraph there, right after the second sentence he
23 says "It's clearly not black voter's preference for
24 black candidates, or white voter's disinclination to
25 vote for black candidates."

1 Is that right --

2 A. I see that, yes.

3 Q. -- or do you see that?

4 And in this, he's referring to the
5 "Remarkable stability and the divergent preferences
6 of black and white voters across years and offices."

7 Do you see that?

8 A. Yes.

9 Q. And he goes on to just, you know, quote
10 your report, and they are -- these -- these
11 percentages are stunningly high. I think he says
12 "At 98.5 percent the average black support for the
13 19 black candidates identified as black in Palmer's
14 Pendergrass table is universal but so is the
15 98.4 percent for white -- for the 21 candidates
16 identified as non-black."

17 Is that right?

18 A. Yes.

19 Q. Okay. Let's move...

20 And would you say, based on your analysis,
21 that the same is true for white voters, that they
22 generally vote in opposition to the black preferred
23 candidate regardless of that person's race; right?

24 A. Yes.

25 Q. On page 4 he's -- Dr. Alford says,

1 referring to the races, the context -- the election
2 contests that you analyzed, he says "In all 40
3 contests, the candidate of choice of black voters is
4 the Democrat and the candidate of choice of white
5 voters is the Republican."

6 Do you see that?

7 A. Yes.

8 Q. And on page 5 -- and do you agree with
9 that analysis, by the way, or that synopsis --

10 A. Yes.

11 Q. -- of your report?

12 Okay. So at 5 he sums up what I believe
13 is his view on -- as to the scope or, I guess,
14 meaning of your analysis. And let me see -- it's at
15 the beginning of the second paragraph of page 5.

16 It says "In short, all that Dr. Palmer's
17 analysis demonstrates is that black voters provide
18 uniformly high levels of support for Democratic
19 candidates and white voters provide uniformly high
20 levels of support for Republican candidates."

21 Do you see that?

22 A. Yes.

23 Q. Do you agree with that?

24 A. I think that is accurate, but that's also
25 the full point of the analysis, is to show if black

1 and white voters are supporting different
2 candidates.

3 Q. And you would also agree that, as
4 Dr. Alford goes on to say, that "There is no
5 indication in these EI results that the high levels
6 of black voter support for Democratic candidates is
7 connected in any meaningful way to the race of the
8 Democratic or Republican candidates"; right?

9 A. I agree there's no difference or no
10 significant difference in the vote shares of white
11 voters for Republican candidates based on the race
12 of the candidate.

13 Q. And would you -- I'm sorry.
14 Could you say that again?

15 A. I agree that there's no meaningful
16 difference in the level of white voter support for
17 the Republican candidate based on the race of the
18 candidate.

19 Q. And you agree that there's no indication
20 in your results that the high levels of white
21 support for Republican candidates is connected in
22 any meaningful way to the race of the Democratic or
23 Republican candidates?

24 A. I'm not sure what "any meaningful way"
25 means, but I would say in any statistically

1 significant way.

2 Q. Okay. Is -- and you did examine the 2022
3 General Election U.S. Senate contest, right, between
4 Raphael Warnock and Herschel Walker?

5 A. I did.

6 Q. And both of those candidates are black;
7 correct?

8 A. Yes.

9 Q. And Raphael Warnock represented the
10 Democratic Party in that election, that statewide
11 Georgia election, and Herschel Walker represented
12 the Republican party in that statewide Georgia
13 election?

14 A. Yes.

15 Q. Did -- in your analysis did the relative
16 vote shares of the candidates different much from
17 the other con- -- contests that you analyzed?

18 A. Not substantially but I don't have the
19 exact numbers in front of me.

20 Q. Okay. So in that -- at least in that
21 instance, white Republican voters were perfectly
22 willing to cast their vote for a black Republican
23 candidate; right?

24 A. A large majority of them, yes.

25 Q. Okay. And, yet, the -- the polarization

1 pattern persisted; right?

2 A. Yes.

3 Q. Okay. And so you mentioned a little -- a
4 little while ago that -- and -- and correct me if
5 I'm not phrasing it properly because I don't want
6 to, you know, misquote your testimony.

7 But you mentioned, I think, that
8 essentially your experience as a political scientist
9 is what causes you to dispute Dr. Alford's
10 conclusion as to the reason for the polarization
11 present in Georgia's elections; is that right?

12 A. Yes.

13 Q. But you don't have any specific analysis
14 that would dispute it; is that right?

15 A. My opinion is that Dr. Alford's report
16 here does not identify, does not separate out the
17 effect of race and the effect of party on
18 polarization, and that opinion is based on my
19 experience and knowledge as a political scientist.

20 Q. Would you agree that Dr. Alford at least
21 attempts to separate out race and polarization --
22 race and party and polarization? Sorry.

23 A. I agree that Dr. Alford calculates the
24 averages among the race of each candidate. I don't
25 agree that that is a meaningful attempt to identify

1 the effects of race versus party.

2 Q. Right. But you do agree that he attempted
3 to; correct?

4 A. I would consider this a very minimal and
5 inadequate attempt.

6 Q. And you -- and you did not attempt to at
7 all, correct, in your report?

8 A. I did not attempt to do so because that is
9 not the purpose of this analysis.

10 Q. Yeah. I understand that you don't feel
11 it's the purpose, but the reality is, whether it's
12 the purpose or not, you did not do it; right?

13 A. I did not do it.

14 Q. Okay. Okay. I'm going to go turn to your
15 reports now, and I already have Grant here,
16 actually, so -- and we have that marked. So we can
17 start with that one. That's back to Exhibit 2.
18 It's been previously marked Exhibit 2.

19 Can you pull that up for me?

20 A. Yes.

21 Q. Okay. And we've covered a lot of your
22 introductory paragraphs, I think, in -- when we were
23 talking about your CV, so I'm not going to go into
24 that.

25 I want you to look at paragraph 7. Okay.

1 And it just states there your conclusion,
2 essentially, with no -- with nothing else. Strike
3 that. Ignore that part of the question. I'll --
4 I'll rephrase.

5 It just states here your conclusion that
6 "I find strong evidence of racially polarized voting
7 across the areas of Georgia I examined."

8 You say -- you go on to say "Black and
9 white voters consistently support different
10 candidates."

11 Right?

12 A. Yes.

13 Q. Okay. And because we just talked at
14 length about you not exploring why, I'm not going to
15 go into that question -- line of questioning with
16 you right now. I think we've established that.

17 What -- for -- for -- for finding racial
18 polarization, for you to -- to -- to say that your
19 analysis led to you finding that a given election
20 was racially polarized, what's your standard for
21 that or is there -- is there a standard that you
22 employ or does it -- is it a case-by-case standard?

23 Strike that. I'm.

24 MR. JACOUTOT: sure Jonathan's going to
25 object to that because that was a poorly worded

1 question, for the record.

2 BY MR. JACOUTOT:

3 Q. So let me ask you this: What is your
4 standard for determining racial polarization?

5 A. So determining racial polarization, to me,
6 comes in three parts.

7 First, I have to see if -- and just to
8 simplify, just for black and white voters as I'm
9 looking for here. If black voters vote
10 cohesively -- that is, do they -- do the large
11 majority of the black voters support the same
12 candidate -- then do white voters vote cohesively,
13 do a large majority of white voters support the same
14 candidate, and then are they different candidates or
15 not. So you first have to have a candidate of
16 choice for each group and then those have to be
17 different candidates.

18 Q. Okay. And how do you -- how do you define
19 cohesively as used in that standard?

20 A. I don't have a bright-line test. Here the
21 results are unambiguous regardless of any cutoff you
22 might want to use.

23 Q. And you didn't examine any primary data in
24 your analysis; right? It was strictly limited to
25 general elections and runoffs, I believe.

1 A. That's correct.

2 Q. Okay. Do you know if there's a -- and
3 this is just for how you operate personally in this
4 area.

5 But do you know if there is a cutoff, like
6 or a threshold level of support that you need to
7 achieve in order to find -- in order for you to find
8 that a -- a group voted cohesively in a given
9 election?

10 A. I don't have a bright-line cutoff.

11 Q. If a group voted 55 percent for the same
12 candidate, would you -- would you find that to be
13 cohesive voting of that group?

14 A. Generally weakly cohesive or not cohesive.

15 Q. Okay. And if there's weak cohesion --

16 A. Sorry. I -- I would say that's not
17 cohesive.

18 Q. Okay. What about 60 percent?

19 Have you ever seen a -- examined an
20 election contest where an indiv- -- a group that you
21 were analyzing voted 60 percent for a candidate -- a
22 given candidate, would you -- have you ever said
23 that that was sufficiently cohesive, in your
24 opinion, for your -- for purposes of your racial
25 polarization analysis?

1 A. I don't believe so.

2 Q. Okay. And -- and why -- why is it that
3 you don't necessarily find those -- those -- those
4 levels of -- of voting patterns to be sufficiently
5 cohesive for racial polarization?

6 A. I'm sorry. I thought you asked if I find
7 it usually in the 60 range.

8 Q. Yeah. So --

9 A. I said I don't --
10 (Simultaneous speakers - unclear.)

11 Q. Yeah. I'm sorry. Go ahead. I didn't
12 want to interrupt you.

13 A. Can you repeat the previous question?
14 Maybe I misunderstood it.

15 MR. JACOUTOT: Can the court reporter
16 repeat it just so it's repeated exactly as I
17 said it? And let me know if you're -- you're
18 struggling to find which question we're asking
19 for you to read back.

20 COURT REPORTER: One moment, please.

21 (Whereupon, the record was read by the
22 reporter as follows:

23 Question, "Okay. What about
24 60 percent?

25 Have you ever seen -- examined an election

1 contest where a group that you were analyzing
2 voted 60 percent for a candidate -- a given
3 candidate, would you -- have you ever said that
4 that was sufficiently cohesive, in your
5 opinion, for -- for purposes of your racial
6 polarization analysis?")

7 THE WITNESS: So I don't believe I found a
8 case in the 60 percent range where I've said it
9 was cohesive, but I'm not sure if I found cases
10 where I've had to make that determination or
11 not.

12 So, for example, if you look at
13 paragraph 19 of the Grant -- of my Grant
14 report --

15 BY MR. JACOUTOT:

16 Q. Hold on.

17 A. -- where it says --

18 Q. Okay.

19 A. So on -- in paragraph 19 I'm looking at
20 polarization in each of the individual districts,
21 and at the end I say "Voting is generally less
22 polarized in Senate District 44 and not polarized in
23 Senate District 39."

24 And if you look at the figure on the
25 following page at the bottom right where you see the

1 graph of polarization for District 39, you'll see
2 that across all the elections I analyzed, white
3 voters are -- support the black-preferred candidate
4 with 60 percent of the vote. So I do find cohesion
5 at roughly that level, but that there's not
6 polarization there because it's in support of the
7 same candidate and also because there's a relatively
8 wide confidence interval there so we can't make a
9 clear determination about the level of support of
10 white voters in that district.

11 Q. Right. Do you make -- in paragraph 19
12 here, do you make any sort of statement as to the
13 level of cohesion or is it -- is it limited to the
14 broader question of pol- -- racial polarization?

15 A. I believe I'm just going right to
16 polarization and not first identifying cohesion
17 among each group.

18 Q. Right. So where -- yeah, I certainly see
19 that there's a broad confidence interval, but you
20 say it's not polarized in 39 and that's because the
21 white -- white voters are voting somewhere between
22 nearly 50 percent and 75 percent for the
23 black-preferred candidate; right?

24 A. So it comes from two things. One is that
25 in some of the contests, and I don't have the

1 individual results for every contest and every
2 district in the report just because there's so many
3 of them, but for some contests, it's not polarized
4 because white voters had the same candidate of
5 choice as black voters. That would be, say, towards
6 the higher -- upper end of that range.

7 In some contests I couldn't identify if
8 white voters had a preferred candidate or not
9 because the confidence interval spanned 50 percent;
10 that is, I could not be confident with any certainty
11 which candidate was the white-preferred candidate,
12 in which case there isn't a white-preferred
13 candidate and the election is not polarized.

14 Q. Okay. Yeah, I see that.

15 And there is a distinction, right, between
16 a candidate of choice of a particular group and
17 whether that particular group votes cohesively;
18 right?

19 A. No. It -- to be a candidate of choice as
20 I frame it here, there -- that is identified through
21 cohesive voting; that is, if -- if the group is not
22 cohesive, they do not have a candidate of choice.

23 Q. Right. Well, let's -- let's say that
24 we're looking at a race where the confidence
25 intervals -- the confidence interval band is much

1 narrower than what we're seeing here in Senate
2 Districts 39 and 44, and the median value for the
3 white voters of a particular candidate, let's say
4 51 percent of white voters with -- voted for a
5 particular candidate.

6 Now, that would be the white-preferred
7 candidate I guess by definition because more voters
8 voted for that candidate than any other, more white
9 voters did; right?

10 A. I use the term "white-preferred candidate"
11 and white -- or "candidate of choice of white
12 voters" interchangeably as the same thing. I don't
13 draw that separate distinction of strict. You know,
14 I estimate slightly higher so it's a strict
15 preferred candidate. To me those are -- those terms
16 refer to the same thing of a preferred candidate is
17 one cohesively supported by that group.

18 Q. Right. But -- okay. So I want -- I want
19 to drill down on that a little bit because I'm not
20 sure if we're getting things mixed up or if these
21 are all interchangeable for you.

22 So I understand that white-preferred
23 candidate and candidate of choice of white voters,
24 those are interchangeable; right?

25 A. Yes.

1 Q. But cohesion isn't necessarily established
2 when a candidate of choice is established; right?

3 A. No. Cohesion is required to identify a
4 candidate of choice.

5 Q. Okay. So --

6 A. The way -- sorry.

7 Q. You can go ahead.

8 A. No, I think I answered it.

9 Q. Okay. So you -- if I understand you
10 correctly, cohesion's established when a candidate
11 of choice is established?

12 A. The way I think about it is I run the
13 ecological inference model. That produces an
14 estimate and a confidence interval for each group
15 for each candidate. I then look to see in those
16 results is there cohesion; that is, is a significant
17 majority of a group voting for a single candidate
18 which includes having a confidence interval that
19 lets me identify such a candidate. When there is
20 cohesion, I can then say the candidate they're
21 cohesively supporting is the preferred candidate.

22 So in that way, they're interchangeable,
23 but I think about it as cohesion lets me identify a
24 preferred candidate. Lack of cohesion means I
25 cannot identify a preferred candidate.

1 Q. Okay. So, then, I guess I'm -- I'm wrong
2 when I say -- or at least the -- as -- as it relates
3 to how you conduct the analysis and how you
4 categorize these -- these types of voting patterns.

5 I'm incorrect when I say that a candidate
6 that secures, let's say, 52 percent of the white
7 voter support in a given election contest, you would
8 not characterize that as a white-preferred
9 candidate; right?

10 A. That's correct.

11 Q. Okay. So you -- you have to establish
12 that threshold level of cohesion which there isn't a
13 bright-line rule for before you can establish
14 whether the candidate is the preferred candidate of
15 a given group of voters?

16 A. Yes.

17 Q. Okay. Thank you. I have a -- just kind
18 of a housekeeping question on page 3. I might have
19 just been misreading it.

20 But the Senate map, it has three shaded
21 areas but only two identified regions.

22 What's -- what was the -- is that because
23 those are Senate districts, the -- the difference in
24 shading, do you know?

25 A. No. The definition of those regions

1 overlaps for a handful of counties. And so if
2 they're in green, it's because it's both a yellow
3 and a blue layer on that map.

4 Q. That makes sense. Okay. Gotcha.

5 A. And, in fact, when I say shared counties,
6 it's really shared districts.

7 Q. Right. Okay. All right.

8 If you could turn to page 4 at the very
9 top, it continues from the previous page where it
10 says "Precinct-level election results for the 2018,
11 2020, and 2021 elections was assembled by the Voting
12 and Elections Science Team, an academic group that
13 provides precinct-level data for U.S. elections,
14 based on data from the Secretary of State."

15 And you've got a few footnotes here in
16 that -- in that sentence.

17 Can you just describe what the Voting and
18 Election Science team is?

19 A. Sure. They're just a group of academics
20 who do the hard work of matching up election results
21 to precinct geography. And this is something that,
22 theoretically, should be really easy; that is, I
23 have a shape file of Georgia precincts from, say,
24 the 2020 election. I have precinct-level election
25 results from the 2020 election and presumably those

1 should match up perfectly.

2 But, in practice, the -- in some counties,
3 and not all, the precinct identifiers used in the
4 election night reporting system is different than
5 the precinct identifiers used in the shape file. It
6 might just be different abbreviations, different
7 ordering. Sometimes there's expert numbers attached
8 which means that you just have to do the tedious
9 work of matching them up. Some part automatically
10 and some part by hand. And so the VEST team did
11 that for those elections and so I used their data.

12 Q. Okay. Did you do any sort of independent
13 analysis to determine the accuracy of the data
14 provided by VEST?

15 A. Yes. They have all of the raw data they
16 use available. They document their process. I
17 validated that the totals matched up properly so
18 that the expected total number of votes across
19 counties and the state were correct. I've used
20 their data in multiple other cases as well as
21 academic work and they're very widely used.

22 Q. Okay. And are they -- are they affiliated
23 with Harvard?

24 A. No. I believe one of the heads of it is
25 at the University of Florida, and I'm not sure where

1 the other academics involved are located.

2 Q. Do -- okay.

3 Do you know if it's nonpartisan or if it's
4 a partisan group?

5 A. I believe it's nonpartisan. It's just
6 cleaned-up election data available to everyone
7 online.

8 Q. Okay. And I don't mean to suggest that it
9 is, you know, some sort of partisan group. I just
10 was curious.

11 In paragraph 15 of your report under
12 "Racially Polarized Voting Analysis," in the middle
13 there you state "I excluded third-party and write-in
14 candidates and analyzed votes for the two
15 major-party candidates in each election."

16 Do you see that?

17 A. Yes.

18 Q. How come you excluded those -- those
19 groups of candidates?

20 A. So, we can include third-party candidates.
21 It's not going to make a big difference in the
22 results, but it essentially adds a lot of noise
23 because third-party support is relatively low.
24 Like, a few votes or zero votes in many precincts.
25 And so it just complicates the ecological inference

1 model but it's certainly feasible.

2 Write-in candidates I exclude because it
3 could be from multiple candidates, we don't know who
4 they are, but again, most importantly, it's a
5 really, really small number of votes.

6 Q. In your experience -- so but do you see
7 the -- when you -- when you -- strike that.

8 When you see the analysis for the data
9 that you're -- that you're looking at for your
10 analysis, do you see the third-party results from
11 elections you examine and then you just decide to
12 exclude them?

13 A. I believe, in all of the data sources I
14 use, the third-party results are included and then I
15 remove them from the data before running ecological
16 inference.

17 Q. Okay. Is there any -- when you're -- when
18 you're looking at the smaller elections, let's say
19 the state senate and the state legislature, do you
20 notice any -- a greater volume of third-party and
21 write-in votes for candidates than you do in the
22 larger elections, like the statewide elections and
23 things?

24 A. I don't know.

25 Q. Okay. Okay. Let's move on to page 10.

1 At the end of paragraph 24, and we're under the
2 heading now "Performance of the New Majority-Black
3 Districts in the Illustrative Maps."

4 So to be clear, you're no longer
5 conducting -- well, are you conducting ecological
6 inference analysis when you are looking at the
7 performance of potential new majority-black
8 districts in the illustrative maps? Do you still
9 have to perform an EI to do that?

10 A. No.

11 Q. Okay. So are you essentially grafting
12 results from prior elections onto newly formulated
13 districts?

14 Is that an accurate, sort of, synopsis of
15 what's happening?

16 A. Yes. It's called a reconstituted election
17 analysis or a reconstituted election results
18 analysis. I figure out which precincts are in which
19 of the new districts based on the shape files of the
20 illustrative maps, and then I just add up the votes
21 for all the precincts within each district and
22 figure out the vote share of each candidate.

23 Q. Okay. So at the bottom of paragraph 24,
24 it states "In House District 145, the
25 black-preferred candidate won all 19 elections since

1 2018 and 27 of the 31 elections overall."

2 Is that right?

3 A. Yes.

4 Q. Does the fact that they didn't win some of
5 the elections affect your analysis as to their
6 ability to win in the illustrative maps?

7 A. So 27 of 31 is a very high percentage.
8 It's going to be, you know, close to 90, 80,
9 90 percent. So that is certainly a district where
10 black-preferred candidates are generally able to
11 win.

12 Q. Is there a -- a threshold where you would
13 say, okay, black-preferred candidates are winning
14 elections in this illustrative district but not
15 enough for me to conclude that they would win in a
16 new majority-black district in the illustrative map?

17 A. So I don't have a exact cutoff, but if you
18 look at table 9 which is on page 24, this shows the
19 numbers discussed in that paragraph and the vote
20 shares of the black-preferred candidate. And if we
21 look at, say, the 2021 runoff or the 2020 general,
22 these are all numbers around 55 percent or higher.
23 That's a 10-percentage point margin which I would
24 consider more than sufficient.

25 COURT REPORTER: Which you would consider

1 more than?

2 THE WITNESS: More than sufficient.

3 COURT REPORTER: Thank you.

4 BY MR. JACOUTOT:

5 Q. Well, in -- in the 55 percent that you
6 would consider more than sufficient, are you
7 referring to an individual vote -- or a vote share
8 in an individual election or are you referring to
9 the percentage of elections that you analyze that
10 they would win?

11 A. I'm sorry. The vote shares in the
12 elections.

13 Q. Okay. So I'm more curious about --

14 A. As I said --

15 (Simultaneous speakers - unclear.)

16 Q. I'm sorry. Go ahead.

17 A. As I said earlier, we're looking at a very
18 high percentage of elections that they would win.

19 Q. Right. But is there, like, a -- let's say
20 they would win 20 out of 30 elections in the
21 illustrative district, is that sufficient for you to
22 say that they have a high likelihood of -- of
23 electing a new majority-black district in the
24 illustrative maps?

25 Would you -- or -- or let me -- let me

1 phrase it that way.

2 If they win 20 out of 30 elections in the
3 elections that you analyze, is that sufficient for
4 you to consider that illustrative district one in
5 which black voters have an ability to elect their
6 candidate of choice?

7 A. I suppose it depends on, you know, the --
8 any sort of relationship between time and success.
9 So, for example, if those ten losses were all from
10 2012, 2014, and then all the 20 victories were more
11 recent, that seems like a really high rate of
12 success in recent elections that might reflect
13 demographic and political change.

14 If they were all mixed through such that
15 in any one random year they're winning about two
16 thirds of the contest, I'd have to dig more into it
17 and sort of see what the margins look like and --
18 and what the relationship might be about between
19 success and the demographics of that district or the
20 political demographics of a district.

21 Q. Okay. Yeah, that makes -- that makes --
22 that makes sense.

23 Okay. I think I'm done with that report,
24 so I'm going to move to the Pendergrass report. And
25 I will introduce that on your Exhibit Share as

1 Exhibit 4.

2 (Defendants' Exhibit 4 was marked for
3 identification.)

4 MR. JACOUTOT: Just making sure this
5 doesn't have any highlights on it or notes. It
6 does not. Good.

7 BY MR. JACOUTOT:

8 Q. All right. It should be coming your way.
9 So just let me know when it's loaded up.

10 A. Okay. I have it now.

11 Q. Okay. Great. So you -- move to page 5 --
12 or before we do that, can you confirm to me that
13 this is your report that you filed in -- in the
14 Pendergrass action?

15 A. It is.

16 Q. Okay. Can we move to page 5 and
17 paragraph 16, and if you want, just read that to
18 yourself real quick and let me know when you've done
19 that.

20 A. Yes.

21 Q. Okay. And so, for the record, it states
22 that "Examining Figure 2, the estimates for support
23 for black-preferred candidates by black voters are
24 all significantly above 50 percent. Black voters
25 are extremely cohesive, with a clear candidate of

1 choice in all 40 elections."

2 So my question to you -- and I guess
3 that's -- well, it's almost a bit of an
4 understatement where you say it's "significantly
5 above 50 percent."

6 It's like almost 100 percent; right? It's
7 right near that line?

8 A. Yes.

9 Q. For black candidates -- or excuse me, for
10 black-preferred candidates. I apologize.

11 So my question to you is charac- -- about
12 characterizing these candidates by black-preferred.

13 Obviously, in the -- in the general
14 election contest, we would be calling them
15 black-preferred candidates and it's difficult to
16 dispute that, but in your analysis you didn't
17 examine the primaries; right?

18 A. That's correct.

19 Q. So you wouldn't know, then, if the
20 candidate listed here as the black-preferred
21 candidate was actually the black-preferred candidate
22 in the primary; right?

23 It could have been -- well, let me ask you
24 that question again and I'll cut it off.

25 Here we can't know because we didn't look

1 at the primaries if the candidate in the general
2 election was the black-preferred candidate in the
3 primary; right?

4 A. We can't say anything about the primary.

5 Q. And so, then, it's true that some of the
6 candidates that you list as the black-preferred
7 candidate here may not have been the black-preferred
8 candidate in the primary?

9 A. I don't know.

10 Q. Is it possible?

11 MR. HAWLEY: Objection.

12 THE WITNESS: Yes.

13 MR. HAWLEY: Calls for speculation.

14 Sorry, Dr. Palmer, you can answer.

15 THE WITNESS: It is possible.

16 BY MR. JACOUTOT:

17 Q. And I do agree that it might call for some
18 speculation because we just don't have the data
19 before us; right?

20 A. I didn't do that analysis.

21 Q. But when they're in the general election,
22 regardless if they commanded -- or excuse me,
23 regardless if they received the black -- the
24 majority of black support in the primary, they
25 clearly are -- have the overwhelming majority of

1 support in the general; right?

2 A. These candidates are the clear
3 black-preferred candidates in the general election.

4 Q. Okay. If you could turn to page 7 for me
5 and look at the figure 4.

6 It looks like you plot the EI results for
7 five different Congressional districts --

8 A. Yes.

9 Q. -- is that right?

10 A. Yes.

11 Q. Okay. And the confidence intervals here
12 are represented by, I guess, the line behind the
13 dots; is that right?

14 A. Yes.

15 Q. I'm curious. Why -- why is it that in
16 some of the districts the -- the CI, or confidence
17 interval, seems to be quite broad whereas in others
18 it's very tight?

19 A. So that depends a lot on the size of each
20 group within the district and in how they're
21 distributed across the district. When places are
22 more heavily black or more heavily white, it can be
23 easier to get more precise estimates. In places
24 where precincts tend to be more mixed, it can be
25 harder to get precise estimates.

1 And so that's a function of how the
2 model -- how the ecological inference model
3 estimates group support based on the precinct-level
4 data.

5 Q. Okay. And so when there's -- is that
6 because it's basically a -- like, for CD13, for
7 example, there's a larger statistical pool of black
8 voters to -- to analyze and pull from so it makes
9 it -- it shrinks those confidence intervals a little
10 bit?

11 A. It's not just that it's a larger pool;
12 it's also how they're distributed across units,
13 across the precincts.

14 Q. Okay. And can you turn to table 6 on
15 page 15, which is the, I think, the table version of
16 this graph?

17 A. Yes.

18 Q. Or excuse me. It's the table version of
19 CD14 in this graph.

20 A. Yes.

21 Q. Okay. So, as I was looking at this, I see
22 that some of the down-ballot races have a wider
23 confidence interval in, let's say -- let's say --
24 let's look at the 2014 general and look at some of
25 the down-ballot races like lieutenant governor.

1 For black voters that has a fairly wide
2 confidence interval, would you say?

3 A. I -- it's all relative to other intervals,
4 I suppose. It's wider than some.

5 Q. Yeah. So, then, let's compare that same
6 lieutenant governor race, same -- same race of
7 voters, black voters, but let's compare it with the
8 2018 lieutenant governor race.

9 You -- you agree with me that the
10 confidence interval is significantly more narrow;
11 right?

12 A. It's narrower. I don't know if we could
13 test the range of it or something and do a physical
14 test to say if it's significant or not.

15 Q. Okay. Would you also -- yeah, would you
16 also agree with me with the -- if you go down to
17 2022 in that same CD14, same lieutenant governor
18 race, and look at the confidence interval for black
19 voters there and it's even more narrow than 2018; is
20 that right?

21 A. Yes. But I -- I don't know if we can
22 infer anything from the width of the confidence
23 interval from separate runs of a model across
24 separate years and different data sets.

25 Q. Okay. That sort of answered my next

1 question. I -- I was going to ask why this might
2 be.

3 Do you have any idea why that might be or
4 you're just not comfortable speculating?

5 A. It would be entirely speculation.

6 Q. Okay. Okay. Does the wider confidence
7 interval affect the reliability of the estimates
8 being given?

9 A. Can you be more specific?

10 Q. Yeah. So if a -- if a confidence interval
11 of 95 has a -- is broader, does that affect its --
12 the reliability of the estimates that you're giving?

13 A. I don't think it changes the reliability.
14 It changes the precision of them. In this case,
15 that doesn't have any bearing on my conclusions.

16 Q. Because these are -- I guess because
17 they're very close to, you know, 100 percent in a
18 lot of these cases?

19 A. That's right.

20 Q. Okay. And, I guess, if -- strike that.

21 Okay. The last question I have is, when I
22 was reading your reports, I didn't notice, like, a
23 conclusion paragraph. It just kind of ended and
24 then started with the tables and things like that
25 and I didn't see a direct appendix link.

1 Am I -- do you know if I'm missing
2 anything or is it just because the conclusion was,
3 sort of, written at the beginning and that's just
4 the way you stylized it?

5 A. The conclusion was written at the
6 beginning and then I just put the tables at the end
7 without --

8 Q. Okay.

9 A. -- an appendix header.

10 MR. JACOUTOT: Okay. I think that may be
11 all I have for you. Can we take a ten-minute
12 break? Let me just go back through this and
13 make sure I don't have anything else.

14 MR. HAWLEY: So --

15 VIDEOGRAPHER: The time on the monitor is
16 11:36 a.m. and we're going off the record.

17 (Off the record.)

18 VIDEOGRAPHER: The time on the monitor is
19 11:45 a.m. and we're back on the record.

20 BY MR. JACOUTOT:

21 Q. Okay. I did just have one follow-up kind
22 of series of questions I meant to ask you earlier
23 when we were going through your CV.

24 As I said, I did notice a -- a lot of
25 articles on housing and we had some on climate

1 change and things like that. A lot of articles on
2 mayoral, I guess -- what was the word? -- I can't
3 remember the words you used, aspirations, I believe,
4 or something like that.

5 But the -- my question is, you know, I
6 didn't see a whole lot on, I guess, election-related
7 matters specifically, and I was just curious if --
8 if you could -- you know, how much time do you --
9 how would you say that you divide your time as a
10 professional in terms of, you know, how much time is
11 spent of your -- of your typical work schedule on
12 election-related statistical analysis matters,
13 things like that, and how much time is devoted to
14 other aspects of your professional career?

15 A. I would say right now of my research time,
16 half is spent on voting rights, redistricting,
17 election-related matters. I have several
18 works-in-progress on this topic, the partisan
19 gerrymandering paper we talked about earlier as well
20 as a bunch of things that are not yet at the working
21 paper or, sort of, publicly available stage.

22 And then about the other half of my
23 research time is on housing and local politics which
24 would include things like the mayor survey and the
25 related papers.

1 My teaching is also similarly split. I
2 spend about half of my teaching time on teaching
3 data science, statistics, political methodology,
4 working with this kind of data, including a new
5 course I'm teaching this semester all about working
6 with census data and geographic data for questions
7 about, you know, public policy. And then half of my
8 time is spent teaching about American politics which
9 certainly includes elections and voting rights as
10 well.

11 Q. Okay. All right. That's perfect. Yeah,
12 I appreciate it. That's what I was looking for.

13 MR. JACOUTOT: And with that, I have no
14 further questions. Mr. Hawley, if you have
15 any, feel free.

16 MR. HAWLEY: Yes, just briefly.

17 EXAMINATION

18 BY-MR. HAWLEY:

19 Q. Dr. Palmer, do you recall that you and
20 Mr. Jacoutot had a discussion about Dr. Alford's
21 report earlier in the deposition?

22 A. Yes.

23 Q. And I'm -- I'm paraphrasing Mr. Jacoutot's
24 question, but he asked whether Dr. Alford had
25 attempted in his rebuttal report to identify

1 partisanship as the cause of the polarization that
2 you reported in your report.

3 Do you recall that exchange?

4 A. Yes.

5 Q. And you indicated -- and I'm not -- again,
6 apologies if this isn't the precise adjective that
7 you used. But you referred to Dr. Alford's attempt
8 as insufficient given the data that he had when he
9 conducted his rebuttal report.

10 Is that about right?

11 A. Yes.

12 Q. Could you explain why you viewed
13 Dr. Alford's attempt as insufficient to answer the
14 question he purports to answer?

15 A. So Dr. Alford is trying to look at the
16 difference at whether the polarization he observed
17 is caused by race or caused by party. And I think
18 there's two significant errors in this analysis.
19 The first is that we're not trying to understand
20 whether the race of the candidate causes
21 polarization, but whether voters of different races
22 are polarized relative to each other.

23 And so in that respect, I don't think the
24 race of the candidate is necessary, and whether
25 there's differences there is not necessary to

1 identify if voters are polarized by race.

2 And then, second, he looks at whether the
3 race of -- he shows that because there's not a
4 difference in support for democratic candidates or
5 Republican candidates based on their race that this
6 must driven by party rather than race. And those
7 two concepts cannot be separated.

8 Social scientists have done plentiful
9 research on the causes of party identification and
10 what leads voters to identify with or support
11 parties or candidates of that party, as well as the
12 linkages between race and party identification. And
13 so we can't separate -- separate out the two.

14 To do this analysis would have to assume
15 that race has no bearing on one's party but, of
16 course, we know that one's individual race is going
17 to affect their partisan preferences, their policy
18 preferences, and how they're going to vote. And so
19 the two are intertwined. We can't separate them
20 out this way, certainly not from aggregate data like
21 this.

22 Q. In responding to your report, Dr. Alford
23 essentially used the same data that you were using
24 when you ran your racially polarized voting
25 analysis; correct?

1 A. I'm not if he was using the same data that
2 was available to him. He might just be using the
3 results of my report and not looking at the data
4 itself.

5 COURT REPORTER: Excuse me. Could you
6 repeat the objection, please? It was spoken
7 over.

8 MR. JACOUTOT: It was just object to form.

9 COURT REPORTER: Thank you.

10 BY MR. HAWLEY:

11 Q. With that data and with the methodology
12 that you applied to reach your results, Dr. Palmer,
13 is it possible for Dr. Alford to make a subjective
14 determination as to causation, which is to say, why
15 voters voted the way they did?

16 MR. JACOUTOT: Object to form.

17 THE WITNESS: I -- I don't believe so.

18 MR. HAWLEY: Okay. That's all I have.

19 MR. JACOUTOT: Okay. And I don't have any
20 follow-up, so I think we can call it a day.

21 VIDEOGRAPHER: All right. The time on the
22 monitor is 11:51 a.m. We're going off the
23 record.

24 (Deposition concluded at 11:51 a.m.)

25 (Pursuant to Rule 30(e) of the Federal

1 Rules of Civil Procedure and/or O.C.G.A.

2 9-11-30(e), signature of the witness has been
3 reserved.)

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C E R T I F I C A T E

STATE OF GEORGIA:

COUNTY OF FULTON:

I hereby certify that the foregoing transcript was taken down, as stated in the caption, and the questions and answers thereto were reduced to typewriting under my direction; that the foregoing pages represent a true, complete, and correct transcript of the evidence given upon said hearing, and I further certify that I am not of kin or counsel to the parties in the case; am not in the regular employ of counsel for any of said parties; nor am I in anywise interested in the result of said case.



LEE ANN BARNES, CCR B-1852, RPR, CRR, CRC

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LEE ANN BARNES, CCR B-1852B, RPR, CRR, CRC

1 To: JONATHAN HAWLEY, ESQ.

2 Re: Signature of Deponent MAXWELL PALMER, Ph.D.

3 Date Errata due back at our offices: 30 days

4
5 Greetings:

6 This deposition has been requested for read and sign
7 by the deponent. It is the deponent's
8 responsibility to review the transcript, noting any
9 changes or corrections on the attached PDF Errata.
10 The deponent may fill out the Errata electronically
11 or print and fill out manually.

12 Once the Errata is signed by the deponent and
13 notarized, please mail it to the offices of Veritext
14 (below).

15 When the signed Errata is returned to us, we will
16 seal and forward to the taking attorney to file with
17 the original transcript. We will also send copies
18 of the Errata to all ordering parties.

19 If the signed Errata is not returned within the time
20 above, the original transcript may be filed with the
21 court without the signature of the deponent.

22 Please send completed Errata to:
23 Veritext Production Facility
24 20 Mansell Court, Suite 300
25 Roswell, GA 30076
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1 ERRATA for ASSIGNMENT #5775081

2 I, the undersigned, do hereby certify that I have
3 read the transcript of my testimony, and that

4 ___ There are no changes noted.

5 ___ The following changes are noted:

6
7 Pursuant to Rule 30(7)(e) of the Federal Rules of
8 Civil Procedure and/or OCGA 9-11-30(e), any changes
9 in form or substance which you desire to make to
10 your testimony shall be entered upon the deposition
11 with a statement of the reasons given for making
12 them. To assist you in making any such corrections,
13 please use the form below. If additional pages are
14 necessary, please furnish same and attach.

15 Page ____Line ____Change to:_____

16 Reason for change:_____

17 Page ____Line ____Change to:_____

18 Reason for change:_____

19 Page ____Line ____Change to:_____

20 Reason for change:_____

21 Page ____Line ____Change to:_____

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23 Page ____Line ____Change to:_____

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1 Page _____Line _____Change to:_____

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21 Page _____Line _____Change to:_____

22 Reason for change:_____

23 Page _____Line _____Change to:_____

24 Reason for change:_____

25 _____

DEPONENT'S SIGNATURE

Sworn to and subscribed before me this _____ day

of _____, 20__.

Notary Public

My commission expires_____

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[cohesive - corrections]

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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.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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Exhibit
0001

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

ANNIE LOIS GRANT, *et al.*,

Plaintiffs,

v.

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

Defendants.

CIVIL ACTION FILE NO.
1:22-CV-00122-SCJ

COAKLEY PENDERGRASS, et al.,

Plaintiffs,

v.

BRAD RAFFENSPERGER, et al.,

Defendants.

CIVIL ACTION

FILE NO. 1:21-CV-05339-SCJ

**DEFENDANTS' NOTICE TO TAKE THE EXPERT DEPOSITION
OF MAXWELL PALMER, Ph.D.**

PLEASE TAKE NOTICE that, pursuant to Rules 26 and 30 of the Federal Rules of Civil Procedure, counsel for Defendants Brad Raffensperger, in his official capacity as Secretary of State of Georgia; William S. Duffey Jr.,

in his official capacity as chair of the State Election Board; and Matthew Mashburn, Sara Tindall Ghazal, Edward Lindsey, and Janice Johnston, will take the oral examination of Plaintiffs' expert, Maxwell Palmer, Ph.D. on Wednesday, February 22, 2023, beginning at 9:30 a.m. via Zoom videoconferencing through Veritext Legal Solutions and continuing thereafter until completed. 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, etc.). The 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.

This 16th day of February, 2023.

Respectfully submitted,

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Attorney General
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(678) 336-7249

Attorneys for Defendants

CERTIFICATE OF SERVICE

I hereby certify that on February 16, 2023, I caused a copy of the foregoing to be served by electronic mail on all counsel of record.

/s/ Bryan P. Tyson

Bryan P. Tyson

Attorney for Defendants

Expert Report of Dr. Maxwell Palmer

Grant v. Raffensperger (N.D. Ga.)

December 12, 2022

A handwritten signature in blue ink, reading "Maxwell Palmer", is positioned above a horizontal line.

Exhibit
0002

EXPERT REPORT OF MAXWELL PALMER, PH.D.

I, Dr. Maxwell Palmer, declare as follows:

1. My name is Maxwell Palmer. I am currently an Associate Professor of Political Science at Boston University. I joined the faculty at Boston University in 2014, after completing my Ph.D. in Political Science at Harvard University. I was promoted to Associate Professor, with tenure, in 2021. I am also a Civic Tech Fellow in the Faculty of Computing & Data Sciences and a Faculty Fellow at the Initiative on Cities. I teach and conduct research on American politics and political methodology.
2. I have published academic work in leading peer-reviewed academic journals, including the *American Political Science Review*, *Journal of Politics*, *Perspectives on Politics*, *British Journal of Political Science*, *Journal of Empirical Legal Studies*, *Political Science Research and Methods*, *Legislative Studies Quarterly*, and *Urban Affairs Review*. My book, *Neighborhood Defenders: Participatory Politics and America's Housing Crisis*, was published by Cambridge University Press in 2019. I have also published academic work in the *Ohio State University Law Review*. My published research uses a variety of analytical approaches, including statistics, geographic analysis, and simulations, and data sources including academic surveys, precinct-level election results, voter registration and vote history files, and census data. My curriculum vitae is attached to this report.
3. I have served as an expert witness or litigation consultant on numerous cases involving voting restrictions. I testified at trial, court hearing, or by deposition in *Bethune Hill v. Virginia* before the U.S. District Court for the Eastern District of Virginia (No. 3:14-cv-00852-REP-AWA-BMK); *Thomas v. Bryant* before the U.S. District Court for the Southern District of Mississippi (No. 3:18-CV-00441-CWR-FKB); *Chestnut v. Merrill* before the U.S. District Court for the Northern District of Alabama (No. 2:18-cv-00907-KOB); *Dwight v. Raffensperger* before the U.S. District Court for the Northern District of Georgia (No. 1:18-cv-2869-RWS); *Bruni v. Hughs* before the U.S. District Court for the Southern District of Texas (No. 5:20-cv-35); *Caster v. Merrill* before the U.S. District Court for the Northern District of Alabama (No. 2:21-cv-1536-AMM); *Pendergrass v. Raffensperger* before the U.S. District Court for the Northern District of Georgia (No. 1:21-CV-05339-SCJ); *Grant v. Raffensperger* before the U.S. District Court for the Northern District of Georgia (No. 1:22-CV-00122-SCJ); and *Galmon v. Ardoin* before the U.S. District Court for the Middle District of Louisiana (3:22-cv-00214-SDD-SDJ). I also served as the independent racially polarized voting analyst for the Virginia Redistricting Commission in 2021, and I have worked as a consultant to the United State Department of Justice on several matters. My expert testimony has been accepted and relied upon by courts; in no case has my testimony been rejected or

found unreliable.

4. I am being compensated at a rate of \$350 per hour. No part of my compensation is dependent upon the conclusions that I reach or the opinions that I offer.
5. I testified in this matter in the preliminary injunction proceedings on February 10, 2022. I was accepted by the court as an expert in redistricting and data analysis.
6. I was retained by the plaintiffs in this litigation to offer an expert opinion on the extent to which voting is racially polarized in parts of Georgia. I was also asked to evaluate the performance of the new majority-minority districts in the plaintiffs' illustrative maps.
7. I find strong evidence of racially polarized voting across the areas of Georgia I examined. Black and White voters consistently support different candidates.
8. Black-preferred candidates are largely unable to win elections in the non-majority-Black districts in the the areas of Georgia I examined.
9. Under the plaintiffs' illustrative House and Senate maps, I find that Black-preferred candidates are generally able to win elections in all of the new majority-Black districts.

Data Sources and Elections Analyzed

10. For the purpose of my analysis, I examined elections across five different focus areas, based on the House and Senate maps adopted by the Georgia General Assembly in 2021.¹ Collectively, I refer to these areas as the "focus areas." Figure 1 maps the focus areas, and Figures 6–10 provide more detailed maps. These focus areas are defined as the areas from which the new majority-minority districts in the plaintiffs' illustrative maps are drawn.
11. There are three focus areas for the House plan:
 - *Black Belt*: House Districts 133, 142, 143, 145, 147, and 149. These districts include Bleckley, Crawford, Dodge, Twiggs, and Wilkinson Counties and parts of Baldwin, Bibb, Houston, Jones, Monroe, Peach, and Telfair Counties.
 - *Southern Atlanta*: House Districts 69, 74, 75, 78, 115, and 117. These districts include parts of Clayton, Fayette, Fulton, Henry, and Spalding Counties.
 - *Western Atlanta*: House Districts 61 and 64. These districts include parts of Douglas, Fulton, and Paulding Counties.
12. There are two focus areas for the Senate plan:
 - *Black Belt*: Senate Districts 22, 23, 24, 25, and 26. These districts include Baldwin, Burke, Butts, Columbia, Elbert, Emanuel, Glascock, Greene, Hancock, Hart, Jasper, Jefferson, Jenkins, Johnson, Jones, Lincoln, Mcduffie, Oglethorpe, Putnam, Richmond,

¹Shape files and demographic data on each plan were downloaded from the website of the Georgia General Assembly's Legislative and Congressional Reapportionment Office (House Bill 1EX and Senate Bill 1EX).

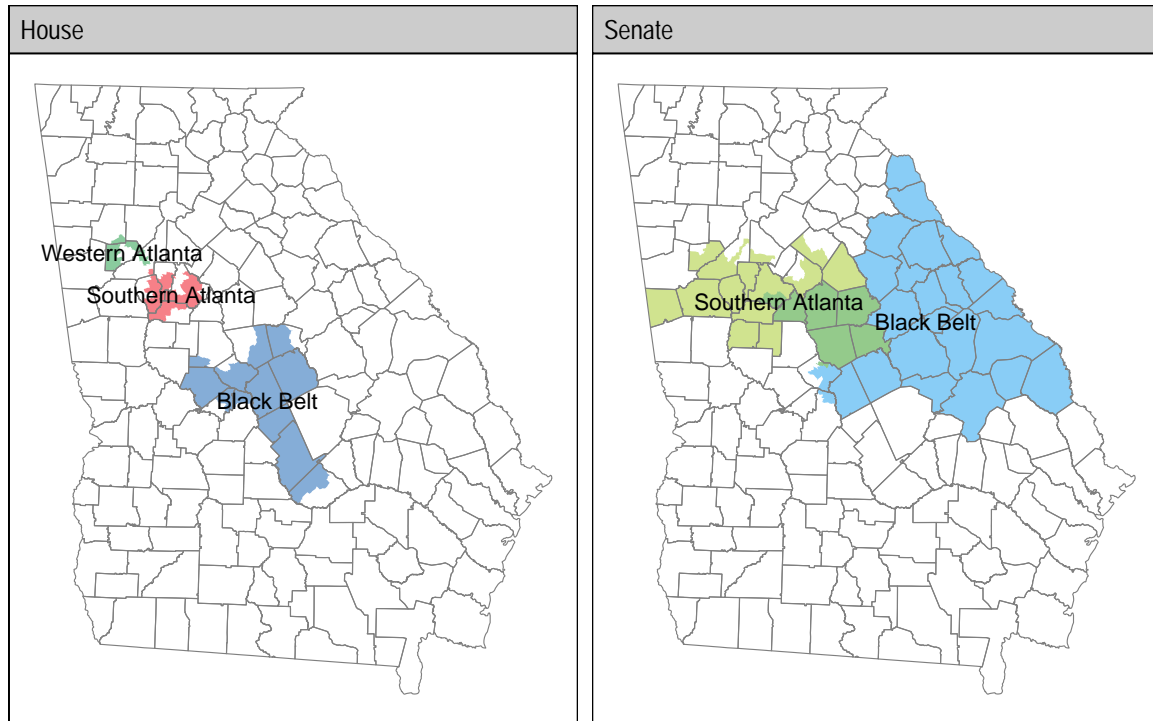


Figure 1: Maps of the Focus Areas

Screven, Taliaferro, Twiggs, Warren, Washington, Wilkes, and Wilkinson Counties and parts of Bibb, Henry, and Houston Counties.

- *Southern Atlanta*: Senate Districts 10, 16, 17, 25, 28, 34, 35, 39, and 44.² These districts include Baldwin, Butts, Clayton, Coweta, Fayette, Heard, Jasper, Jones, Lamar, Morgan, Pike, Putnam, and Spalding Counties and parts of Bibb, DeKalb, Douglas, Fulton, Henry, Newton, and Walton Counties.
13. To analyze racially polarized voting, I relied on precinct-level election results and voter turnout by race, compiled by the state of Georgia. The data includes the racial breakdown of registrants and voters in each precinct, based on registrants' self-identified race when registering to vote. Data for the 2012, 2014, 2016, and 2018 general elections was provided to counsel by the Georgia Secretary of State in a prior case.³ Data on turnout by race for the 2020 general election and the 2018 and 2021 runoff elections was retrieved from the website of the Georgia Secretary of State.⁴ Data on turnout by race for the 2022 general election was provided to counsel by the Georgia Secretary of State, and 2022 precinct-level election results were downloaded from the the website of the Georgia Secretary of State.⁵ Precinct-level election results for the 2018,⁶ 2020, and

²Senate District 25 is included in both Senate focus areas.

³*Dwight v. Raffensperger* (No. 1:18-cv-2869-RWS).

⁴<https://sos.ga.gov/index.php/Elections>.

⁵<https://results.enr.clarityelections.com/GA/115465/web.307039/#/summary>.

⁶Voting and Election Science Team, 2019, "2018 Precinct-Level Election Results", <https://doi.org/10.>

2021⁷ elections was assembled by the Voting and Election Science Team, an academic group that provides precinct-level data for U.S. Elections, based on data from the Secretary of State.^{8,9} Precinct shape files for 2012 through 2020 were downloaded from the Georgia General Assembly’s Legislative and Congressional Reapportionment Office.¹⁰

14. The state of Georgia provides six options for race and ethnicity on the voter registration form: Black, White, Hispanic/Latino, Asian/Pacific Islander, American Indian, and Other.¹¹ I combined Hispanic/Latino, Asian/Pacific Islander and American Indian into the “Other” category.

Racially Polarized Voting Analysis

15. In analyzing racially polarized voting in each election, I used a statistical procedure, ecological inference (EI), that estimates group-level preferences based on aggregate data. I analyzed the results for three racial demographic groups: Non-Hispanic Black, Non-Hispanic White, and Other, based on the voters’ self-identified race in the voter registration database. I excluded third-party and write-in candidates, and analyzed votes for the two major-party candidates in each election. The results of this analysis are estimates of the percentage of each group that voted for the candidate from each party in each election. The results include both a mean estimate (the most likely vote share) and a 95% confidence interval.¹²
16. Interpreting the results of the ecological inference models proceeds in two general stages. First, I examined the support for each candidate by each demographic group to determine if members of the group vote cohesively in support of a single candidate in each election. When a significant majority of the group supports a single candidate, I can then identify that candidate as the group’s candidate of choice. If the group’s support is roughly evenly divided between the two candidates, then the group does not cohesively support a single candidate and does not have a clear preference. Second, after identifying the preferred candidate for each group (or the lack of such a candidate), I compared the preferences of White voters to the preferences of Black voters. Evidence of

7910/DVN/UBKYRU, Harvard Dataverse, V47; ga_2018.zip.

⁷Voting and Election Science Team, 2020, “2020 Precinct-Level Election Results”, <https://doi.org/10.7910/DVN/K7760H>, Harvard Dataverse, V21; ga_2020.zip. Note that the 2020 election results file includes the 2021 runoff election results as well.

⁸The election results provided by VEST are the same as the precinct-level data available on the website of the Georgia Secretary of State. However, VEST provides the data in a more convenient format.

⁹As of December 12, 2022, precinct-level voter turnout data for the 2022 runoff election was not available.

¹⁰<https://www.legis.ga.gov/joint-office/reapportionment>.

¹¹https://sos.ga.gov/admin/files/GA_VR_APP_2019.pdf.

¹²The 95% confidence interval is a measure of uncertainty in the estimates from the model. For example, the model might estimate that 94% of the members of a group voted for a particular candidate, with a 95% confidence interval of 91-96%. This means that based on the data and the model assumptions, 95% of the simulated estimates for this group fall in the range of 91-96%, with 94% being the average value. Larger confidence intervals reflect a higher degree of uncertainty in the estimates, while smaller confidence intervals reflect less uncertainty.

racially polarized voting is found when Black voters and White voters support different candidates.

17. Figure 2 presents the estimates of support for the Black-preferred candidate for Black and White voters for all 40 electoral contests from 2012 to 2020 across the five focus areas. Here, I present only the estimates and confidence intervals, and exclude individual election labels. Full results for each election are presented in Tables 2-6. In each panel, the dots correspond to an estimate in a particular election, and the gray vertical lines behind each dot are the 95% confidence intervals for the estimate.¹³
18. Examining Figure 2, the estimates for support for Black-preferred candidates by Black voters across are all significantly above 50% across the five focus areas. 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

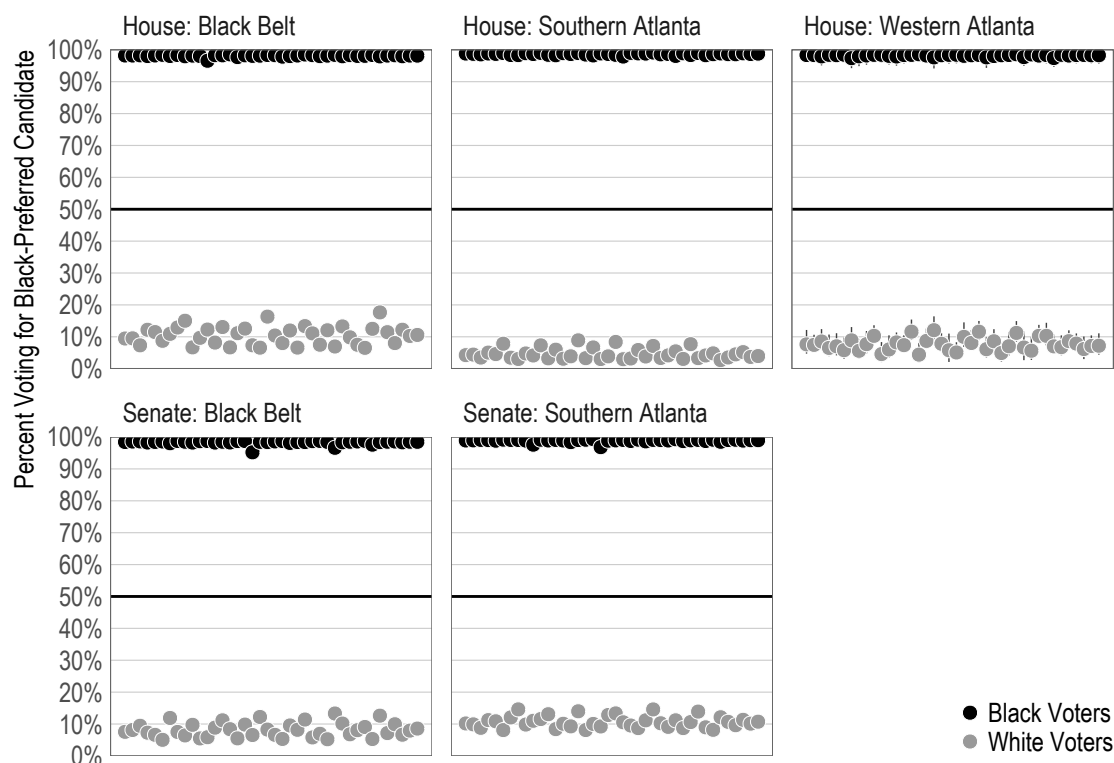


Figure 2: Racially Polarized Voting Estimates by Race — Focus Area

¹³In some cases the lines for the confidence intervals are not visible behind the dots because they are relatively small.

Table 1: Average Support for Black-Preferred Candidates by Voters' Race

	Focus Area	Black Voters	White Voters
House	Black Belt	98.1%	10.4%
	Southern Atlanta	98.7%	4.6%
	Western Atlanta	98.2%	7.7%
Senate	Black Belt	98.4%	8.2%
	Southern Atlanta	98.9%	10.7%

a maximum of 17.7% of the vote. This is strong evidence of racially polarized voting across all five focus areas.

19. There is also strong evidence of racially polarized voting within the districts comprising the five focus areas. I estimated ecological inference models for each election for every district in the focus areas with fifteen or more precincts.¹⁴ Figure 3 plots the average ecological inference across the 40 statewide elections analyzed.¹⁵ There is consistent evidence of racially polarized voting in every House district analyzed, and in 12 of the 14 Senate districts. Voting is generally less polarized in Senate District 44, and not polarized in Senate District 39.

¹⁴House Districts 64, 75, 78, 115, 117, 142, 143, and 147 do not have at least fifteen precincts for every election, and are excluded from the analysis.

¹⁵Table 7 presents the numerical results for Figure 3. Due to the large number of ecological inference models estimates (20 districts \times 40 elections = 800 models), I do not provide results for each separate election here. In Figure 3 and Table 7 I present results averaging across the 40 elections.

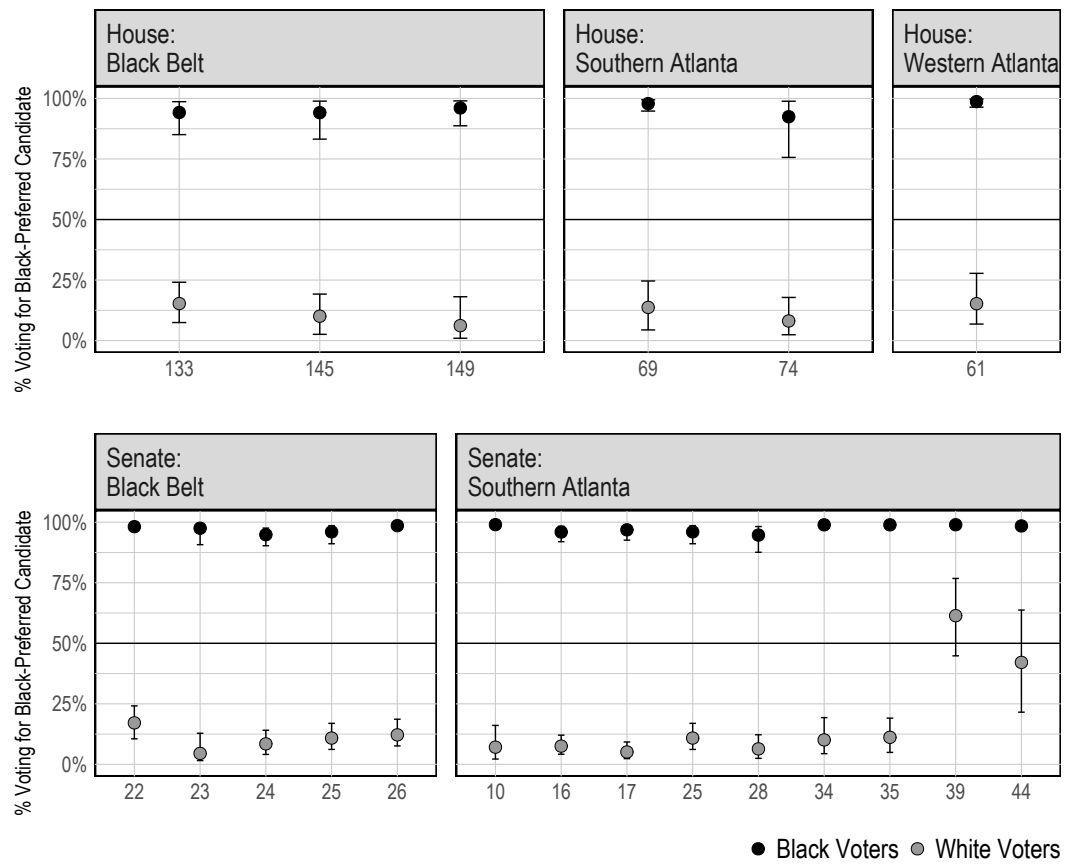


Figure 3: Average Racially Polarized Voting Estimates by District

Performance of Black-Preferred Candidates in the Focus Area

20. Having identified the Black-preferred candidate in each election, I now turn to their ability to win elections in these districts. Table 8 presents the results for each election in the focus areas and districts. For each election, I calculate the vote share obtained by the Black-preferred candidate.¹⁶ Black-preferred candidates are able to win elections in the Southern Atlanta and Western Atlanta focus areas for the House districts. However, they are only able to do so due to the high support for Black-preferred candidates in the majority-Black districts.
21. Figure 4 plots the average share of the vote received by the Black-preferred candidate across each district. The solid black circles indicate majority-Black districts, and the gray circles indicate non-majority-Black districts. Black-preferred candidates win almost every election in the majority-Black districts, but lose almost every election in the non-majority-Black districts.

¹⁶Winning elections in Georgia requires a majority of the vote rather than a plurality of the vote (the threshold in most of the states). In this table and following sections analyzing election results I present vote shares as percentages of the two-party vote (excluding third party and independent candidates).

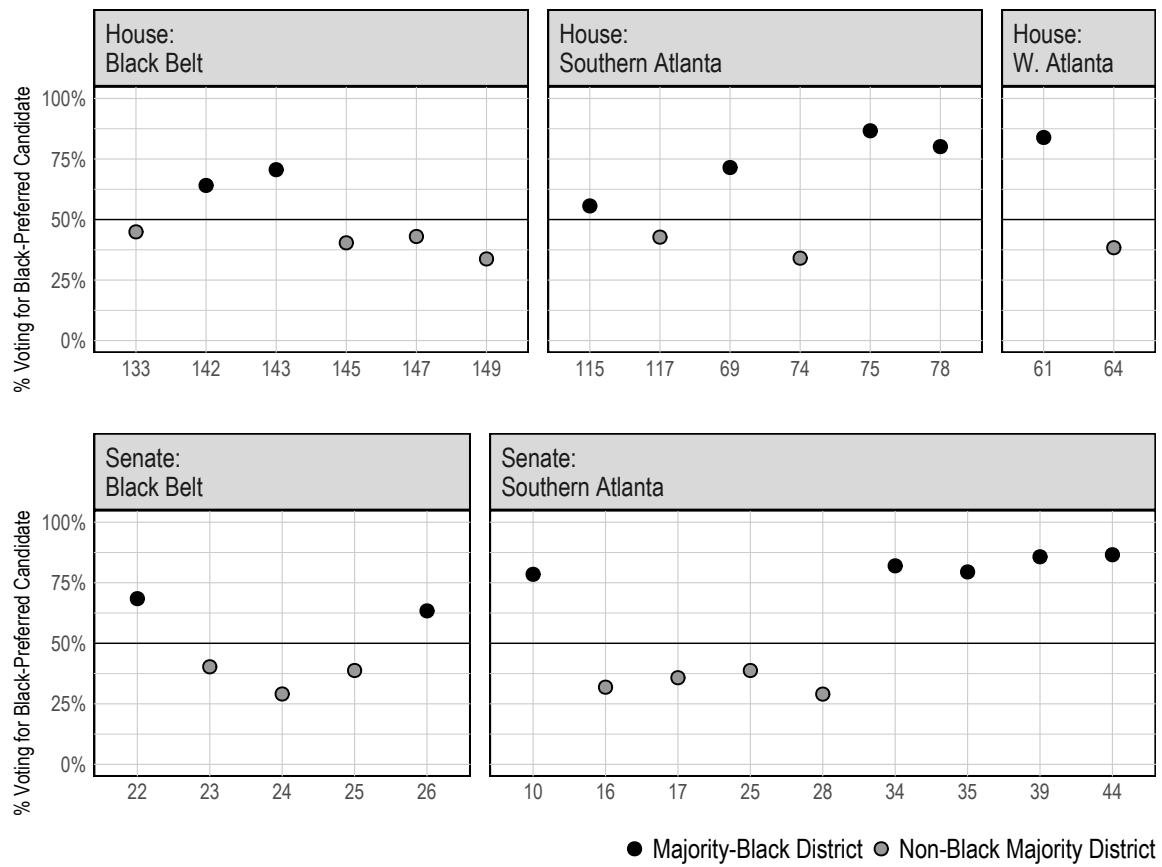


Figure 4: Average Performance of Black-Preferred Candidates by District

Performance of the New Majority-Black Districts in the Illustrative Maps

22. I also analyzed the performance of Black-preferred candidates in the new majority-Black districts in the plaintiffs' illustrative maps by calculating the percentage of the vote won by the Black-preferred candidates across the 31 statewide races from 2012 through 2021 for each district.
23. To perform this analysis, I used geographic data on the boundaries of the voting precincts in each year and the boundaries of the districts in the illustrative maps to determine which voting precincts would be located in each district. Then, I aggregated the election results for each contest for all of the precincts in each district to find the estimated vote shares of candidates in each contest. I was not able to include the 2022 elections in this analysis because, as of December 12, 2022, precinct boundary data for the 2022 voting precincts was not available.
24. Figure 5 presents the results of this analysis. In House Districts 64, 74, and 149, and Senate Districts 23, 25, and 28, the Black-preferred candidate won a larger share of the vote in all 40 statewide elections. In House District 117, the Black-preferred candidate won all 19 elections since 2018. In House District 145, the Black-preferred candidate won all 19 elections since 2018, and 27 of the 31 elections overall. Table 9 provides the full results.
25. Under the plaintiffs' illustrative maps, the majority-Black districts in the focus areas under the adopted maps for the House and Senate continue to perform for Black-preferred candidates with similar or higher vote shares.

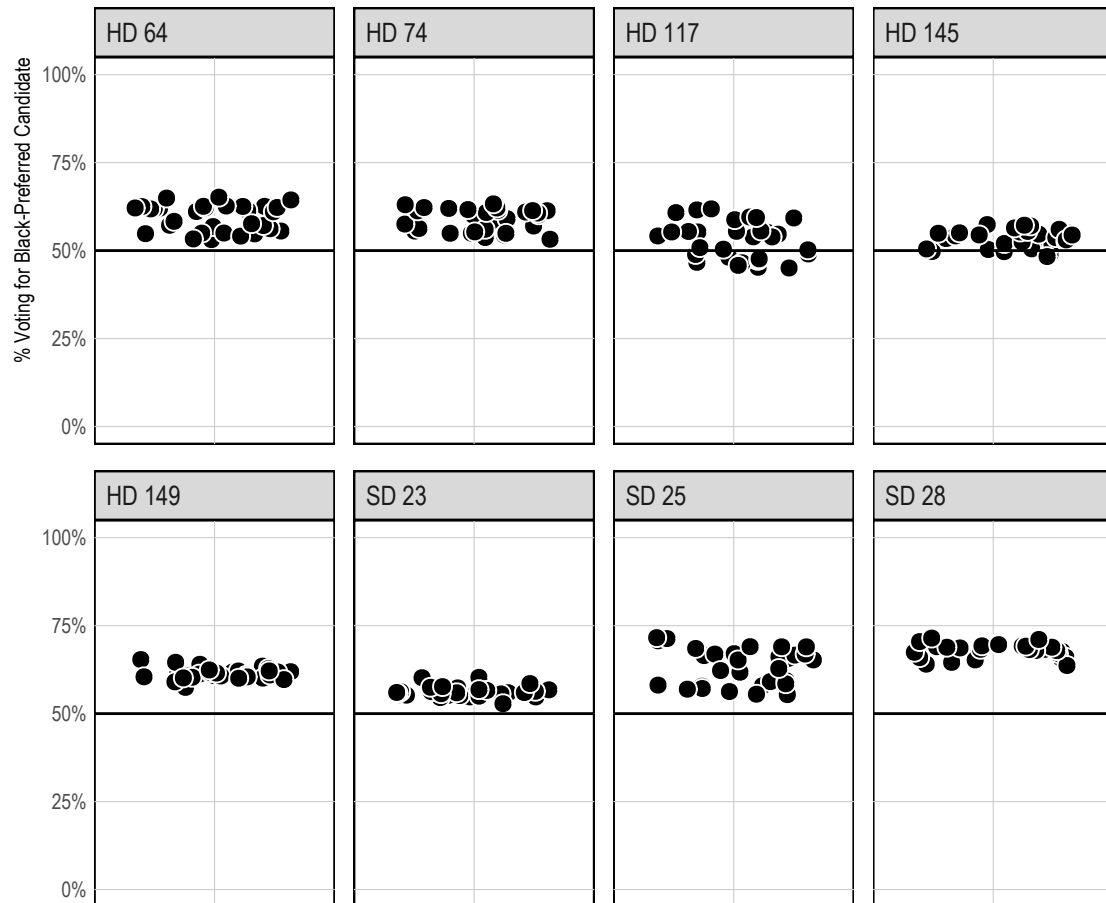


Figure 5: Vote Shares of Black-Preferred Candidates in Under the Illustrative Maps

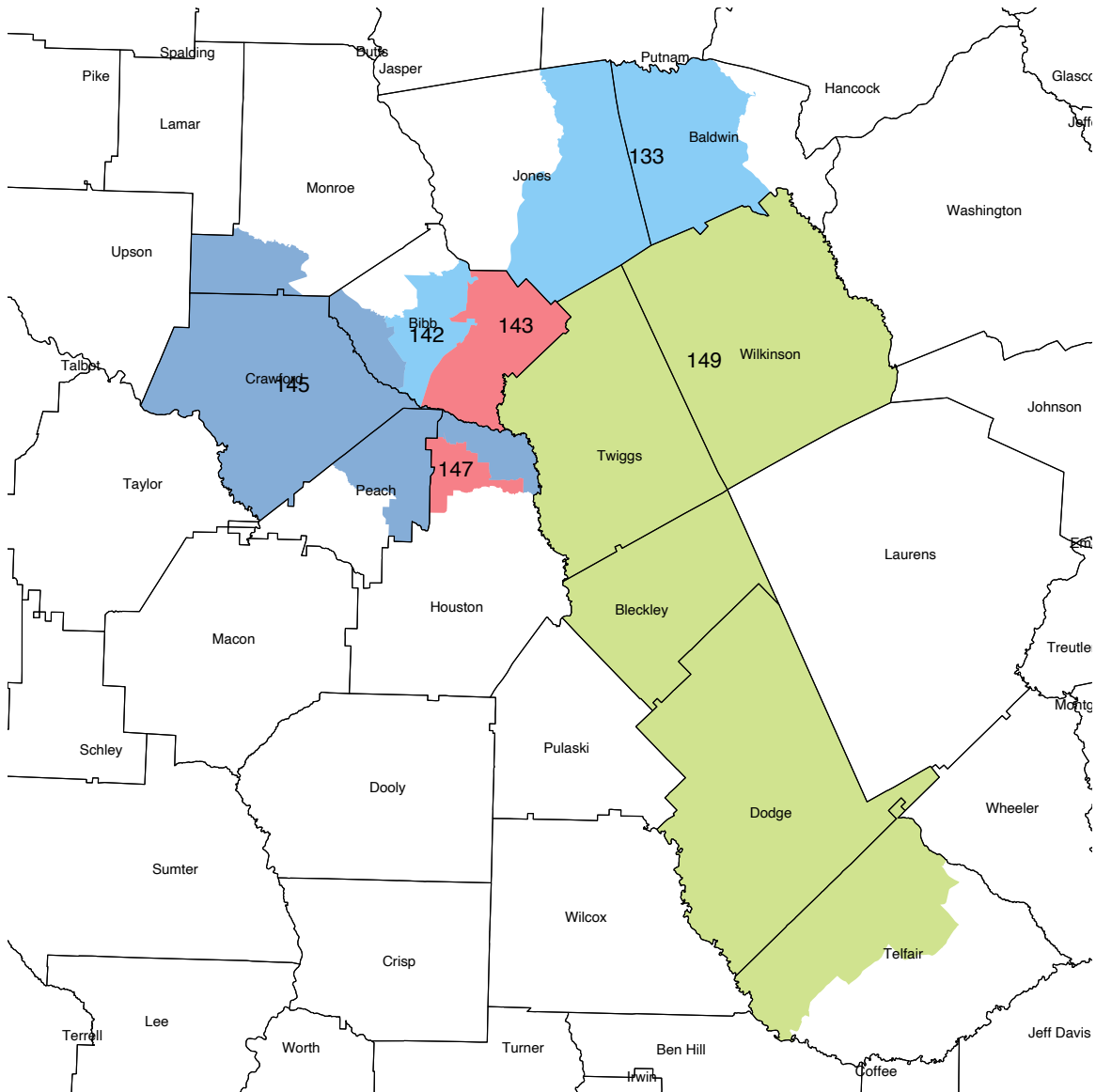


Figure 6: House Black Belt Focus Area

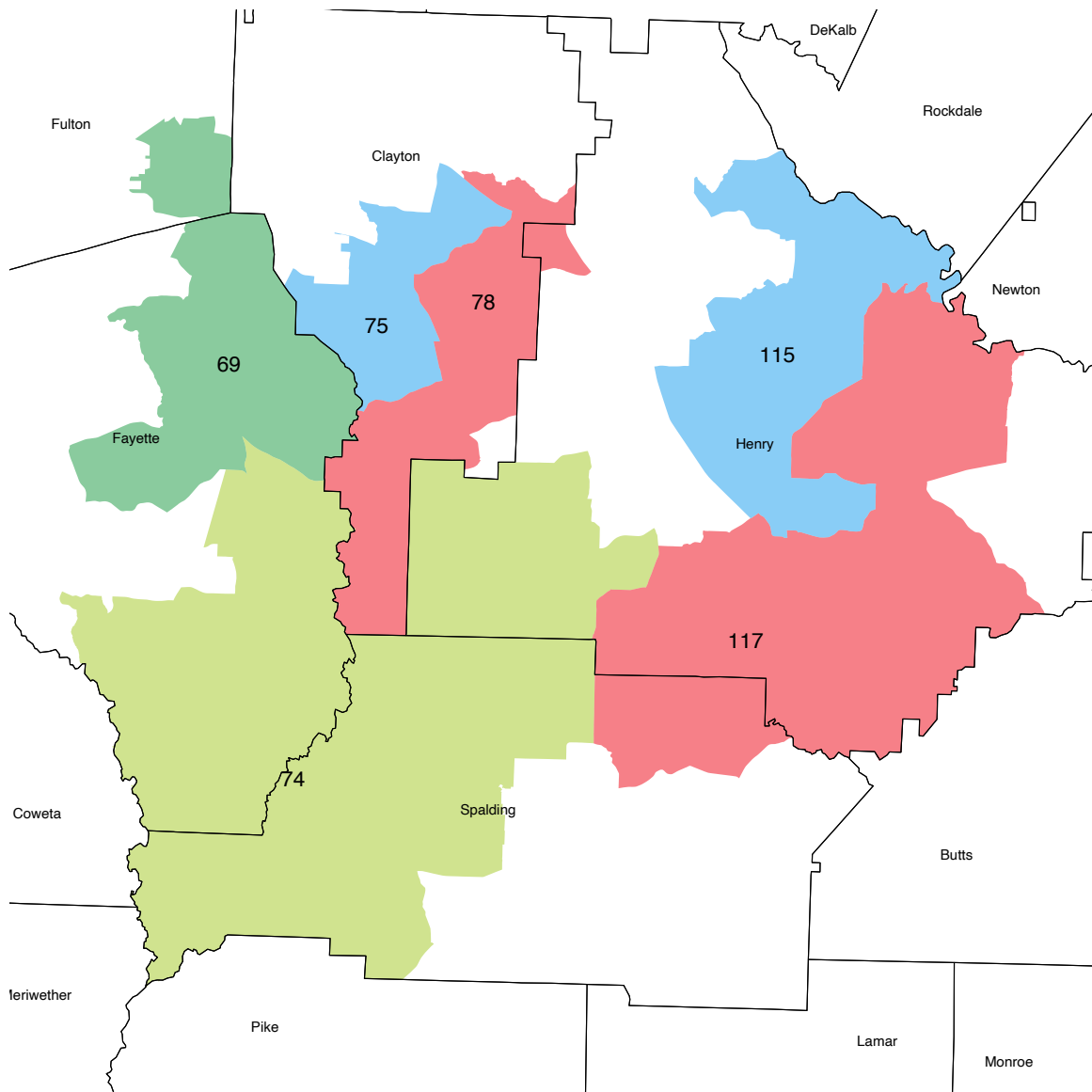


Figure 7: House Southern Atlanta Focus Area

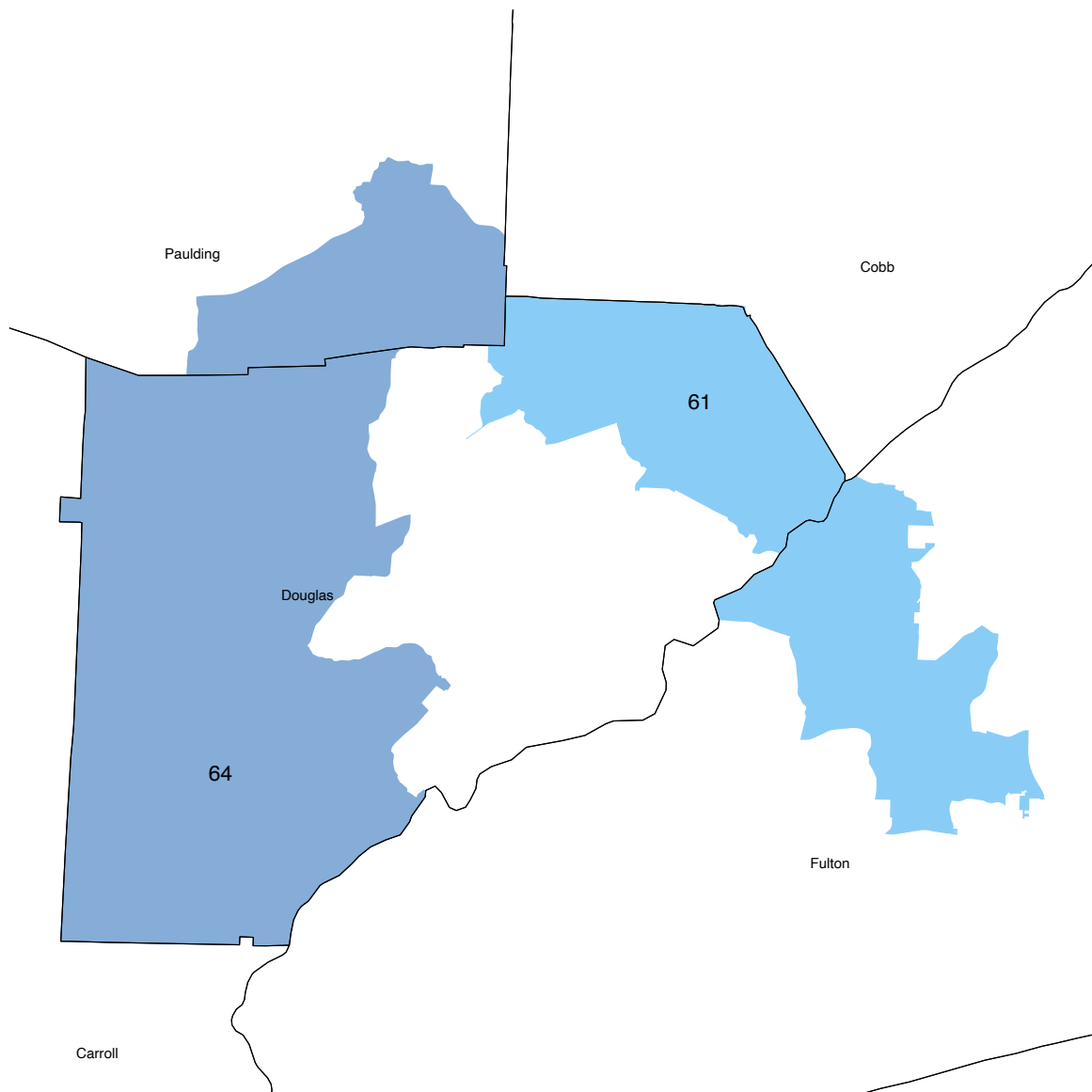


Figure 8: House Western Atlanta Focus Area

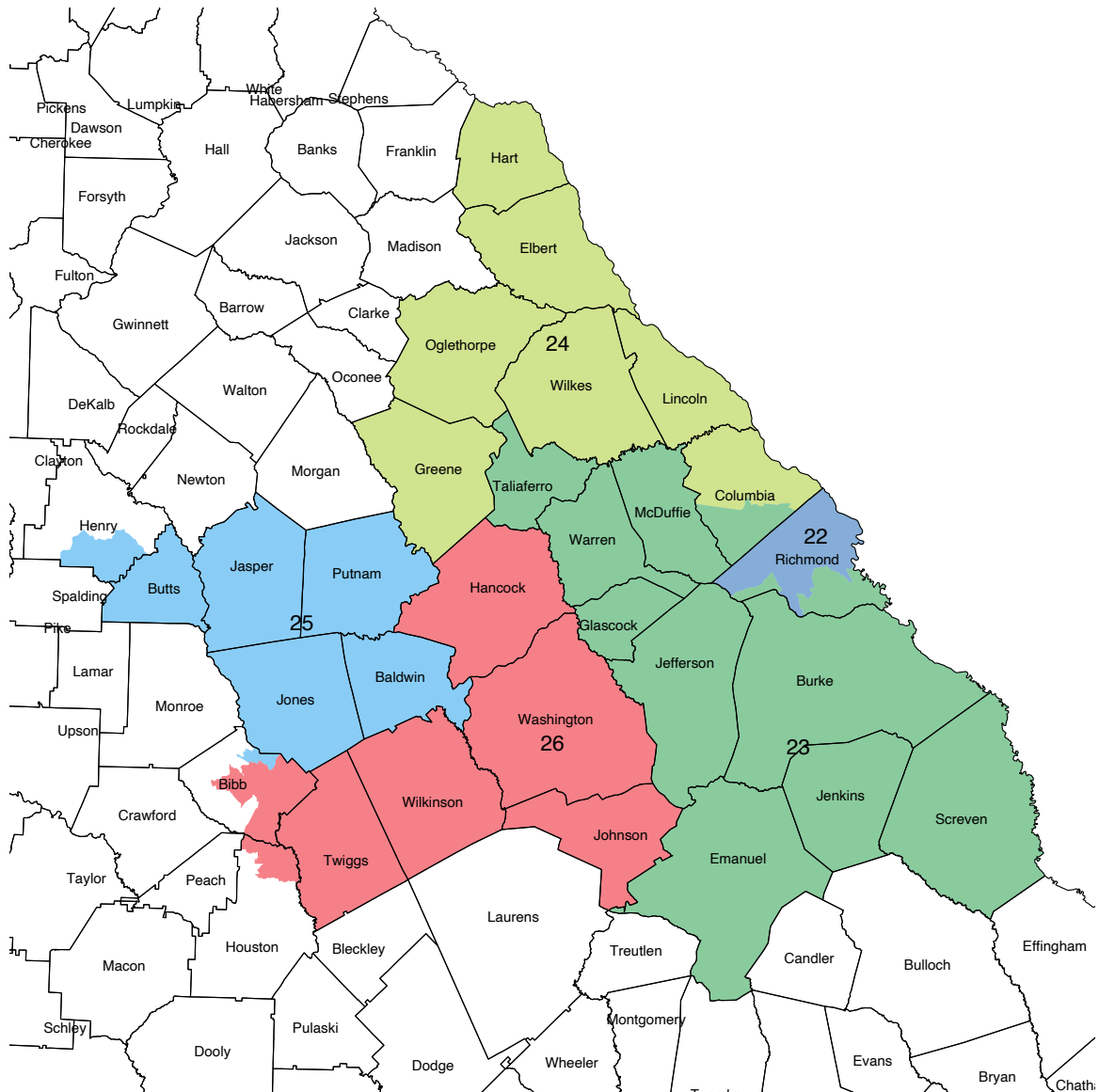


Figure 9: Senate Black Belt Focus Area

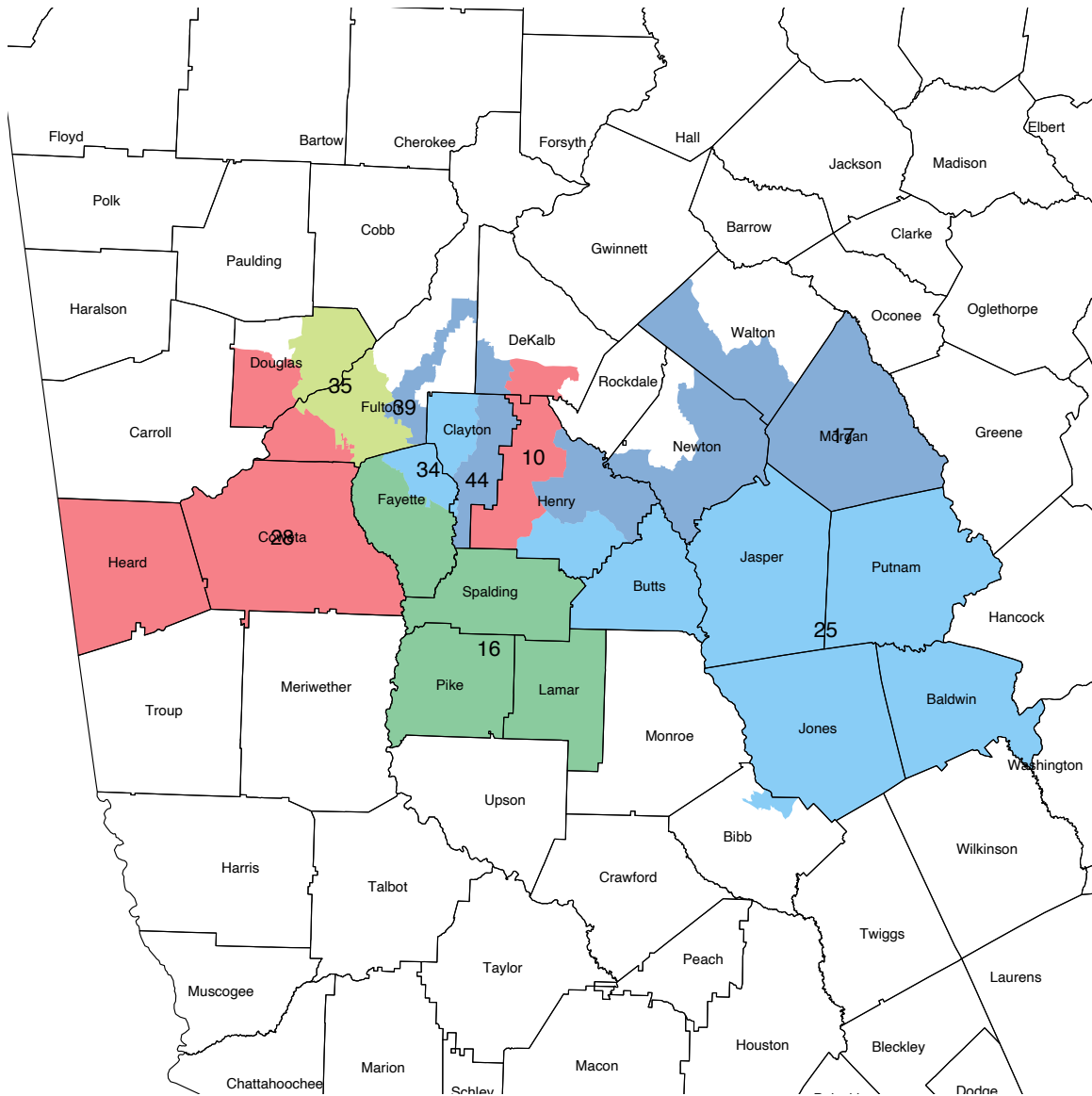


Figure 10: Senate Southern Atlanta Focus Area

Table 2: Ecological Inference Results — Estimated Vote Share of Black-Preferred Candidates
— House: Black Belt

		Black	White	Other
2012 General	U.S. President*	98.4% (97.3, 99.1)	13.1% (12.2, 14.2)	89.2% (78.7, 95.2)
2014 General	U.S. Senator	98.0% (96.8, 98.9)	16.3% (15.2, 17.7)	79.8% (61.5, 91.8)
	Governor	98.0% (96.7, 98.9)	17.7% (16.4, 19.2)	74.5% (49.0, 90.5)
	Lt. Governor*	97.7% (96.5, 98.6)	11.1% (9.8, 12.6)	63.7% (39.0, 84.6)
	Sec. of State*	98.0% (96.7, 98.8)	11.5% (10.3, 12.9)	73.2% (49.6, 90.6)
	Attorney General	97.8% (96.6, 98.7)	12.9% (11.6, 14.4)	72.5% (50.0, 90.0)
	Com. Agriculture	97.9% (96.7, 98.8)	12.2% (10.9, 13.9)	59.6% (32.7, 82.7)
	Com. Insurance*	98.3% (97.2, 99.1)	12.0% (11.0, 13.5)	78.4% (54.7, 91.6)
	Com. Labor*	98.1% (96.9, 99.0)	12.3% (11.2, 13.6)	76.8% (53.1, 89.8)
	School Super.*	98.1% (97.0, 98.9)	15.0% (13.9, 16.5)	80.1% (54.3, 92.8)
2016 General	U.S. President	98.2% (96.9, 99.1)	11.5% (10.4, 12.8)	89.5% (79.0, 95.9)
	U.S. Senator	96.6% (95.0, 97.7)	7.0% (5.7, 8.5)	76.8% (59.1, 89.2)
2018 General	Governor*	98.6% (97.6, 99.3)	9.5% (8.7, 10.6)	93.0% (86.5, 97.1)
	Lt. Governor	98.3% (97.2, 99.1)	9.8% (8.8, 11.1)	90.1% (82.4, 95.6)
	Sec. of State	98.3% (97.2, 99.2)	13.3% (12.2, 14.6)	89.6% (80.5, 95.5)
	Attorney General	98.2% (96.9, 99.0)	10.6% (9.4, 12.0)	87.9% (76.4, 95.0)
	Com. Agriculture	98.3% (97.2, 99.0)	7.3% (6.3, 8.6)	86.9% (76.1, 95.0)
	Com. Insurance*	98.5% (97.3, 99.3)	8.7% (7.8, 10.0)	90.1% (82.0, 95.5)
	Com. Labor	98.4% (97.3, 99.1)	8.0% (7.2, 9.1)	92.2% (85.5, 96.7)
	School Super.*	98.4% (97.3, 99.2)	7.3% (6.4, 8.6)	91.0% (81.9, 96.4)
	Public Serv. Com. 3	98.2% (96.9, 99.1)	11.1% (10.0, 12.4)	89.1% (81.5, 94.9)
	Public Serv. Com. 5	98.3% (97.0, 99.1)	9.7% (8.7, 11.0)	90.1% (82.5, 95.8)
2018 Runoff	Sec. of State	98.1% (96.8, 99.0)	13.4% (12.2, 14.7)	85.6% (72.7, 94.0)
	Public Serv. Com. 3	98.0% (96.7, 99.0)	12.5% (11.3, 13.9)	86.4% (71.3, 95.2)
2020 General	U.S. President	98.4% (97.3, 99.1)	10.9% (9.9, 12.3)	90.6% (82.0, 95.8)
	U.S. Senator	98.0% (96.7, 98.9)	10.3% (9.1, 11.8)	88.4% (79.3, 94.9)
	Public Serv. Com. 1*	98.4% (97.2, 99.2)	8.0% (7.2, 9.1)	94.5% (89.9, 97.7)
	Public Serv. Com. 4*	98.3% (96.9, 99.2)	9.5% (8.3, 10.9)	90.2% (82.1, 95.4)
2021 Runoff	U.S. Senator (Perdue)	98.3% (97.1, 99.1)	12.0% (11.0, 13.2)	93.9% (88.5, 97.6)
	U.S. Senator (Loeffler)*	98.2% (97.0, 99.1)	12.6% (11.6, 13.8)	93.3% (87.1, 97.2)
	Public Serv. Com. 4*	98.2% (96.9, 99.1)	10.4% (9.5, 11.6)	94.3% (89.3, 97.4)
2022 General	U.S. Senator*	98.2% (96.8, 99.1)	12.2% (11.2, 13.5)	92.5% (86.2, 96.7)
	Governor*	98.3% (97.1, 99.1)	6.6% (5.8, 7.8)	91.4% (84.7, 96.4)
	Lt. Governor	98.2% (97.0, 99.1)	7.5% (6.6, 8.7)	91.0% (83.3, 95.8)
	Sec. of State	98.0% (96.8, 98.9)	6.6% (5.4, 8.1)	83.9% (74.5, 92.4)
	Attorney General	98.2% (96.8, 99.0)	8.2% (7.3, 9.4)	93.6% (88.4, 96.9)
	Com. Agriculture*	98.2% (96.9, 99.0)	6.7% (5.8, 7.9)	90.7% (83.7, 95.4)
	Com. Insurance*	98.1% (96.8, 99.0)	6.7% (5.8, 7.9)	92.4% (86.1, 96.5)
	Com. Labor*	98.2% (96.9, 99.1)	7.5% (6.6, 8.8)	90.7% (83.5, 95.7)
	School Super.*	98.0% (96.7, 98.9)	6.5% (5.6, 7.7)	90.9% (84.1, 95.7)

* Indicates that the Black candidate of choice was Black.

Table 3: Ecological Inference Results — Estimated Vote Share of Black-Preferred Candidates
— House: Southern Atlanta

		Black	White	Other
2012 General	U.S. President*	99.1% (98.5, 99.6)	3.7% (2.9, 4.6)	96.1% (93.5, 97.8)
2014 General	U.S. Senator	98.8% (98.0, 99.4)	6.7% (5.7, 7.8)	95.4% (92.2, 97.6)
	Governor	98.7% (97.9, 99.2)	7.1% (5.9, 8.7)	91.4% (84.9, 95.8)
	Lt. Governor*	98.3% (97.2, 99.0)	3.0% (2.1, 4.3)	77.6% (70.3, 84.6)
	Sec. of State*	98.4% (97.5, 99.1)	3.2% (2.3, 4.6)	83.6% (76.5, 89.8)
	Attorney General	98.2% (97.3, 98.9)	5.4% (4.1, 7.4)	89.2% (79.1, 94.7)
	Com. Agriculture	97.9% (96.7, 98.8)	3.1% (2.1, 4.4)	77.3% (69.1, 85.3)
	Com. Insurance*	98.3% (97.5, 99.0)	2.7% (2.0, 3.6)	90.3% (85.2, 94.6)
	Com. Labor*	98.6% (97.8, 99.2)	3.1% (2.2, 4.5)	88.2% (81.6, 93.5)
	School Super.*	99.0% (98.4, 99.4)	4.5% (3.4, 5.8)	92.3% (86.6, 96.0)
2016 General	U.S. President	98.9% (98.2, 99.4)	4.6% (3.6, 5.8)	94.6% (91.1, 97.0)
	U.S. Senator	98.3% (97.5, 99.0)	3.1% (1.9, 4.7)	74.9% (68.7, 80.4)
2018 General	Governor*	99.0% (98.3, 99.5)	4.4% (3.4, 5.6)	96.4% (94.3, 97.9)
	Lt. Governor	98.7% (98.0, 99.2)	3.9% (3.0, 5.1)	95.2% (91.9, 97.5)
	Sec. of State	98.9% (98.3, 99.4)	4.8% (3.8, 6.0)	95.3% (92.3, 97.5)
	Attorney General	98.9% (98.1, 99.4)	4.8% (3.7, 6.2)	93.4% (89.2, 96.3)
	Com. Agriculture	98.7% (97.9, 99.3)	3.3% (2.3, 4.6)	88.6% (83.8, 92.7)
	Com. Insurance*	98.9% (98.2, 99.3)	3.9% (2.9, 5.2)	94.8% (91.8, 97.1)
	Com. Labor	98.5% (97.7, 99.1)	3.5% (2.5, 4.7)	91.8% (87.9, 95.3)
	School Super.*	99.0% (98.4, 99.4)	3.0% (2.1, 4.2)	87.9% (84.0, 91.2)
	Public Serv. Com. 3	98.9% (98.2, 99.4)	5.0% (4.0, 6.4)	94.8% (91.5, 97.0)
	Public Serv. Com. 5	99.0% (98.4, 99.4)	3.8% (2.8, 5.1)	94.6% (91.2, 96.9)
2018 Runoff	Sec. of State	98.8% (98.0, 99.3)	5.9% (4.7, 7.3)	94.5% (89.9, 97.3)
	Public Serv. Com. 3	98.7% (97.9, 99.3)	7.7% (6.4, 9.3)	94.3% (89.3, 97.4)
2020 General	U.S. President	98.6% (97.8, 99.2)	8.4% (6.4, 10.7)	86.6% (80.9, 92.1)
	U.S. Senator	98.6% (97.9, 99.2)	6.0% (4.6, 7.7)	91.4% (87.0, 94.9)
	Public Serv. Com. 1*	98.3% (97.4, 99.0)	4.1% (3.0, 5.6)	92.1% (88.0, 95.6)
	Public Serv. Com. 4*	98.7% (98.0, 99.3)	4.1% (3.1, 5.6)	93.7% (90.4, 96.3)
2021 Runoff	U.S. Senator (Perdue)	98.9% (98.3, 99.4)	7.3% (6.2, 8.6)	95.9% (93.3, 97.8)
	U.S. Senator (Loeffler)*	99.0% (98.4, 99.5)	7.8% (6.8, 9.2)	96.2% (93.7, 98.0)
	Public Serv. Com. 4*	98.9% (98.2, 99.3)	5.2% (4.2, 6.4)	96.2% (94.1, 97.9)
2022 General	U.S. Senator*	98.8% (98.1, 99.3)	8.9% (7.7, 10.3)	96.3% (93.6, 98.1)
	Governor*	98.8% (98.1, 99.3)	3.2% (2.3, 4.3)	89.8% (86.8, 92.7)
	Lt. Governor	98.6% (97.8, 99.2)	4.2% (3.3, 5.4)	94.0% (90.8, 96.6)
	Sec. of State	98.1% (96.9, 98.9)	4.0% (2.6, 5.7)	83.0% (78.1, 88.3)
	Attorney General	98.7% (98.0, 99.2)	4.2% (3.0, 5.7)	92.3% (88.4, 95.4)
	Com. Agriculture*	98.7% (97.9, 99.2)	3.3% (2.3, 4.5)	89.5% (86.1, 92.7)
	Com. Insurance*	98.4% (97.6, 99.1)	3.4% (2.3, 4.7)	89.4% (85.7, 92.9)
	Com. Labor*	98.6% (97.8, 99.2)	3.5% (2.6, 4.7)	93.1% (89.6, 96.3)
	School Super.*	98.4% (97.5, 99.1)	3.5% (2.4, 5.1)	88.8% (84.6, 92.8)

* Indicates that the Black candidate of choice was Black.

Table 4: Ecological Inference Results — Estimated Vote Share of Black-Preferred Candidates
— House: Western Atlanta

		Black	White	Other
2012 General	U.S. President*	98.4% (95.7, 99.6)	7.5% (5.4, 10.6)	92.1% (83.4, 97.5)
2014 General	U.S. Senator	98.1% (95.4, 99.5)	10.3% (7.9, 13.6)	90.2% (80.4, 96.6)
	Governor	97.9% (95.0, 99.5)	11.6% (9.0, 15.0)	81.6% (69.6, 92.0)
	Lt. Governor*	97.7% (94.9, 99.4)	5.6% (3.0, 9.2)	75.3% (61.1, 88.7)
	Sec. of State*	98.2% (95.3, 99.6)	5.8% (3.1, 9.7)	77.6% (63.6, 89.6)
	Attorney General	97.6% (94.1, 99.4)	7.7% (4.8, 11.8)	79.4% (65.7, 91.2)
	Com. Agriculture	97.4% (94.2, 99.1)	6.2% (3.0, 10.1)	70.6% (54.8, 85.5)
	Com. Insurance*	97.6% (94.3, 99.4)	7.0% (4.1, 11.5)	80.0% (65.9, 90.9)
	Com. Labor*	97.9% (95.1, 99.4)	6.8% (4.2, 10.4)	82.3% (69.7, 93.0)
	School Super.*	97.9% (94.9, 99.5)	8.7% (6.2, 12.6)	88.4% (78.0, 96.3)
2016 General	U.S. President	98.3% (95.9, 99.5)	7.0% (4.7, 10.7)	91.4% (82.4, 96.8)
	U.S. Senator	97.4% (94.7, 99.2)	5.8% (2.1, 11.0)	75.4% (57.9, 90.3)
2018 General	Governor*	98.3% (95.8, 99.6)	8.5% (6.0, 12.4)	93.4% (86.0, 98.0)
	Lt. Governor	98.5% (96.6, 99.6)	7.8% (5.3, 11.1)	90.3% (81.6, 95.8)
	Sec. of State	98.4% (95.8, 99.6)	8.1% (5.7, 12.1)	92.5% (84.8, 97.3)
	Attorney General	98.2% (95.8, 99.4)	8.6% (6.2, 12.0)	89.3% (80.8, 95.2)
	Com. Agriculture	98.4% (95.9, 99.5)	6.0% (3.5, 10.5)	87.9% (78.2, 95.0)
	Com. Insurance*	98.2% (96.2, 99.4)	7.1% (4.9, 10.4)	93.5% (86.5, 97.9)
	Com. Labor	98.1% (95.5, 99.3)	6.5% (3.9, 10.7)	91.2% (83.1, 97.0)
	School Super.*	98.3% (96.1, 99.4)	6.1% (3.5, 9.9)	88.4% (78.6, 95.0)
	Public Serv. Com. 3	98.4% (95.8, 99.6)	8.9% (6.5, 13.1)	91.8% (83.7, 96.9)
	Public Serv. Com. 5	98.4% (96.3, 99.5)	7.4% (5.1, 10.5)	91.8% (84.0, 96.8)
2018 Runoff	Sec. of State	98.4% (96.2, 99.5)	8.2% (5.9, 11.4)	92.7% (84.5, 97.9)
	Public Serv. Com. 3	98.4% (96.1, 99.6)	10.3% (7.8, 13.7)	90.8% (82.0, 96.5)
2020 General	U.S. President	98.1% (95.8, 99.4)	10.3% (7.3, 14.4)	88.9% (79.4, 95.6)
	U.S. Senator	98.4% (95.7, 99.6)	10.0% (6.8, 14.5)	88.7% (79.1, 95.5)
	Public Serv. Com. 1*	98.3% (95.8, 99.5)	7.6% (4.7, 12.1)	89.9% (81.0, 96.1)
	Public Serv. Com. 4*	98.3% (96.0, 99.5)	8.6% (5.8, 12.4)	90.7% (82.4, 96.3)
2021 Runoff	U.S. Senator (Perdue)	98.4% (96.3, 99.6)	11.2% (8.5, 14.9)	93.0% (84.9, 97.6)
	U.S. Senator (Loeffler)*	98.3% (95.6, 99.6)	12.1% (9.2, 16.4)	93.3% (85.6, 98.0)
	Public Serv. Com. 4*	98.6% (96.5, 99.6)	7.9% (5.8, 11.1)	96.0% (90.9, 98.9)
2022 General	U.S. Senator*	98.4% (96.2, 99.6)	11.6% (9.0, 15.4)	95.2% (89.3, 98.5)
	Governor*	98.4% (96.5, 99.5)	4.6% (2.1, 8.3)	92.8% (85.5, 97.5)
	Lt. Governor	98.4% (96.3, 99.4)	7.2% (4.4, 11.1)	92.5% (85.1, 97.4)
	Sec. of State	98.3% (96.1, 99.4)	6.6% (2.7, 11.6)	79.7% (67.4, 89.8)
	Attorney General	98.3% (96.2, 99.4)	7.0% (4.2, 11.1)	91.7% (84.4, 97.0)
	Com. Agriculture*	98.6% (96.7, 99.5)	4.4% (2.0, 8.1)	92.7% (86.3, 97.1)
	Com. Insurance*	98.2% (96.2, 99.3)	5.6% (2.8, 10.0)	90.2% (82.0, 96.2)
	Com. Labor*	98.4% (96.7, 99.4)	5.1% (2.7, 8.3)	95.2% (89.3, 98.4)
	School Super.*	98.5% (96.7, 99.5)	4.9% (2.3, 8.6)	90.7% (83.0, 96.1)

* Indicates that the Black candidate of choice was Black.

Table 5: Ecological Inference Results — Estimated Vote Share of Black-Preferred Candidates
— Senate: Black Belt

		Black	White	Other
2012 General	U.S. President*	96.6% (96.0, 97.2)	11.4% (10.9, 12.0)	93.9% (91.0, 96.2)
2014 General	U.S. Senator	98.7% (98.3, 99.1)	12.6% (11.9, 13.5)	82.1% (72.5, 89.0)
	Governor	98.4% (97.8, 98.9)	13.3% (12.4, 14.4)	70.6% (57.1, 80.0)
	Lt. Governor*	98.3% (97.8, 98.8)	8.1% (7.4, 8.9)	71.0% (62.0, 79.0)
	Sec. of State*	98.5% (98.0, 98.9)	8.3% (7.5, 9.1)	73.5% (64.5, 82.5)
	Attorney General	98.5% (98.0, 98.9)	9.6% (8.7, 10.4)	66.9% (57.2, 77.0)
	Com. Agriculture	98.4% (97.9, 98.9)	8.6% (7.8, 9.3)	69.6% (60.8, 78.5)
	Com. Insurance*	98.6% (98.1, 99.0)	8.9% (8.2, 9.6)	78.0% (69.5, 85.6)
	Com. Labor*	98.5% (98.0, 98.9)	9.1% (8.4, 9.9)	73.3% (64.1, 80.9)
	School Super.*	98.6% (98.1, 99.0)	11.2% (10.5, 12.0)	83.2% (74.5, 89.6)
2016 General	U.S. President	98.8% (98.3, 99.1)	8.4% (7.9, 8.9)	92.8% (89.6, 95.4)
	U.S. Senator	95.2% (94.3, 96.1)	5.5% (4.9, 6.2)	84.8% (78.6, 90.1)
2018 General	Governor*	98.8% (98.3, 99.1)	7.5% (7.1, 8.0)	95.5% (93.5, 97.1)
	Lt. Governor	98.3% (97.7, 98.8)	7.3% (6.8, 7.8)	93.3% (89.9, 95.8)
	Sec. of State	98.6% (98.0, 99.0)	12.2% (11.7, 12.8)	93.8% (90.6, 96.1)
	Attorney General	98.5% (98.0, 98.9)	7.9% (7.5, 8.4)	92.9% (89.6, 95.5)
	Com. Agriculture	98.1% (97.4, 98.6)	5.9% (5.4, 6.4)	89.7% (85.1, 93.4)
	Com. Insurance*	98.7% (98.2, 99.0)	6.6% (6.1, 7.0)	92.9% (89.9, 95.1)
	Com. Labor	98.4% (97.9, 98.8)	6.6% (6.1, 7.1)	90.2% (86.2, 93.7)
	School Super.*	98.3% (97.8, 98.8)	6.4% (5.9, 7.0)	89.3% (84.5, 93.1)
	Public Serv. Com. 3	98.7% (98.3, 99.1)	7.6% (7.1, 8.1)	93.6% (90.3, 95.9)
	Public Serv. Com. 5	98.7% (98.2, 99.1)	7.2% (6.7, 7.7)	92.9% (89.9, 95.3)
2018 Runoff	Sec. of State	98.5% (97.9, 99.0)	11.9% (11.4, 12.5)	93.6% (90.1, 96.3)
	Public Serv. Com. 3	98.5% (97.9, 98.9)	9.8% (9.2, 10.4)	92.4% (87.7, 95.8)
2020 General	U.S. President	98.6% (98.1, 99.0)	9.5% (9.0, 10.0)	94.3% (91.6, 96.5)
	U.S. Senator	98.3% (97.7, 98.7)	8.1% (7.6, 8.6)	93.8% (90.7, 96.2)
	Public Serv. Com. 1*	98.4% (97.9, 98.9)	6.6% (6.2, 7.2)	93.9% (91.2, 96.1)
	Public Serv. Com. 4*	98.6% (98.1, 99.0)	6.9% (6.5, 7.4)	95.0% (92.6, 96.7)
2021 Runoff	U.S. Senator (Perdue)	98.8% (98.3, 99.2)	9.8% (9.4, 10.3)	95.8% (93.6, 97.5)
	U.S. Senator (Loeffler)*	98.7% (98.3, 99.1)	10.1% (9.7, 10.6)	95.9% (93.9, 97.3)
	Public Serv. Com. 4*	98.7% (98.3, 99.1)	8.2% (7.7, 8.7)	95.6% (93.4, 97.2)
2022 General	U.S. Senator*	98.6% (98.1, 99.0)	9.9% (9.5, 10.4)	95.9% (94.0, 97.3)
	Governor*	98.4% (97.9, 98.9)	5.5% (5.0, 6.1)	90.6% (87.0, 93.6)
	Lt. Governor	98.1% (97.5, 98.7)	6.6% (6.1, 7.2)	90.8% (87.7, 93.8)
	Sec. of State	97.6% (96.7, 98.3)	5.0% (4.5, 5.6)	86.8% (82.1, 90.8)
	Attorney General	98.5% (98.0, 98.9)	6.8% (6.3, 7.3)	92.8% (90.1, 95.1)
	Com. Agriculture*	98.5% (97.9, 99.0)	5.2% (4.8, 5.7)	91.0% (87.9, 93.5)
	Com. Insurance*	98.3% (97.7, 98.8)	5.3% (4.9, 5.8)	92.2% (88.9, 94.6)
	Com. Labor*	98.5% (98.0, 99.0)	5.8% (5.4, 6.3)	91.8% (88.5, 94.6)
	School Super.*	98.3% (97.7, 98.8)	5.3% (4.8, 6.0)	91.3% (86.8, 94.5)

* Indicates that the Black candidate of choice was Black.

Table 6: Ecological Inference Results — Estimated Vote Share of Black-Preferred Candidates
— Senate: Southern Atlanta

		Black	White	Other
2012 General	U.S. President*	99.3% (99.1, 99.5)	8.7% (8.4, 9.1)	95.7% (94.4, 96.7)
2014 General	U.S. Senator	99.2% (98.9, 99.4)	12.1% (11.7, 12.5)	95.1% (93.3, 96.6)
	Governor	98.9% (98.6, 99.2)	12.8% (12.3, 13.4)	87.9% (84.9, 90.9)
	Lt. Governor*	98.4% (97.9, 98.8)	8.2% (7.5, 8.8)	75.4% (70.9, 81.0)
	Sec. of State*	98.8% (98.4, 99.1)	8.4% (7.9, 8.9)	79.6% (76.2, 83.2)
	Attorney General	98.5% (98.0, 98.9)	10.5% (9.8, 11.3)	79.7% (75.3, 85.2)
	Com. Agriculture	97.6% (96.4, 98.4)	8.1% (7.3, 9.0)	74.4% (66.6, 84.9)
	Com. Insurance*	98.6% (98.2, 99.0)	8.7% (8.1, 9.3)	82.0% (78.1, 86.1)
	Com. Labor*	98.9% (98.5, 99.2)	8.8% (8.3, 9.4)	82.9% (79.1, 86.8)
	School Super.*	99.0% (98.7, 99.3)	10.1% (9.6, 10.7)	91.4% (88.1, 94.6)
2016 General	U.S. President	99.1% (98.8, 99.3)	10.7% (10.3, 11.1)	94.2% (92.7, 95.5)
	U.S. Senator	96.8% (95.9, 97.8)	8.1% (7.4, 8.9)	80.1% (73.7, 85.7)
2018 General	Governor*	99.3% (99.1, 99.5)	11.2% (10.8, 11.5)	96.2% (95.2, 97.1)
	Lt. Governor	99.1% (98.8, 99.3)	10.7% (10.3, 11.2)	93.6% (91.7, 95.2)
	Sec. of State	99.1% (98.8, 99.3)	11.6% (11.2, 12.0)	95.7% (94.4, 96.7)
	Attorney General	99.1% (98.8, 99.3)	11.2% (10.7, 11.8)	91.8% (89.7, 93.9)
	Com. Agriculture	98.9% (98.5, 99.1)	9.3% (8.8, 9.8)	87.3% (84.9, 89.8)
	Com. Insurance*	99.2% (98.9, 99.4)	10.0% (9.6, 10.5)	94.2% (92.7, 95.5)
	Com. Labor	99.2% (98.9, 99.4)	9.6% (9.2, 10.1)	89.5% (87.6, 91.4)
	School Super.*	99.1% (98.8, 99.3)	9.0% (8.5, 9.4)	88.2% (86.4, 90.3)
	Public Serv. Com. 3	99.2% (98.9, 99.4)	11.2% (10.7, 11.6)	95.0% (93.4, 96.2)
	Public Serv. Com. 5	99.1% (98.8, 99.3)	10.2% (9.8, 10.6)	94.2% (92.4, 95.5)
2018 Runoff	Sec. of State	99.1% (98.8, 99.3)	13.3% (12.9, 13.8)	96.1% (94.6, 97.3)
	Public Serv. Com. 3	99.0% (98.7, 99.3)	14.6% (14.1, 15.1)	96.3% (94.9, 97.4)
2020 General	U.S. President	98.8% (98.4, 99.1)	14.0% (13.4, 14.7)	88.4% (86.0, 90.9)
	U.S. Senator	98.9% (98.5, 99.2)	12.1% (11.5, 12.7)	91.1% (89.0, 93.1)
	Public Serv. Com. 1*	98.9% (98.6, 99.2)	10.2% (9.8, 10.8)	90.8% (88.8, 92.8)
	Public Serv. Com. 4*	98.9% (98.6, 99.2)	10.6% (10.1, 11.2)	92.6% (90.6, 94.5)
2021 Runoff	U.S. Senator (Perdue)	99.1% (98.9, 99.3)	13.1% (12.7, 13.5)	96.9% (95.9, 97.7)
	U.S. Senator (Loeffler)*	99.1% (98.9, 99.4)	13.9% (13.5, 14.4)	97.0% (95.7, 97.9)
	Public Serv. Com. 4*	99.1% (98.8, 99.3)	11.3% (11.0, 11.7)	96.7% (95.6, 97.6)
2022 General	U.S. Senator*	99.1% (98.9, 99.3)	14.6% (14.2, 15.0)	97.0% (95.9, 97.8)
	Governor*	99.0% (98.7, 99.3)	9.9% (9.5, 10.4)	88.3% (86.6, 90.1)
	Lt. Governor	98.9% (98.6, 99.2)	11.0% (10.6, 11.5)	92.1% (90.2, 93.7)
	Sec. of State	98.7% (98.4, 99.0)	10.1% (9.5, 10.6)	80.5% (78.4, 82.7)
	Attorney General	98.8% (98.5, 99.1)	10.9% (10.4, 11.4)	91.6% (89.9, 93.4)
	Com. Agriculture*	99.0% (98.7, 99.3)	9.1% (8.7, 9.6)	89.2% (87.5, 90.8)
	Com. Insurance*	99.0% (98.7, 99.2)	9.5% (9.1, 10.1)	87.5% (85.6, 89.3)
	Com. Labor*	98.9% (98.6, 99.2)	9.8% (9.4, 10.3)	91.7% (90.1, 93.3)
	School Super.*	98.9% (98.6, 99.2)	9.2% (8.8, 9.7)	88.0% (86.3, 89.8)

* Indicates that the Black candidate of choice was Black.

Table 7: Ecological Inference Results — Average Estimated Vote Share of Black-Preferred Candidates by District

	District	Black	White	Other
House: Black Belt	133	94.2% (85.1, 98.7)	15.3% (7.5, 24.1)	64.1% (24.6, 92.3)
	145	94.1% (83.2, 98.9)	10.1% (2.6, 19.2)	72.5% (32.0, 95.4)
	149	96.1% (88.7, 99.0)	6.2% (1.0, 18.1)	71.6% (31.4, 93.7)
House: Southern Atlanta	69	97.9% (94.8, 99.5)	13.7% (4.4, 24.6)	82.2% (55.0, 96.2)
	74	92.5% (75.7, 98.9)	8.1% (2.4, 17.8)	80.1% (42.4, 96.9)
House: Western Atlanta	61	98.7% (96.4, 99.7)	15.3% (6.8, 27.8)	86.4% (61.8, 97.4)
Senate: Black Belt	22	98.2% (96.8, 99.2)	17.1% (10.5, 24.1)	79.4% (52.1, 94.1)
	23	97.5% (90.7, 98.9)	4.5% (1.6, 12.8)	89.2% (70.7, 96.8)
	24	94.9% (90.3, 97.6)	8.5% (4.1, 14.1)	83.9% (45.0, 96.3)
	25	96.0% (91.1, 98.6)	10.9% (6.2, 16.9)	67.3% (32.6, 89.6)
	26	98.6% (96.9, 99.4)	12.2% (7.6, 18.6)	84.2% (50.9, 96.6)
Senate: Southern Atlanta	10	99.0% (98.0, 99.7)	7.1% (2.2, 16.1)	83.5% (41.0, 96.9)
	16	96.0% (92.0, 98.3)	7.5% (4.2, 12.1)	89.6% (75.5, 96.5)
	17	96.9% (92.6, 98.9)	5.1% (2.4, 9.2)	82.2% (60.3, 96.1)
	25	96.0% (91.1, 98.6)	10.9% (6.2, 16.9)	67.3% (32.6, 89.6)
	28	94.7% (87.6, 98.2)	6.4% (2.5, 12.2)	89.5% (69.0, 97.1)
	34	98.9% (97.9, 99.5)	10.1% (4.4, 19.3)	85.6% (56.4, 96.8)
	35	98.9% (97.7, 99.6)	11.2% (4.9, 19.1)	91.0% (72.7, 97.8)
	39	99.0% (98.2, 99.5)	61.4% (44.8, 76.8)	80.6% (50.0, 95.2)
	44	98.5% (96.6, 99.4)	42.1% (21.5, 63.7)	79.3% (33.5, 96.2)

Table 8: Average Performance of Black-Preferred Candidates in Focus Areas and Districts, 2012–2021

Focus Area	District	% Black	% Avg Vote for Black-Preferred Cand.	% Elections Won by Black-Preferred Cand.
House: Black Belt	Focus Area	42.6%	49.3%	37.5%
	133	37.0%	44.9%	0.0%
	142	60.5%	64.1%	100.0%
	143	61.7%	70.6%	100.0%
	145	35.7%	40.4%	0.0%
	147	29.5%	43.0%	0.0%
	149	31.1%	33.7%	0.0%
House: Southern Atlanta	Focus Area	52.5%	60.2%	100.0%
	69	61.9%	71.5%	100.0%
	74	25.2%	34.1%	0.0%
	75	71.3%	86.7%	100.0%
	78	69.4%	80.1%	100.0%
	115	51.3%	55.6%	72.5%
	117	35.9%	42.7%	12.5%
House: Western Atlanta	Focus Area	50.5%	60.9%	100.0%
	61	71.5%	83.9%	100.0%
	64	29.3%	38.4%	0.0%
Senate: Black Belt	Focus Area	40.2%	46.6%	2.5%
	22	56.6%	68.4%	100.0%
	23	34.7%	40.3%	0.0%
	24	19.0%	29.1%	0.0%
	25	33.4%	38.8%	0.0%
	26	57.4%	63.4%	100.0%
Senate: Southern Atlanta	Focus Area	49.0%	59.4%	100.0%
	10	69.0%	78.5%	100.0%
	16	22.3%	31.9%	0.0%
	17	31.2%	35.8%	0.0%
	25	33.4%	38.8%	0.0%
	28	18.8%	29.0%	0.0%
	34	66.6%	82.0%	100.0%
	35	69.8%	79.5%	100.0%
	39	60.3%	85.7%	100.0%
	44	69.1%	86.6%	100.0%

Table 9: Vote Share of Black-Preferred Candidates — Illustrative Maps

		HD 64	HD 74	HD 117	HD 145	HD 149	SD 23	SD 25	SD 28
2012 General	U.S. President	55.6%	56.9%	48.1%	57.4%	65.4%	60.3%	57.9%	67.4%
2014 General	U.S. Senator	57.2%	57.5%	48.9%	52.0%	64.6%	58.3%	59.4%	68.3%
	Governor	56.8%	57.0%	49.0%	52.8%	64.0%	57.3%	59.1%	67.7%
	Lt. Governor	53.3%	53.7%	45.1%	49.0%	60.1%	54.7%	55.5%	64.6%
	Sec. of State	54.1%	54.4%	45.8%	49.7%	61.4%	55.2%	56.3%	65.3%
	Attorney General	54.7%	55.5%	47.2%	50.3%	61.8%	55.1%	57.8%	65.9%
	Com. Agriculture	53.1%	53.2%	45.2%	49.7%	60.7%	54.8%	55.4%	64.0%
	Com. Insurance	55.0%	54.9%	46.7%	50.5%	62.1%	55.9%	57.1%	65.9%
	Com. Labor	55.0%	54.9%	46.5%	50.5%	61.9%	55.6%	56.9%	66.0%
	School Super.	56.2%	56.3%	47.4%	51.8%	63.5%	57.3%	58.1%	67.1%
2016 General	U.S. President	57.1%	59.1%	50.4%	52.5%	61.8%	56.8%	61.8%	67.9%
	U.S. Senator	54.8%	54.9%	47.7%	48.3%	57.5%	52.8%	58.5%	63.7%
2018 General	Governor	62.6%	62.1%	55.4%	54.9%	61.2%	56.3%	67.0%	70.0%
	Lt. Governor	61.8%	61.0%	54.7%	54.4%	60.5%	55.2%	66.2%	68.9%
	Sec. of State	62.3%	61.9%	55.6%	56.0%	62.8%	60.2%	66.9%	69.6%
	Attorney General	62.1%	61.4%	55.3%	54.9%	60.8%	55.9%	66.5%	69.0%
	Com. Agriculture	61.1%	60.2%	53.9%	53.4%	59.0%	54.6%	65.3%	67.9%
	Com. Insurance	61.9%	61.3%	55.2%	54.2%	60.3%	55.5%	66.6%	69.3%
	Com. Labor	61.4%	60.7%	54.2%	53.8%	60.1%	55.3%	65.7%	68.3%
	School Super.	61.0%	60.0%	53.9%	53.7%	59.7%	55.0%	65.3%	68.0%
	Public Serv. Com. 3	62.5%	62.0%	55.5%	55.3%	61.7%	56.3%	66.9%	69.6%
	Public Serv. Com. 5	62.2%	61.4%	55.3%	54.7%	61.0%	56.0%	66.6%	69.2%
2018 Runoff	Sec. of State	57.6%	55.3%	50.2%	53.0%	61.4%	58.5%	62.2%	67.4%
	Public Serv. Com. 3	58.3%	56.0%	50.8%	52.6%	60.9%	56.2%	62.8%	67.9%
2020 General	U.S. President	62.6%	62.2%	59.6%	55.4%	60.7%	56.6%	69.0%	69.2%
	U.S. Senator	62.7%	61.7%	59.4%	54.9%	60.1%	55.7%	69.0%	68.9%
	Public Serv. Com. 1	62.1%	60.8%	58.8%	54.4%	60.2%	55.8%	68.5%	68.2%
	Public Serv. Com. 4	62.6%	61.3%	59.3%	55.0%	60.4%	56.0%	69.0%	68.7%
2021 Runoff	U.S. Senator (Perdue)	64.9%	63.0%	61.6%	57.0%	62.1%	57.5%	71.3%	71.1%
	U.S. Senator (Loeffler)	65.2%	63.3%	61.9%	57.2%	62.4%	57.7%	71.6%	71.5%
	Public Serv. Com. 4	64.4%	62.1%	60.8%	56.4%	61.5%	56.8%	70.7%	70.5%

Table 10: List of Candidates in Statewide Elections, 2012–2022

		Democratic Candidate	Dem. Cand. Race	Republican Candidate	Rep. Cand. Race
2012 General	U.S. President	Barack Obama	Black	Mitt Romney	White
2014 General	U.S. Senator	Michelle Nunn	White	David Perdue	White
	Governor	Jason Carter	White	John Nathan Deal	White
	Lt. Governor	Connie Stokes	Black	L. S. 'Casey' Cagle	White
	Sec. of State	Doreen Carter	Black	Brian Kemp	White
	Attorney General	Gregory Hecht	White	Samuel Olens	White
	Com. Agriculture	Christopher Irvin	White	Gary Black	White
	Com. Insurance	Elizabeth Johnson	Black	Ralph Hudgens	White
	Com. Labor	Robbin Shipp	Black	J. Mark Butler	White
	School Super.	Valarie Wilson	Black	Richard Woods	White
2016 General	U.S. President	Hillary Clinton	White	Donald Trump	White
	U.S. Senator	Jim Barksdale	White	Johnny Isakson	White
2018 General	Governor	Stacey Abrams	Black	Brian Kemp	White
	Lt. Governor	Sarah Riggs Amico	White	Geoff Duncan	White
	Sec. of State	John Barrow	White	Brad Raffensperger	White
	Attorney General	Charlie Bailey	White	Chris Carr	White
	Com. Agriculture	Fred Swann	White	Gary Black	White
	Com. Insurance	Janice Laws	Black	Jim Beck	White
	Com. Labor	Richard Keatley	White	Mark Butler	White
	School Super.	Otha Thornton	Black	Richard Woods	White
	Public Serv. Com. 3	Lindy Miller	White	Chuck Eaton	White
	Public Serv. Com. 5	Dawn Randolph	White	Tricia Pridemore	White
2018 Runoff	Sec. of State	John Barrow	White	Brad Raffensperger	White
	Public Serv. Com. 3	Lindy Miller	White	Chuck Eaton	White
2020 General	U.S. President	Joe Biden	White	Donald Trump	White
	U.S. Senator	Jon Ossoff	White	David Perdue	White
	Public Serv. Com. 1	Robert Bryant	Black	Jason Shaw	White
	Public Serv. Com. 4	Daniel Blackman	Black	Lauren McDonald	White
2021 Runoff	U.S. Senator (Perdue)	Jon Ossoff	White	David Perdue	White
	U.S. Senator (Loeffler)	Raphael Warnock	Black	Kelly Loeffler	White
	Public Serv. Com. 4	Daniel Blackman	Black	Lauren McDonald	White
2022 General	U.S. Senator	Raphael Warnock	Black	Herschel Junior Walker	Black
	Governor	Stacey Abrams	Black	Brian Kemp	White
	Lt. Governor	Charlie Bailey	White	Burt Jones	White
	Sec. of State	Bee Nguyen	Asian	Brad Raffensperger	White
	Attorney General	Jennifer "Jen" Jordan	White	Chris Carr	White
	Com. Agriculture	Nakita Hemingway	Black	Tyler Harper	White
	Com. Insurance	Janice Laws Robinson	Black	John King	White
	Com. Labor	William "Will" Boddie, Jr	Black	Bruce Thompson	White
	School Super.	Alisha Thomas Searcy	Black	Richard Woods	White

* Excludes candidates in the 2020 Special Election for U.S. Senate

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EDUCATION	<p>Harvard University, Cambridge, Massachusetts</p> <p>Ph.D., Political Science, May 2014.</p> <p>A.M., Political Science, May 2012.</p> <p>Bowdoin College, Brunswick, Maine</p> <p>A.B., Mathematics & Government and Legal Studies, May 2008.</p>
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Glick, David M., Katherine Levine Einstein, Maxwell Palmer, Stacy Fox, Katharine Lusk, Nicholas Henninger, and Songhyun Park. 2021. *2020 Menino Survey of Mayors: Policing and Protests*. Research Report. Boston University Initiative on Cities.

Glick, David M., Katherine Levine Einstein, Maxwell Palmer, and Stacy Fox. 2020. *2020 Menino Survey of Mayors: COVID-19 Recovery and the Future of Cities*. Research Report. Boston University Initiative on Cities.

de Benedictis-Kessner, Justin and Maxwell Palmer. 2020. *Got Wheels? How Having Access to a Car Impacts Voting*. *Democracy Docket*.

Palmer, Maxwell, Katherine Levine Einstein, and David Glick. 2020. *Counting the City: Mayoral Views on the 2020 Census*. Research Report. Boston University Initiative on Cities.

Einstein, Katherine Levine, Maxwell Palmer, Stacy Fox, Marina Berardino, Noah Fischer, Jackson Moore-Otto, Aislinn O'Brien, Marilyn Rutecki and Benjamin Wuesthoff. 2020. *COVID-19 Housing Policy*. Research Report. Boston University Initiative on Cities.

Einstein, Katherine Levine, Maxwell Palmer, David Glick, and Stacy Fox. 2020. *Mayoral Views on Cities' Legislators: How Representative are City Councils?* Research Report. Boston University Initiative on Cities.

Einstein, Katherine Levine and Maxwell Palmer. 2020. *"Newton and other communities must reform housing approval process."* *The Boston Globe*.

Einstein, Katherine Levine, David Glick, Maxwell Palmer and Stacy Fox. 2020. *"2019 Menino Survey of Mayors."* Research Report. Boston University Initiative on Cities.

Palmer, Maxwell, Katherine Levine Einstein, David Glick, and Stacy Fox. 2019. *Mayoral Views on Housing Production: Do Planning Goals Match Reality?* Research Report. Boston University Initiative on Cities.

Wilson, Graham, David Glick, Katherine Levine Einstein, Maxwell Palmer, and Stacy Fox. 2019. *Mayoral Views on Economic Incentives: Valuable Tools or a Bad Use of Resources?*. Research Report. Boston University Initiative on Cities

Einstein, Katherine Levine, David Glick, Maxwell Palmer and Stacy Fox. 2019. *"2018 Menino Survey of Mayors."* Research Report. Boston University Initiative

on Cities.

Einstein, Katherine Levine, Katharine Lusk, David Glick, Maxwell Palmer, Christiana McFarland, Leon Andrews, Aliza Wasserman, and Chelsea Jones. 2018. *“Mayoral Views on Racism and Discrimination.”* National League of Cities and Boston University Initiative on Cities.

Einstein, Katherine Levine, David Glick, and Maxwell Palmer. 2018. *“As the Trump administration retreats on climate change, US cities are moving forward.”* The Conversation.

Einstein, Katherine Levine, David M. Glick, Maxwell Palmer, and Robert Presel. 2018. *“Few big-city mayors see running for higher office as appealing.”* LSE United States Politics and Policy Blog.

Einstein, Katherine Levine, David Glick, and Maxwell Palmer. 2018. *“2017 Menino Survey of Mayors.”* Research Report. Boston University Initiative on Cities.

Williamson, Ryan D., Michael Crespin, Maxwell Palmer, and Barry C. Edwards. 2017. *“This is how to get rid of gerrymandered districts.”* *The Washington Post*, Monkey Cage Blog.

Palmer, Maxwell and Benjamin Schneer. 2015. *“How and why retired politicians get lucrative appointments on corporate boards.”* *The Washington Post*, Monkey Cage Blog.

CURRENT PROJECTS

“A Partisan Solution to Partisan Gerrymandering: The Define-Combine Procedure” (with Benjamin Schneer and Kevin DeLuca).

– Covered in *Fast Company*

“Descended from Immigrants and Revolutionists: How Family Immigration History Shapes Legislative Behavior in Congress” (with James Feigenbaum and Benjamin Schneer).

“The Gender Pay Gap in Congressional Offices” (with Joshua McCrain).

“Racial Disparities in Local Elections” (with Katherine Levine Einstein).

“Renters in an Ownership Society: Property Rights, Voting Rights, and the Making of American Citizenship.” Book Project. With Katherine Levine Einstein.

“Menino Survey of Mayors 2021.” Co-principal investigator with David M. Glick and Katherine Levine Einstein.

GRANTS
AND AWARDS

The Boston Foundation Grant. “2022 Greater Boston Housing Report Card” (Co-principal investigator). 2022. \$70,000.

The Rockefeller Foundation, “Menino Survey of Mayors” (Co-principal investigator). 2021. \$355,000.

American Political Science Association, **Heinz Eulau Award**, for the best article published in *Perspectives on Politics* during the previous calendar year, for “**Who Participates in Local Government? Evidence from Meeting Minutes.**” (with Katherine Levine Einstein and David M. Glick). 2020.

Boston University Initiative on Cities, COVID-19 Research to Action Seed Grant. “How Are Cities Responding to the COVID-19 Housing Crisis?” 2020. \$8,000.

The Rockefeller Foundation, “Menino Survey of Mayors” (Co-principal investigator). 2017. \$325,000.

Hariri Institute for Computing, Boston University. Junior Faculty Fellow. 2017–2020. \$10,000.

The Rockefeller Foundation, “2017 Menino Survey of Mayors” (Co-principal investigator). 2017. \$100,000.

The Center for Finance, Law, and Policy, Boston University, Research Grant for “From the Capitol to the Boardroom: The Returns to Office from Corporate Board Directorships,” 2015.

Senator Charles Sumner Prize, Dept. of Government, Harvard University. 2014.
Awarded to the best dissertation “from the legal, political, historical, economic, social or ethnic approach, dealing with means or measures tending toward the prevention of war and the establishment of universal peace.”

The Center for American Political Studies, Dissertation Research Fellowship on the Study of the American Republic, 2013–2014.

The Tobin Project, Democracy and Markets Graduate Student Fellowship, 2013–2014.

The Dirksen Congressional Center, Congressional Research Award, 2013.

The Institute for Quantitative Social Science, Conference Travel Grant, 2014.

The Center for American Political Studies, Graduate Seed Grant for “Capitol Gains: The Returns to Elected Office from Corporate Board Directorships,” 2014.

The Institute for Quantitative Social Science, Research Grant, 2013.

Bowdoin College: High Honors in Government and Legal Studies; Philo Sherman Bennett Prize for Best Honors Thesis in the Department of Government, 2008.

SELECTED
PRESENTATIONS

“A Partisan Solution to Partisan Gerrymandering: The Define-Combine Procedure.” MIT Election Data and Science Lab, 2020.

“Who Represents the Renters?” Local Political Economy Conference, Washington, D.C., 2019.

“Housing and Climate Politics,” Sustainable Urban Systems Conference, Boston University 2019.

“Redistricting and Gerrymandering,” American Studies Summer Institute, John F. Kennedy Presidential Library and Museum, 2019.

“The Participatory Politics of Housing,” Government Accountability Office Seminar, 2018.

“Descended from Immigrants and Revolutionists: How Immigrant Experience Shapes Immigration Votes in Congress,” Congress and History Conference, Princeton University, 2018.

“Identifying Gerrymanders at the Micro- and Macro-Level.” Hariri Institute for Computing, Boston University, 2018.

“How Institutions Enable NIMBYism and Obstruct Development,” Boston Area Research Initiative Spring Conference, Northeastern University, 2017.

“Congressional Gridlock,” American Studies Summer Institute, John F. Kennedy Presidential Library and Museum, 2016.

“Capitol Gains: The Returns to Elected Office from Corporate Board Directorships,” Microeconomics Seminar, Department of Economics, Boston University, 2015.

“A Two Hundred-Year Statistical History of the Gerrymander,” Congress and History Conference, Vanderbilt University, 2015.

“A New (Old) Standard for Geographic Gerrymandering,” Harvard Ash Center Workshop: How Data is Helping Us Understand Voting Rights After Shelby County, 2015.

“Capitol Gains: The Returns to Elected Office from Corporate Board Directorships,” Boston University Center for Finance, Law, and Policy, 2015.

“Capitol Gains: The Returns to Elected Office from Corporate Board Directorships,” Bowdoin College, 2014.

American Political Science Association: 2013, 2014, 2015, 2016, 2018, 2019, 2020

Midwestern Political Science Association: 2012, 2013, 2014, 2017, 2019

Southern Political Science Association: 2015, 2018

European Political Science Association: 2015

EXPERT
TESTIMONY
AND CONSULTING

Bethune-Hill v. Virginia (3:14-cv-00852-REP-AWA-BMK), U.S. District Court for the Eastern District of Virginia. Prepared expert reports and testified on racial predominance and racially polarized voting in selected districts of the 2011 Virginia House of Delegates map. (2017)

Thomas v. Bryant (3:18-CV-441-CWR-FKB), U.S. District Court for the Southern District of Mississippi. Prepared expert reports and testified on racially polarized voting in a district of the 2012 Mississippi State Senate map. (2018–2019)

Chestnut v. Merrill (2:18-cv-00907-KOB), U.S. District Court for the Northern District of Alabama. Prepared expert reports and testified on racially polarized voting in selected districts of the 2011 Alabama congressional district map. (2019)

Dwight v. Raffensperger (No. 1:18-cv-2869-RWS), U.S. District Court for the Northern District of Georgia. Prepared expert reports and testified on racially polarized voting in selected districts of the 2011 Georgia congressional district map. (2019)

Bruni, et al. v. Hughs (No. 5:20-cv-35), U.S. District Court for the Southern District of Texas. Prepared expert reports and testified on the use of straight-ticket voting by race and racially polarized voting in Texas. (2020)

Caster v. Merrill (No. 2:21-cv-1536-AMM), U.S. District Court for the Northern District of Alabama. Prepared expert report and testified on racially polarized voting in selected districts of the 2021 Alabama congressional district map. (2022)

Pendergrass v. Raffensperger (1:21-CV-05339-SCJ), U.S. District Court for the Northern District of Georgia. Prepared expert reports and testified on racially polarized voting in selected districts of the 2021 Georgia congressional district map. (2022)

Grant v. Raffensperger (1:22-CV-00122-SCJ), U.S. District Court for the Northern District of Georgia. Prepared expert reports and testified on racially polarized voting in selected districts of the 2021 Georgia state legislative district maps.

(2022)

Galmon, et al. v. Ardoin (3:22-cv-00214-SDD-SDJ), U.S. District Court for the Middle District of Louisiana. Prepared expert reports and testified on racially polarized voting for the 2021 Louisiana congressional district map. (2022)

Racially Polarized Voting Consultant, Virginia Redistricting Commission, August 2021.

The General Court of the Commonwealth of Massachusetts, Joint Committee on Housing, Hearing on Housing Production Legislation. May 14, 2019. Testified on the role of public meetings in housing production.

TEACHING

Boston University

- *Introduction to American Politics* (PO 111; Fall 2014, Fall 2015, Fall 2016, Fall 2017, Spring 2019, Fall 2019, Fall 2020)
- *Congress and Its Critics* (PO 302; Fall 2014, Spring 2015, Spring 2017, Spring 2019)
- *Data Science for Politics* (PO 399; Spring 2020, Spring 2021, Fall 2021, Fall 2022)
- *Formal Political Theory* (PO 501; Spring 2015, Spring 2017, Fall 2019, Fall 2020)
- *American Political Institutions in Transition* (PO 505; Spring 2021, Fall 2021)
- *Prohibition* (PO 540; Fall 2015, Fall 2022)
- *Political Analysis (Graduate Seminar)* (PO 840; Fall 2016, Fall 2017)
- *Graduate Research Workshop* (PO 903/4; Fall 2019, Spring 2020)

SERVICE

Boston University

- Research Computing Governance Committee, 2021–.
- Initiative on Cities Faculty Advisory Board, 2020–2022.
- Undergraduate Assessment Working Group, 2020-2021.
- College of Arts and Sciences
 - Search Committee for the Faculty Director of the Initiative on Cities, 2020–2021.
 - General Education Curriculum Committee, 2017–2018.
- Department of Political Science
 - Director of Advanced Programs (Honors & B.A./M.A.). 2020–.
 - Political Methodology Search Committee, 2021.

- Delegate, Chair Selection Advisory Process, 2021.
- Comprehensive Exam Committee, American Politics, 2019.
- Comprehensive Exam Committee, Political Methodology, 2016, 2017, 2021.
- Co-organizer, Research in American Politics Workshop, 2016–2018.
- American Politics Search Committee, 2017.
- American Politics Search Committee, 2016.
- Graduate Program Committee, 2014–2015, 2018–2019, 2020–2021.

Co-organizer, *Boston University Local Political Economy Conference*, August 29, 2018.

Editorial Board Member, *Legislative Studies Quarterly*, 2020–Present

Malcolm Jewell Best Graduate Student Paper Award Committee, Southern Political Science Association, 2019.

Reviewer: *American Journal of Political Science*; *American Political Science Review*; *Journal of Politics*; *Quarterly Journal of Political Science*; *Science*; *Political Analysis*; *Legislative Studies Quarterly*; *Public Choice*; *Political Science Research and Methods*; *Journal of Law, Economics and Organization*; *Election Law Journal*; *Journal of Empirical Legal Studies*; *Urban Affairs Review*; *Applied Geography*; *PS: Political Science & Politics*; Cambridge University Press; Oxford University Press.

Elected Town Meeting Member, Town of Arlington, Mass., Precinct 2. April 2021–Present.

Arlington Election Reform Committee Member, August 2019–April 2022.

Coordinator, **Harvard Election Data Archive**, 2011–2014.

OTHER EXPERIENCE

Charles River Associates, Boston, Massachusetts 2008–2010

Associate, Energy & Environment Practice

Economic consulting in the energy sector for electric and gas utilities, private equity, and electric generation owners. Specialized in Financial Modeling, Resource Planning, Regulatory Support, Price Forecasting, and Policy Analysis.

Updated December 12, 2022

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

**Exhibit
0003**

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" McCollum	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

A handwritten signature in black ink, appearing to read 'John R. Alford', is written over a horizontal line.

John R. Alford, Ph.D.

Appendix 1

CV

John R. Alford

Curriculum Vitae

January 2023

Dept. of Political Science
Rice University - MS-24
P.O. Box 1892
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 Tavis, 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. Ardoyn, (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. Ardoyn, (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.

Expert Report of Dr. Maxwell Palmer

Pendergrass v. Raffensperger (N.D. Ga.)

December 12, 2022

A handwritten signature in blue ink that reads "Maxwell Palmer". The signature is written in a cursive style with a long horizontal line extending from the end of the name.

Exhibit
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EXPERT REPORT OF MAXWELL PALMER, PH.D.

I, Dr. Maxwell Palmer, declare as follows:

1. My name is Maxwell Palmer. I am currently an Associate Professor of Political Science at Boston University. I joined the faculty at Boston University in 2014, after completing my Ph.D. in Political Science at Harvard University. I was promoted to Associate Professor, with tenure, in 2021. I am also a Civic Tech Fellow in the Faculty of Computing & Data Sciences and a Faculty Fellow at the Initiative on Cities. I teach and conduct research on American politics and political methodology.
2. I have published academic work in leading peer-reviewed academic journals, including the *American Political Science Review*, *Journal of Politics*, *Perspectives on Politics*, *British Journal of Political Science*, *Journal of Empirical Legal Studies*, *Political Science Research and Methods*, *Legislative Studies Quarterly*, and *Urban Affairs Review*. My book, *Neighborhood Defenders: Participatory Politics and America's Housing Crisis*, was published by Cambridge University Press in 2019. I have also published academic work in the *Ohio State University Law Review*. My published research uses a variety of analytical approaches, including statistics, geographic analysis, and simulations, and data sources including academic surveys, precinct-level election results, voter registration and vote history files, and census data. My curriculum vitae is attached to this report.
3. I have served as an expert witness or litigation consultant on numerous cases involving voting restrictions. I testified at trial, court hearing, or by deposition in *Bethune Hill v. Virginia* before the U.S. District Court for the Eastern District of Virginia (No. 3:14-cv-00852-REP-AWA-BMK); *Thomas v. Bryant* before the U.S. District Court for the Southern District of Mississippi (No. 3:18-CV-00441-CWR-FKB); *Chestnut v. Merrill* before the U.S. District Court for the Northern District of Alabama (No. 2:18-cv-00907-KOB); *Dwight v. Raffensperger* before the U.S. District Court for the Northern District of Georgia (No. 1:18-cv-2869-RWS); *Bruni v. Hughs* before the U.S. District Court for the Southern District of Texas (No. 5:20-cv-35); *Caster v. Merrill* before the U.S. District Court for the Northern District of Alabama (No. 2:21-cv-1536-AMM); *Pendergrass v. Raffensperger* before the U.S. District Court for the Northern District of Georgia (No. 1:21-CV-05339-SCJ); *Grant v. Raffensperger* before the U.S. District Court for the Northern District of Georgia (No. 1:22-CV-00122-SCJ); and *Galmon v. Ardoin* before the U.S. District Court for the Middle District of Louisiana (3:22-cv-00214-SDD-SDJ). I also served as the independent racially polarized voting analyst for the Virginia Redistricting Commission in 2021, and I have worked as a consultant to the United State Department of Justice on several matters. My expert testimony has been accepted and relied upon by courts; in no case has my testimony been rejected or

found unreliable.

4. I am being compensated at a rate of \$350 per hour. No part of my compensation is dependent upon the conclusions that I reach or the opinions that I offer.
5. I testified in this matter in the preliminary injunction proceedings on February 10, 2022. I was accepted by the court as an expert in redistricting and data analysis.
6. I was retained by the plaintiffs in this litigation to offer an expert opinion on the extent to which voting is racially polarized in Northwest Georgia. I was also asked to evaluate the performance of the 6th Congressional District in the plaintiffs' illustrative map.
7. I find strong evidence of racially polarized voting across the focus area, which is comprised of the 3rd, 6th, 11th, 13th, and 14th Congressional Districts under the 2021 redistricting map.¹ Black and White voters consistently support different candidates. On average, I estimate that 98.4% of Black voters support the same candidate, while only 12.4% of White voters support the Black-preferred candidate. I also find strong evidence of racially polarized voting in each of the five individual congressional districts.
8. Black-preferred candidates are largely unable to win elections in the focus area. Across an analysis of 40 statewide elections from 2012 to 2022, the Black-preferred candidate lost every election in the focus area. When taken on a district-by-district basis, the Black-preferred candidate was defeated in every one of the 40 elections analyzed in the 3rd, 6th, 11th, and 14th Congressional Districts. The Black-preferred candidate won a majority of the vote in the 13th Congressional District in all 40 elections.
9. Under the plaintiffs' illustrative map, I find that Black-preferred candidates are able to win elections in the new 6th Congressional District. Across 31 statewide elections from 2012 to 2021, the Black-preferred candidate won an average of 66.1% of the vote in this illustrative district.²

Data Sources and Elections Analyzed

10. For the purpose of my analysis, I examined elections in the 3rd, 6th, 11th, 13th, and 14th Congressional Districts, under the plan adopted by the state legislature in 2021. Collectively, I refer to this area as the "focus area." Figure 1 maps the focus area.
11. To analyze racially polarized voting, I relied on precinct-level election results and voter turnout by race, compiled by the state of Georgia. The data includes the racial breakdown of registrants and voters in each precinct, based on registrants' self-identified race when registering to vote. Data for the 2012, 2014, 2016, and 2018 general elections

¹In my expert report for the preliminary injunction hearing, I defined the focus area as the 3rd, 11th, 13th, and 14th Congressional Districts. I added the 6th District to the focus area in this report because the plaintiff's revised illustrative map now includes a portion of the 6th District in the new majority-minority district.

²As discussed below, I was not able to include the 2022 general elections in this analysis because 2022 precinct geography data was not available.

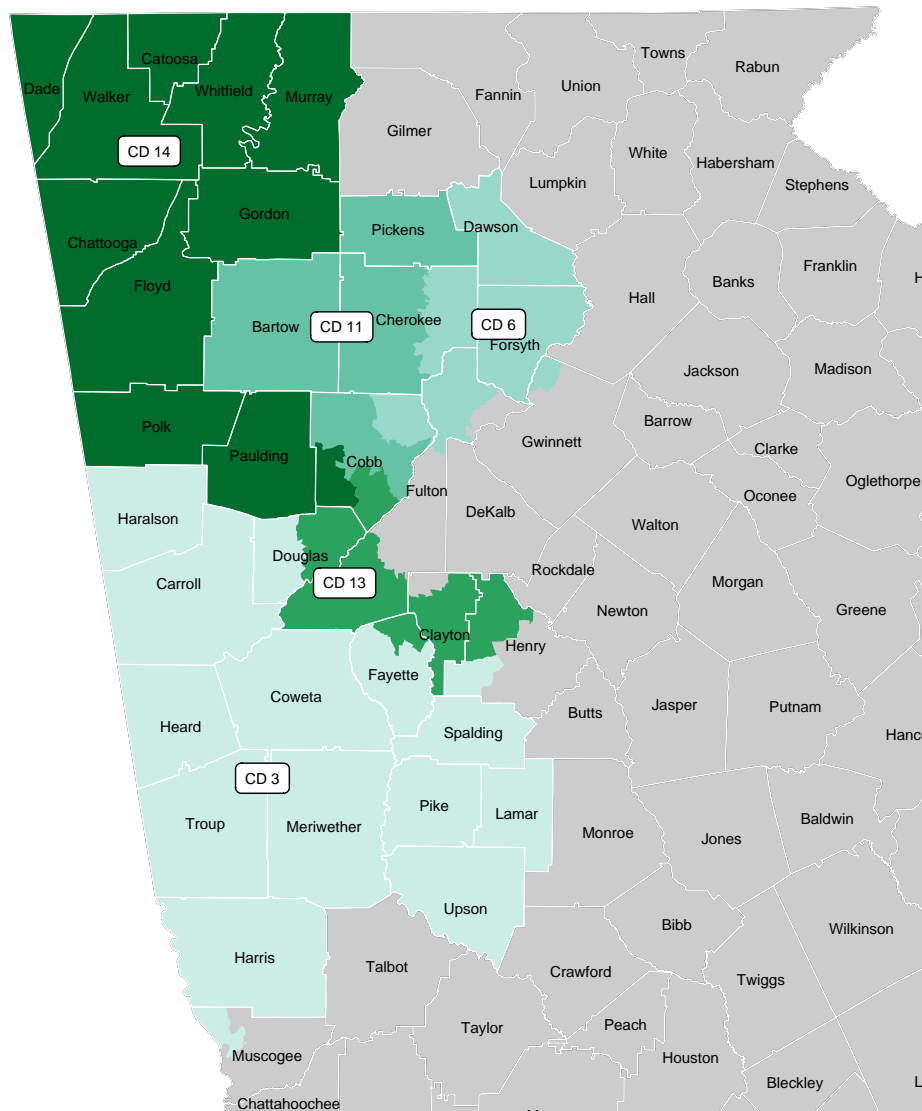


Figure 1: Map of the Focus Area

was provided to counsel by the Georgia Secretary of State in a prior case.³ Data on turnout by race for the 2020 general election and the 2018 and 2021 runoff elections was retrieved from the website of the Georgia Secretary of State.⁴ Data on turnout by race for the 2022 general election was provided to counsel by the Georgia Secretary of State, and 2022 precinct-level election results were downloaded from the website of the Georgia Secretary of State.⁵ Precinct-level election results for the 2018⁶, 2020, and

³*Dwight v. Raffensperger* (No. 1:18-cv-2869-RWS).

⁴<https://sos.ga.gov/index.php/Elections>.

⁵<https://results.enr.clarityelections.com/GA/115465/web.307039/#/summary>.

⁶Voting and Election Science Team, 2019, “2018 Precinct-Level Election Results”, <https://doi.org/10.7910/DVN/UBKYRU>, Harvard Dataverse, V47; ga_2018.zip.

2021⁷ elections was assembled by the Voting and Election Science Team, an academic group that provides precinct-level data for U.S. Elections, based on data from the Secretary of State.^{8,9} Precinct shape files for 2012 through 2020 were downloaded from the Georgia General Assembly’s Legislative and Congressional Reapportionment Office.¹⁰

12. The state of Georgia provides six options for race and ethnicity on the voter registration form: Black, White, Hispanic/Latino, Asian/Pacific Islander, American Indian, and Other.¹¹ I combined Hispanic/Latino, Asian/Pacific Islander and American Indian into the “Other” category.

Racially Polarized Voting Analysis

13. In analyzing racially polarized voting in each election, I used a statistical procedure, ecological inference (EI), that estimates group-level preferences based on aggregate data. I analyzed the results for three racial demographic groups: Non-Hispanic Black, Non-Hispanic White, and Other, based on the voters’ self-identified race in the voter registration database. I excluded third party and write-in candidates, and analyzed votes for the two major-party candidates in each election. The results of this analysis are estimates of the percentage of each group that voted for the candidate from each party in each election. The results include both a mean estimate (the most likely vote share) and a 95% confidence interval.¹²
14. Interpreting the results of the ecological inference models proceeds in two general stages. First, I examined the support for each candidate by each demographic group to determine if members of the group vote cohesively in support of a single candidate in each election. When a significant majority of the group supports a single candidate, I can then identify that candidate as the group’s candidate of choice. If the group’s support is roughly evenly divided between the two candidates, then the group does not cohesively support a single candidate and does not have a clear preference. Second, after identifying the preferred candidate for each group (or the lack of such a candidate), I compared the preferences of White voters to the preferences of Black voters. Evidence of

⁷Voting and Election Science Team, 2020, “2020 Precinct-Level Election Results”, <https://doi.org/10.7910/DVN/K7760H>, Harvard Dataverse, V21; ga_2020.zip. Note that the 2020 election results file includes the 2021 runoff election results as well.

⁸The election results provided by VEST are the same as the precinct-level data available on the website of the Georgia Secretary of State. However, VEST provides the data in a more convenient format.

⁹As of December 12, 2022, precinct-level voter turnout data for the 2022 runoff election was not available.

¹⁰<https://www.legis.ga.gov/joint-office/reapportionment>.

¹¹https://sos.ga.gov/admin/files/GA_VR_APP_2019.pdf.

¹²The 95% confidence interval is a measure of uncertainty in the estimates from the model. For example, the model might estimate that 94% of the members of a group voted for a particular candidate, with a 95% confidence interval of 91-96%. This means that based on the data and the model assumptions, 95% of the simulated estimates for this group fall in the range of 91-96%, with 94% being the average value. Larger confidence intervals reflect a higher degree of uncertainty in the estimates, while smaller confidence intervals reflect less uncertainty.

racially polarized voting is found when Black voters and White voters support different candidates.

15. Figure 2 presents the estimates of support for the Black-preferred candidate for Black and White voters for all 40 electoral contests from 2012 to 2022. Here, I present only the estimates and confidence intervals, and exclude individual election labels. Full results for each election are presented in Figure 3 and Table 1. In each panel, the solid dots correspond to an estimate in a particular election, and the gray vertical lines behind each dot are the 95% confidence intervals for the estimate.¹³

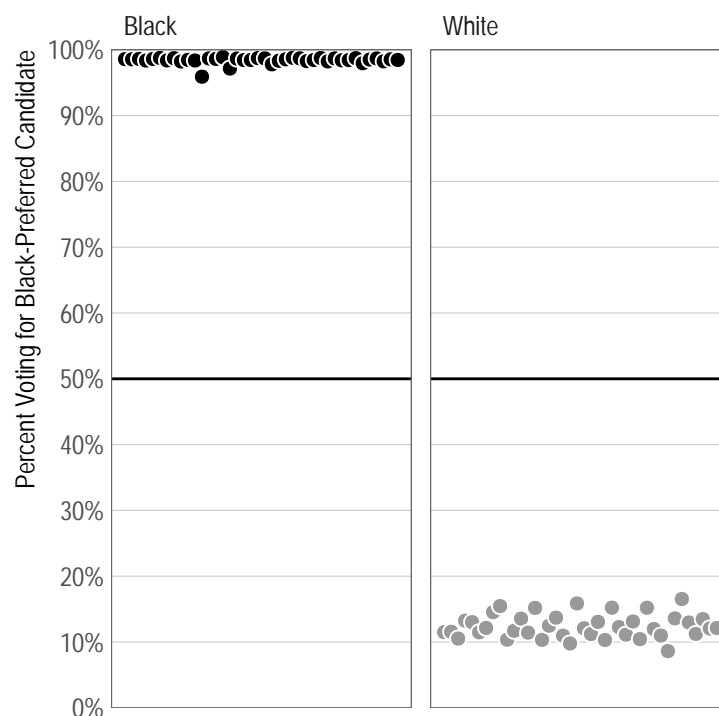


Figure 2: Racially Polarized Voting Estimates by Race — Focus Area

16. Examining Figure 2, the estimates for support for Black-preferred candidates by Black voters are all significantly above 50%. Black voters are extremely cohesive, with a clear candidate of choice in all 40 elections. On average, Black voters supported their candidates of choice with 98.4% of the vote.
17. 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. On average, White voters supported Black-preferred candidates with 12.4% of the vote, and in no election did this estimate exceed 17%.
18. Figure 3 presents the same results as Figure 2, separated by each electoral contest. The estimated levels of support for the Black-preferred candidate in each election for each

¹³In some cases the lines for the confidence intervals are not visible behind the dots because they are relatively small.

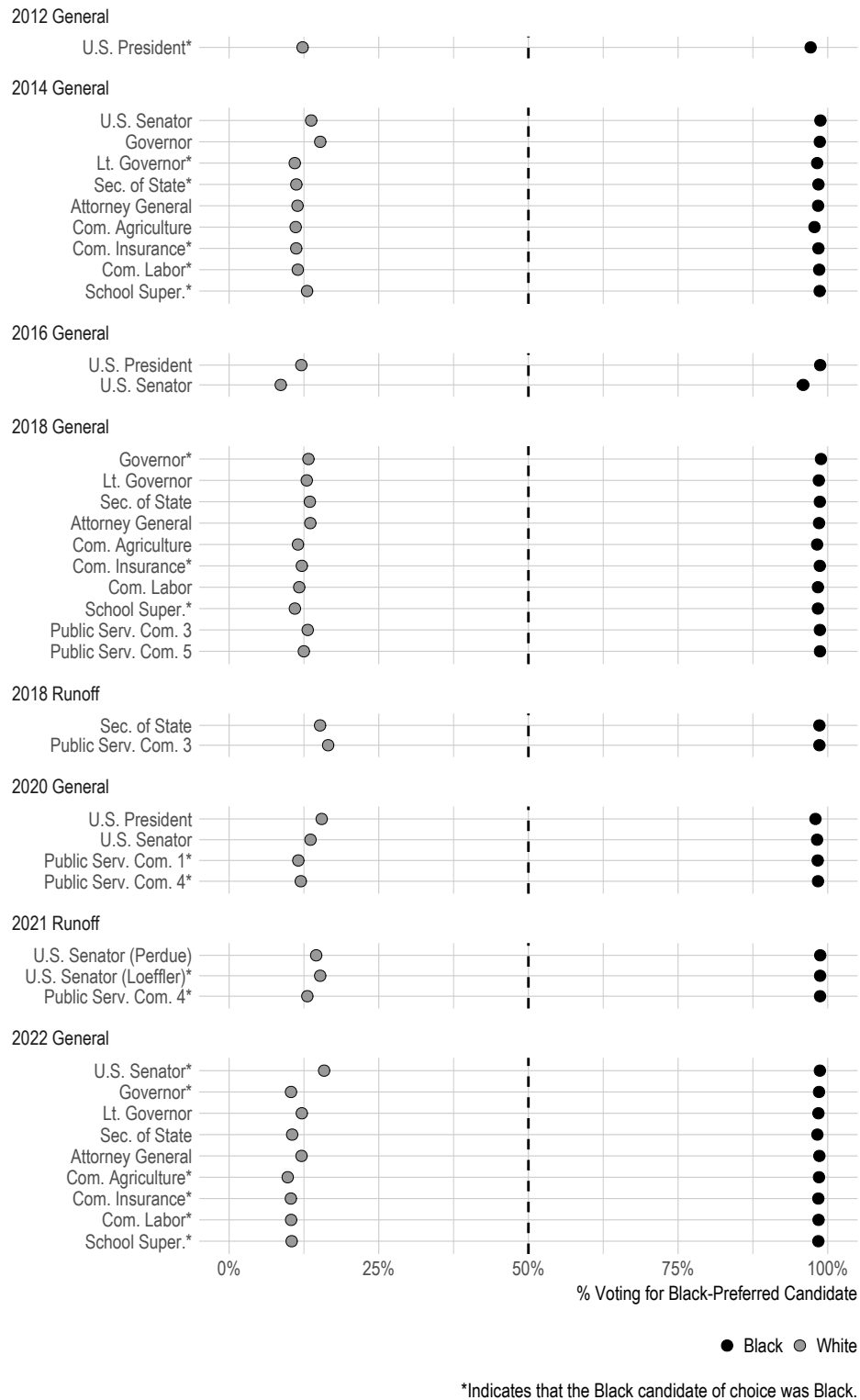


Figure 3: Racially Polarized Voting Estimates by Election — Focus Area

group are represented by the colored points, and the horizontal lines indicate the range of the 95% confidence intervals. In every election, Black voters have a clear candidate of choice, and White voters are strongly opposed to this candidate.

19. There is also strong evidence of racially polarized voting in each of the five congressional districts that comprise the focus area. Figure 4 plots the results, and Tables 2–6 present the full results. Black voters are extremely cohesive, with a clear candidate of choice in all 40 elections in each district. On average, Black voters supported their candidates of choice with 97.2% of the vote in CD 3, 93.3% in CD 6, 96.1% in CD 11, 99.0% in CD 13, and 95.8% in CD 14.
20. In contrast to Black voters, Figure 4 shows that White voters are highly cohesive in voting in opposition to the Black-preferred candidate in every election in each district. On average, White voters supported Black-preferred candidates with 6.7% of the vote in CD 3, 20.2% in CD 6, 16.1% in CD 11, 15.5% in CD 13, and 10.3% in CD 14.

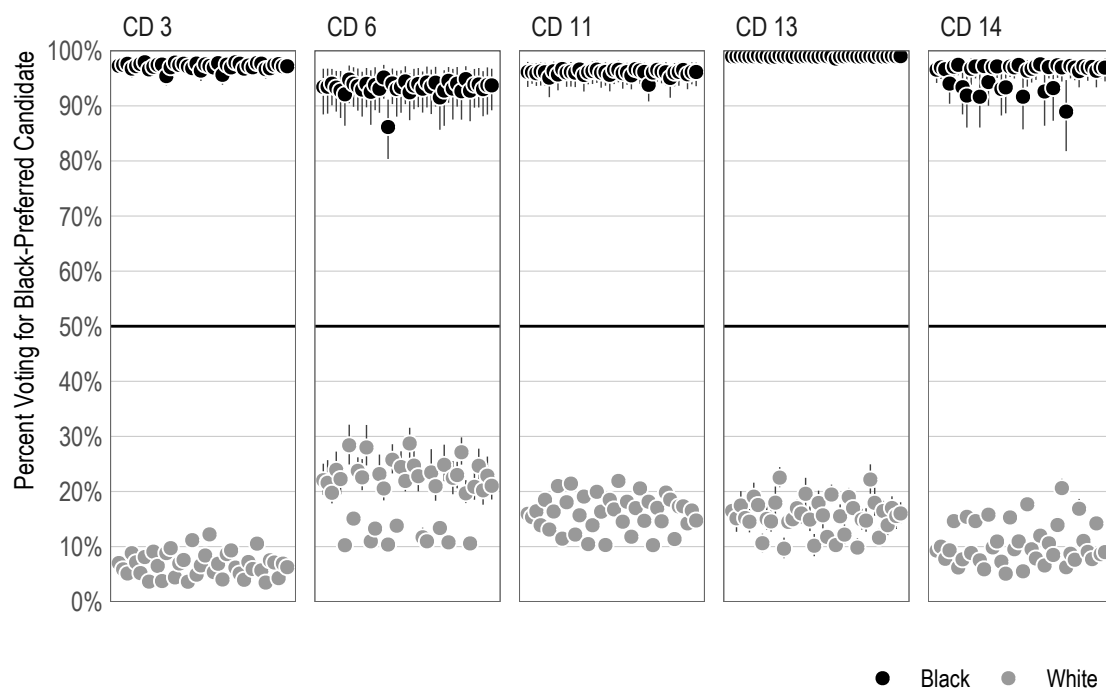


Figure 4: Racially Polarized Voting Estimates by Race — Congressional Districts

Performance of Black-Preferred Candidates in the Focus Area

21. Having identified the Black-preferred candidate in each election, I now turn to their ability to win elections in these districts. Table 7 presents the results of each election in the focus area and each congressional district. For each election, I present the vote share obtained by the Black-preferred candidate.¹⁴
22. The White-preferred candidate won the majority of the vote in all 40 elections in the focus area. In the 3rd, 6th, 11th, and 14th Congressional Districts, the White-preferred candidate received a larger share of the vote than the Black-preferred candidate in all 40 elections. In the 13th Congressional District, the Black-preferred candidate won a larger share of the vote in all 40 elections.

Performance of the the Sixth Congressional District in the Illustrative Map

23. I also analyzed the performance of Black-preferred candidates in the new 6th Congressional District proposed in the plaintiffs' illustrative map by calculating the percentage of the vote won by the Black-preferred candidates across the 31 statewide races from 2012 through 2021.
24. To perform this analysis, I used geographic data on the boundaries of the voting precincts in each year and the boundaries of the districts in the illustrative maps to determine which voting precincts would be located in each district. Then, I aggregated the election results for each contest for all of the precincts in each district to find the estimated vote shares of candidates in each contest. I was not able to include the 2022 elections in this analysis because, as of December 12, 2022, precinct boundary data for the 2022 voting precincts was not available.
25. Figure 5 presents the results of this analysis. In the plaintiffs' illustrative 6th Congressional District, the Black-preferred candidate won a larger share of the vote in all 31 statewide elections, with an average of 66.1%. Table 8 provide the full results.
26. Under the plaintiffs' illustrative map, the 13th Congressional District (the only district in the focus area to which the Black-preferred candidate won a majority of the vote in every election) continues to perform for Black-preferred candidates. I estimate that under this map Black-preferred candidates won a larger share of the vote in all 40 statewide elections, with an average of 62.3%.

¹⁴Winning elections in Georgia requires a majority of the vote rather than a plurality of the vote (the threshold in most of the states). In this table and following sections analyzing election results I present vote shares as percentages of the two-party vote (excluding third party and independent candidates).

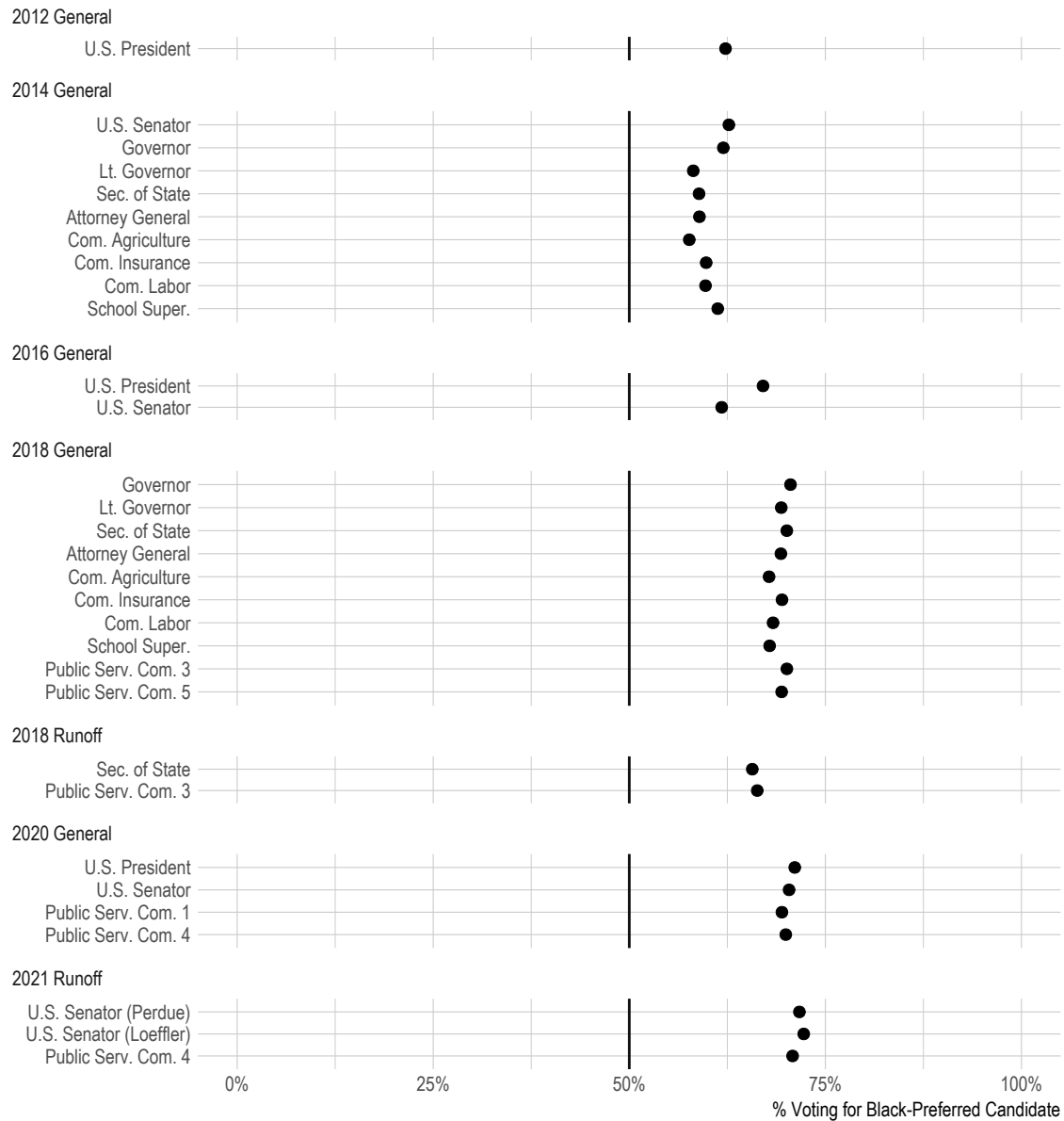


Figure 5: Vote Shares of Black-Preferred Candidates in CD 6 Under the Illustrative Map

Table 1: Ecological Inference Results — Estimated Vote Share of Black-Preferred Candidates — Focus Area

		Black	White	Other
2012 General	U.S. President*	97.1% (96.6, 97.6)	12.3% (12.0, 12.5)	94.7% (92.9, 96.2)
2014 General	U.S. Senator	98.8% (98.4, 99.1)	13.7% (13.4, 14.0)	94.0% (91.4, 96.0)
	Governor	98.7% (98.3, 99.0)	15.2% (14.8, 15.6)	83.8% (80.2, 87.3)
	Lt. Governor*	98.2% (97.8, 98.6)	11.0% (10.5, 11.5)	70.0% (65.7, 73.8)
	Sec. of State*	98.5% (98.1, 98.8)	11.2% (10.8, 11.6)	75.1% (71.7, 78.7)
	Attorney General	98.4% (98.0, 98.7)	11.4% (11.0, 11.9)	79.2% (75.3, 83.0)
	Com. Agriculture	97.8% (97.2, 98.3)	11.1% (10.6, 11.6)	66.9% (62.7, 71.4)
	Com. Insurance*	98.4% (98.0, 98.8)	11.2% (10.8, 11.7)	79.2% (75.1, 83.0)
	Com. Labor*	98.6% (98.2, 98.9)	11.5% (11.0, 11.9)	78.7% (75.3, 82.5)
	School Super.*	98.7% (98.3, 99.0)	13.0% (12.6, 13.5)	86.9% (83.3, 90.1)
2016 General	U.S. President	98.7% (98.4, 99.0)	12.1% (11.8, 12.4)	94.7% (93.3, 95.8)
	U.S. Senator	95.9% (95.0, 96.7)	8.6% (8.1, 9.2)	85.6% (82.0, 89.3)
2018 General	Governor*	98.9% (98.6, 99.1)	13.2% (13.0, 13.5)	93.5% (92.2, 94.6)
	Lt. Governor	98.5% (98.2, 98.8)	13.0% (12.7, 13.3)	91.2% (89.6, 92.5)
	Sec. of State	98.7% (98.4, 99.0)	13.5% (13.2, 13.8)	92.2% (90.7, 93.6)
	Attorney General	98.6% (98.2, 98.9)	13.6% (13.1, 14.1)	90.0% (87.6, 92.2)
	Com. Agriculture	98.2% (97.7, 98.7)	11.5% (11.1, 11.9)	87.6% (85.3, 89.8)
	Com. Insurance*	98.7% (98.3, 98.9)	12.1% (11.8, 12.5)	91.7% (90.1, 93.1)
	Com. Labor	98.4% (97.9, 98.7)	11.7% (11.3, 12.2)	89.2% (86.7, 91.2)
	School Super.*	98.4% (98.0, 98.7)	11.0% (10.6, 11.4)	88.1% (86.0, 90.0)
	Public Serv. Com. 3	98.7% (98.4, 99.0)	13.1% (12.8, 13.5)	92.2% (90.6, 93.5)
	Public Serv. Com. 5	98.7% (98.4, 99.0)	12.5% (12.2, 12.9)	90.5% (88.7, 92.0)
2018 Runoff	Sec. of State	98.6% (98.2, 98.9)	15.2% (14.9, 15.6)	90.0% (87.8, 91.8)
	Public Serv. Com. 3	98.6% (98.2, 98.9)	16.5% (16.2, 16.9)	90.2% (87.8, 92.2)
2020 General	U.S. President	98.0% (97.4, 98.4)	15.5% (15.0, 16.0)	90.4% (88.0, 92.3)
	U.S. Senator	98.2% (97.8, 98.7)	13.6% (13.2, 14.1)	90.8% (88.7, 92.7)
	Public Serv. Com. 1*	98.3% (97.9, 98.7)	11.6% (11.2, 12.0)	90.0% (88.1, 91.7)
	Public Serv. Com. 4*	98.4% (98.0, 98.7)	12.0% (11.6, 12.4)	91.6% (89.6, 93.1)
2021 Runoff	U.S. Senator (Perdue)	98.7% (98.4, 99.0)	14.5% (14.3, 14.9)	94.4% (93.1, 95.5)
	U.S. Senator (Loeffler)*	98.7% (98.4, 99.0)	15.2% (14.9, 15.5)	95.1% (93.9, 96.1)
	Public Serv. Com. 4*	98.7% (98.4, 99.0)	13.1% (12.8, 13.4)	93.4% (91.9, 94.5)
2022 General	U.S. Senator*	98.7% (98.4, 99.0)	15.9% (15.6, 16.2)	95.7% (94.5, 96.6)
	Governor*	98.5% (98.2, 98.9)	10.3% (9.9, 10.8)	88.1% (86.2, 89.9)
	Lt. Governor	98.4% (98.0, 98.8)	12.1% (11.8, 12.6)	91.4% (89.6, 93.0)
	Sec. of State	98.3% (97.8, 98.6)	10.5% (10.0, 11.1)	81.6% (79.2, 84.2)
	Attorney General	98.6% (98.2, 98.9)	12.1% (11.7, 12.5)	89.7% (87.8, 91.4)
	Com. Agriculture*	98.5% (98.2, 98.9)	9.8% (9.4, 10.2)	88.7% (87.1, 90.3)
	Com. Insurance*	98.4% (98.0, 98.8)	10.3% (9.9, 10.8)	87.4% (85.4, 89.2)
	Com. Labor*	98.5% (98.1, 98.8)	10.4% (10.0, 10.8)	90.9% (89.2, 92.3)
	School Super.*	98.4% (98.0, 98.8)	10.4% (10.0, 10.9)	87.4% (85.5, 89.1)

* Indicates that the Black candidate of choice was Black.

Table 2: Ecological Inference Results — Estimated Vote Share of Black-Preferred Candidates
— CD 3

		Black	White	Other
2012 General	U.S. President*	95.4% (93.7, 96.7)	8.8% (8.2, 9.7)	92.2% (85.7, 95.9)
2014 General	U.S. Senator	97.2% (95.7, 98.3)	11.2% (10.4, 12.2)	88.1% (77.5, 94.8)
	Governor	96.8% (95.3, 98.0)	12.2% (11.3, 13.4)	83.1% (70.1, 92.5)
	Lt. Governor*	96.8% (95.3, 97.9)	6.3% (5.5, 7.2)	84.8% (74.0, 92.2)
	Sec. of State*	97.1% (95.7, 98.2)	6.9% (6.2, 8.0)	86.3% (74.2, 93.2)
	Attorney General	96.6% (95.2, 97.8)	8.1% (7.5, 9.1)	87.9% (77.1, 93.7)
	Com. Agriculture	96.4% (94.5, 97.7)	6.6% (5.7, 7.7)	80.6% (67.1, 90.9)
	Com. Insurance*	97.0% (95.6, 98.1)	7.2% (6.5, 8.1)	86.7% (77.1, 93.6)
	Com. Labor*	97.0% (95.5, 98.1)	7.5% (6.7, 8.5)	85.9% (74.6, 93.8)
	School Super.*	97.3% (96.0, 98.3)	9.7% (8.9, 10.7)	84.6% (74.4, 92.2)
2016 General	U.S. President	97.7% (96.4, 98.6)	7.0% (6.6, 7.5)	94.5% (91.1, 96.9)
	U.S. Senator	95.6% (93.8, 97.1)	4.0% (3.5, 4.8)	92.0% (87.6, 95.1)
2018 General	Governor*	97.8% (96.7, 98.6)	6.5% (6.1, 7.0)	95.3% (92.2, 97.3)
	Lt. Governor	97.4% (96.3, 98.3)	6.2% (5.7, 6.8)	94.5% (90.8, 97.1)
	Sec. of State	97.5% (96.3, 98.4)	7.2% (6.7, 7.8)	94.8% (91.6, 97.1)
	Attorney General	97.6% (96.4, 98.5)	7.6% (7.1, 8.2)	93.6% (89.6, 96.3)
	Com. Agriculture	97.2% (96.0, 98.1)	4.9% (4.4, 5.5)	93.7% (90.3, 96.2)
	Com. Insurance*	97.5% (96.3, 98.4)	5.7% (5.2, 6.2)	94.9% (91.8, 97.0)
	Com. Labor	97.6% (96.5, 98.5)	5.1% (4.7, 5.7)	94.4% (90.8, 97.0)
	School Super.*	97.5% (96.3, 98.3)	4.4% (4.0, 4.9)	94.8% (91.9, 96.9)
	Public Serv. Com. 3	97.6% (96.5, 98.5)	6.9% (6.4, 7.5)	94.0% (90.8, 96.7)
	Public Serv. Com. 5	97.7% (96.5, 98.5)	5.9% (5.5, 6.5)	94.5% (91.1, 96.8)
2018 Runoff	Sec. of State	96.7% (95.0, 97.9)	8.8% (8.2, 9.4)	93.0% (89.0, 96.1)
	Public Serv. Com. 3	96.8% (95.2, 98.0)	10.5% (9.9, 11.4)	90.0% (82.2, 94.8)
2020 General	U.S. President	97.4% (96.2, 98.4)	8.4% (7.9, 9.0)	94.9% (91.4, 97.2)
	U.S. Senator	97.5% (96.1, 98.4)	6.9% (6.5, 7.4)	96.3% (94.0, 97.9)
	Public Serv. Com. 1*	97.9% (96.9, 98.7)	5.1% (4.7, 5.6)	95.6% (92.8, 97.4)
	Public Serv. Com. 4*	97.7% (96.5, 98.6)	5.9% (5.4, 6.4)	95.6% (93.1, 97.4)
2021 Runoff	U.S. Senator (Perdue)	97.8% (96.5, 98.6)	8.6% (8.2, 9.2)	95.4% (92.5, 97.4)
	U.S. Senator (Loeffler)*	97.5% (96.2, 98.5)	9.3% (8.8, 10.0)	95.2% (92.0, 97.2)
	Public Serv. Com. 4*	97.9% (96.8, 98.7)	7.1% (6.7, 7.6)	95.3% (92.5, 97.2)
2022 General	U.S. Senator*	97.6% (96.3, 98.6)	9.1% (8.6, 9.7)	94.8% (91.6, 97.0)
	Governor*	97.2% (95.8, 98.2)	4.0% (3.5, 4.6)	92.2% (88.9, 94.6)
	Lt. Governor	97.0% (95.5, 98.1)	5.4% (4.9, 6.0)	94.0% (91.2, 96.2)
	Sec. of State	96.9% (95.3, 98.0)	3.5% (3.0, 4.0)	91.8% (88.6, 94.2)
	Attorney General	97.3% (95.9, 98.3)	5.2% (4.7, 5.8)	94.0% (90.7, 96.3)
	Com. Agriculture*	97.0% (95.7, 98.0)	3.6% (3.0, 4.3)	90.8% (86.8, 94.1)
	Com. Insurance*	97.8% (96.7, 98.6)	3.7% (3.3, 4.3)	92.2% (88.8, 94.8)
	Com. Labor*	97.2% (95.8, 98.2)	4.3% (3.8, 4.9)	92.3% (89.0, 94.9)
	School Super.*	97.2% (96.0, 98.2)	3.6% (3.2, 4.1)	93.0% (90.2, 95.4)

* Indicates that the Black candidate of choice was Black.

Table 3: Ecological Inference Results — Estimated Vote Share of Black-Preferred Candidates
— CD 6

		Black	White	Other
2012 General	U.S. President*	86.2% (80.4, 91.1)	13.4% (12.6, 14.4)	90.4% (83.0, 95.1)
2014 General	U.S. Senator	93.8% (89.7, 96.7)	15.1% (14.2, 16.5)	87.6% (77.7, 94.0)
	Governor	94.0% (90.1, 96.7)	13.8% (12.9, 15.0)	90.3% (82.5, 95.7)
	Lt. Governor*	93.4% (88.7, 96.5)	10.3% (9.2, 11.5)	82.8% (74.5, 89.8)
	Sec. of State*	94.0% (89.7, 96.9)	10.8% (9.7, 12.1)	83.1% (73.5, 91.0)
	Attorney General	94.5% (90.6, 97.0)	10.6% (9.7, 11.8)	86.2% (77.9, 92.2)
	Com. Agriculture	92.8% (87.2, 96.3)	10.4% (9.3, 11.8)	79.6% (70.1, 87.2)
	Com. Insurance*	95.1% (91.3, 97.4)	11.0% (10.0, 12.3)	84.2% (75.0, 90.9)
	Com. Labor*	94.9% (91.4, 97.2)	11.0% (9.8, 12.6)	84.0% (72.0, 92.3)
	School Super.*	94.0% (89.9, 97.1)	13.3% (12.3, 14.7)	86.1% (75.8, 93.0)
2016 General	U.S. President	94.0% (89.8, 97.0)	19.7% (17.9, 22.1)	80.9% (70.5, 88.2)
	U.S. Senator	93.8% (88.4, 97.0)	11.7% (10.3, 13.4)	75.7% (68.5, 81.2)
2018 General	Governor*	94.4% (90.3, 97.2)	24.7% (21.6, 27.7)	67.0% (56.1, 77.8)
	Lt. Governor	92.5% (87.4, 95.9)	23.9% (20.9, 27.2)	64.8% (53.2, 75.4)
	Sec. of State	93.4% (88.4, 96.7)	23.7% (21.4, 26.2)	67.6% (59.6, 75.9)
	Attorney General	93.9% (89.7, 96.9)	21.9% (20.0, 24.3)	71.6% (63.0, 78.3)
	Com. Agriculture	93.8% (89.2, 97.0)	20.6% (18.4, 23.0)	66.6% (58.0, 74.3)
	Com. Insurance*	93.5% (88.5, 96.6)	22.8% (20.0, 25.7)	65.2% (54.5, 74.9)
	Com. Labor	94.2% (89.7, 97.1)	20.9% (18.5, 23.6)	66.9% (57.3, 75.1)
	School Super.*	94.1% (90.3, 96.8)	19.8% (17.8, 22.2)	66.0% (57.5, 72.7)
	Public Serv. Com. 3	93.7% (89.2, 96.7)	23.0% (20.6, 25.4)	68.7% (60.4, 77.3)
	Public Serv. Com. 5	94.2% (89.9, 97.1)	23.2% (20.3, 26.7)	63.8% (51.3, 73.6)
2018 Runoff	Sec. of State	92.1% (86.4, 95.9)	27.1% (24.9, 29.8)	56.6% (43.9, 67.2)
	Public Serv. Com. 3	91.5% (85.7, 95.5)	28.7% (26.1, 31.6)	55.8% (42.3, 68.0)
2020 General	U.S. President	94.8% (90.5, 97.3)	28.0% (24.7, 32.1)	69.7% (57.1, 79.9)
	U.S. Senator	93.0% (88.0, 96.4)	24.4% (21.8, 27.3)	70.9% (62.0, 78.8)
	Public Serv. Com. 1*	92.5% (86.6, 96.5)	22.1% (19.4, 25.0)	69.1% (59.9, 77.2)
	Public Serv. Com. 4*	93.1% (87.5, 96.7)	22.9% (19.8, 26.3)	68.5% (58.0, 77.7)
2021 Runoff	U.S. Senator (Perdue)	93.6% (89.1, 96.8)	24.7% (21.9, 27.8)	73.9% (64.1, 82.6)
	U.S. Senator (Loeffler)*	93.0% (88.1, 96.3)	25.8% (23.3, 28.6)	74.4% (65.0, 82.3)
	Public Serv. Com. 4*	92.8% (87.8, 96.3)	22.6% (20.2, 25.9)	73.2% (62.9, 80.5)
2022 General	U.S. Senator*	92.8% (86.4, 96.5)	28.4% (24.9, 32.1)	73.3% (61.2, 84.4)
	Governor*	94.0% (89.8, 96.9)	22.3% (19.5, 25.2)	62.5% (53.0, 71.4)
	Lt. Governor	92.7% (87.5, 95.9)	24.8% (21.9, 28.5)	65.3% (53.3, 75.1)
	Sec. of State	93.7% (89.4, 96.7)	20.2% (17.6, 23.0)	62.3% (53.5, 70.8)
	Attorney General	93.3% (89.0, 96.3)	23.5% (20.6, 27.7)	67.2% (54.2, 76.3)
	Com. Agriculture*	93.5% (88.6, 96.8)	21.0% (18.3, 24.3)	64.4% (53.7, 72.7)
	Com. Insurance*	93.1% (88.8, 96.2)	21.0% (18.5, 23.9)	64.0% (54.7, 72.0)
	Com. Labor*	93.1% (88.7, 96.3)	22.5% (19.5, 25.5)	63.4% (53.4, 72.9)
	School Super.*	93.0% (88.1, 96.2)	21.6% (18.6, 25.7)	63.0% (49.8, 72.6)

* Indicates that the Black candidate of choice was Black.

Table 4: Ecological Inference Results — Estimated Vote Share of Black-Preferred Candidates — CD 11

		Black	White	Other
2012 General	U.S. President*	93.8% (90.8, 95.9)	14.6% (13.9, 15.5)	91.1% (84.6, 95.5)
2014 General	U.S. Senator	95.5% (93.0, 97.3)	16.4% (15.7, 17.4)	89.1% (80.0, 94.7)
	Governor	96.1% (93.7, 97.8)	16.3% (15.6, 17.3)	89.7% (80.2, 95.7)
	Lt. Governor*	96.1% (93.8, 97.8)	10.5% (9.9, 11.3)	90.2% (83.7, 94.9)
	Sec. of State*	96.0% (93.6, 97.8)	11.4% (10.8, 12.1)	91.3% (84.7, 95.9)
	Attorney General	96.5% (94.4, 98.1)	11.4% (10.9, 12.3)	91.5% (83.3, 95.8)
	Com. Agriculture	96.3% (93.8, 98.0)	10.3% (9.6, 11.0)	91.8% (85.6, 95.9)
	Com. Insurance*	96.7% (94.6, 98.1)	11.8% (11.2, 12.6)	90.7% (83.3, 95.7)
	Com. Labor*	96.2% (93.7, 97.8)	12.2% (11.6, 13.0)	90.2% (82.6, 95.3)
	School Super.*	96.1% (93.9, 97.8)	14.7% (14.0, 15.7)	90.3% (80.0, 95.6)
2016 General	U.S. President	96.2% (93.5, 98.0)	16.8% (16.1, 17.7)	93.3% (88.6, 96.5)
	U.S. Senator	96.7% (94.5, 98.3)	10.3% (9.7, 11.0)	94.7% (90.8, 97.3)
2018 General	Governor*	96.0% (93.3, 97.9)	19.1% (18.3, 20.2)	93.2% (86.9, 96.7)
	Lt. Governor	96.0% (93.5, 97.9)	18.1% (17.4, 19.1)	93.7% (88.5, 97.0)
	Sec. of State	96.5% (94.3, 98.2)	18.5% (17.8, 19.4)	93.8% (89.0, 97.0)
	Attorney General	96.6% (94.6, 98.1)	18.1% (17.4, 18.9)	94.1% (89.5, 97.0)
	Com. Agriculture	96.2% (93.7, 97.9)	15.7% (14.9, 16.7)	93.4% (88.2, 96.7)
	Com. Insurance*	96.5% (94.4, 98.2)	17.3% (16.5, 18.3)	92.2% (86.9, 96.1)
	Com. Labor	96.1% (93.7, 97.9)	16.4% (15.5, 17.6)	92.5% (86.1, 96.3)
	School Super.*	96.3% (94.0, 98.1)	15.4% (14.6, 16.4)	92.7% (86.7, 96.3)
	Public Serv. Com. 3	96.5% (94.0, 98.1)	18.5% (17.8, 19.7)	92.2% (85.7, 95.9)
	Public Serv. Com. 5	96.1% (93.9, 97.9)	17.3% (16.6, 18.3)	93.3% (88.3, 96.5)
2018 Runoff	Sec. of State	95.1% (91.5, 97.4)	19.8% (18.9, 20.9)	89.7% (81.4, 95.1)
	Public Serv. Com. 3	95.1% (91.6, 97.5)	21.4% (20.5, 22.7)	87.9% (78.5, 94.0)
2020 General	U.S. President	96.1% (93.7, 97.9)	20.6% (19.7, 21.9)	93.2% (87.7, 96.5)
	U.S. Senator	96.4% (94.0, 98.1)	18.5% (17.7, 19.6)	93.4% (88.8, 96.4)
	Public Serv. Com. 1*	96.2% (93.7, 97.9)	15.9% (15.2, 16.9)	94.6% (91.0, 97.0)
	Public Serv. Com. 4*	95.7% (93.0, 97.6)	17.0% (16.2, 18.0)	93.6% (89.8, 96.5)
2021 Runoff	U.S. Senator (Perdue)	96.1% (93.6, 97.8)	19.9% (19.2, 20.9)	94.5% (90.1, 97.3)
	U.S. Senator (Loeffler)*	96.2% (93.4, 98.0)	21.0% (20.2, 22.1)	94.2% (90.3, 97.0)
	Public Serv. Com. 4*	96.2% (94.1, 97.9)	18.1% (17.5, 19.0)	94.9% (91.5, 97.2)
2022 General	U.S. Senator*	95.6% (92.6, 97.5)	21.9% (21.0, 23.3)	92.4% (86.3, 96.3)
	Governor*	95.9% (93.1, 97.9)	14.5% (13.6, 15.7)	91.6% (86.7, 95.1)
	Lt. Governor	95.6% (92.6, 97.6)	17.0% (16.1, 18.2)	92.5% (87.3, 96.0)
	Sec. of State	96.1% (94.0, 97.7)	13.1% (12.4, 14.0)	93.5% (89.8, 96.3)
	Attorney General	96.0% (93.4, 97.7)	16.6% (15.8, 17.6)	93.0% (88.2, 96.1)
	Com. Agriculture*	96.1% (93.5, 97.9)	13.9% (13.0, 15.1)	91.9% (86.7, 95.3)
	Com. Insurance*	96.6% (94.2, 98.2)	13.9% (13.0, 15.1)	92.5% (87.0, 96.0)
	Com. Labor*	95.9% (93.6, 97.8)	14.7% (13.9, 15.8)	93.3% (89.0, 96.3)
	School Super.*	95.7% (92.8, 97.6)	14.2% (13.4, 15.3)	93.3% (89.3, 96.1)

* Indicates that the Black candidate of choice was Black.

Table 5: Ecological Inference Results — Estimated Vote Share of Black-Preferred Candidates — CD 13

		Black	White	Other
2012 General	U.S. President*	99.2% (98.8, 99.4)	11.8% (10.8, 12.9)	96.7% (95.0, 98.0)
2014 General	U.S. Senator	99.2% (98.8, 99.4)	14.5% (13.3, 15.9)	94.8% (91.3, 96.8)
	Governor	99.1% (98.7, 99.4)	15.0% (13.3, 16.7)	84.7% (79.9, 89.2)
	Lt. Governor*	98.9% (98.5, 99.3)	9.6% (7.9, 11.6)	68.4% (62.5, 74.0)
	Sec. of State*	98.9% (98.5, 99.3)	9.8% (8.3, 11.5)	76.5% (71.4, 81.6)
	Attorney General	98.9% (98.5, 99.3)	12.2% (10.4, 14.0)	76.8% (71.5, 82.2)
	Com. Agriculture	98.9% (98.4, 99.3)	10.2% (8.3, 12.3)	61.0% (55.0, 66.8)
	Com. Insurance*	98.9% (98.5, 99.2)	10.6% (9.0, 12.3)	79.2% (74.1, 84.4)
	Com. Labor*	99.0% (98.6, 99.3)	10.3% (8.7, 11.9)	81.3% (76.7, 85.9)
	School Super.*	99.1% (98.7, 99.4)	11.6% (10.2, 13.2)	90.3% (85.9, 94.0)
2016 General	U.S. President	99.1% (98.7, 99.4)	15.2% (13.5, 17.1)	93.2% (89.6, 96.3)
	U.S. Senator	98.6% (98.0, 99.0)	15.1% (12.7, 17.7)	64.2% (58.6, 70.2)
2018 General	Governor*	99.1% (98.8, 99.4)	16.5% (15.2, 17.9)	96.2% (94.3, 97.6)
	Lt. Governor	99.1% (98.8, 99.5)	16.0% (14.2, 18.0)	91.2% (87.8, 94.2)
	Sec. of State	99.1% (98.7, 99.4)	16.5% (14.9, 18.3)	94.1% (91.1, 96.3)
	Attorney General	99.0% (98.5, 99.3)	17.0% (15.0, 19.1)	88.8% (85.0, 92.5)
	Com. Agriculture	99.0% (98.7, 99.3)	14.7% (12.7, 17.0)	83.8% (80.2, 87.2)
	Com. Insurance*	99.1% (98.7, 99.4)	14.9% (13.1, 16.9)	93.8% (91.0, 96.3)
	Com. Labor	99.1% (98.7, 99.4)	14.6% (12.7, 16.7)	87.2% (83.6, 90.4)
	School Super.*	99.1% (98.7, 99.4)	13.9% (12.1, 15.9)	86.0% (82.6, 89.2)
	Public Serv. Com. 3	99.1% (98.7, 99.4)	17.0% (15.4, 18.8)	93.3% (90.6, 96.0)
	Public Serv. Com. 5	99.1% (98.7, 99.4)	16.0% (14.2, 18.0)	91.4% (88.3, 94.2)
2018 Runoff	Sec. of State	99.0% (98.6, 99.3)	17.0% (15.6, 18.5)	95.1% (92.5, 97.1)
	Public Serv. Com. 3	99.0% (98.5, 99.3)	19.0% (17.5, 20.7)	94.7% (91.8, 96.9)
2020 General	U.S. President	98.9% (98.5, 99.3)	22.2% (19.6, 24.9)	80.6% (77.1, 84.1)
	U.S. Senator	98.9% (98.5, 99.3)	19.1% (16.7, 21.6)	85.3% (82.0, 88.4)
	Public Serv. Com. 1*	99.0% (98.6, 99.3)	17.5% (15.0, 20.1)	84.6% (81.1, 87.9)
	Public Serv. Com. 4*	99.0% (98.7, 99.3)	17.9% (15.6, 20.2)	86.7% (83.8, 89.6)
2021 Runoff	U.S. Senator (Perdue)	99.0% (98.7, 99.3)	17.5% (16.2, 19.2)	95.8% (94.1, 97.2)
	U.S. Senator (Loeffler)*	99.1% (98.7, 99.4)	19.4% (17.9, 21.2)	95.0% (92.9, 96.8)
	Public Serv. Com. 4*	99.0% (98.7, 99.3)	15.5% (14.0, 17.7)	95.2% (92.3, 97.0)
2022 General	U.S. Senator*	99.0% (98.6, 99.3)	22.5% (20.8, 24.4)	95.1% (92.8, 97.0)
	Governor*	99.0% (98.6, 99.3)	14.9% (12.8, 17.3)	86.9% (84.0, 89.7)
	Lt. Governor	98.8% (98.4, 99.2)	17.9% (15.6, 20.7)	90.0% (86.5, 93.2)
	Sec. of State	98.9% (98.5, 99.3)	19.6% (16.8, 22.5)	71.5% (68.0, 75.1)
	Attorney General	98.9% (98.5, 99.2)	18.0% (15.6, 20.9)	87.4% (83.8, 90.6)
	Com. Agriculture*	99.0% (98.5, 99.3)	14.5% (12.6, 16.8)	88.4% (85.7, 91.1)
	Com. Insurance*	99.0% (98.6, 99.3)	15.6% (13.2, 18.2)	84.8% (81.5, 87.9)
	Com. Labor*	98.9% (98.5, 99.2)	15.0% (13.1, 17.4)	91.0% (88.0, 93.7)
	School Super.*	98.9% (98.5, 99.3)	15.7% (13.3, 18.4)	85.3% (81.9, 88.5)

* Indicates that the Black candidate of choice was Black.

Table 6: Ecological Inference Results — Estimated Vote Share of Black-Preferred Candidates — CD 14

		Black	White	Other
2012 General	U.S. President*	93.4% (88.5, 96.9)	15.8% (14.8, 17.1)	83.3% (69.3, 93.1)
2014 General	U.S. Senator	94.3% (90.0, 97.3)	16.9% (15.7, 18.7)	76.7% (52.3, 90.7)
	Governor	91.9% (86.1, 96.1)	20.6% (19.3, 22.3)	73.2% (48.1, 88.2)
	Lt. Governor*	89.0% (81.8, 94.7)	14.2% (13.1, 15.6)	77.9% (59.0, 92.4)
	Sec. of State*	93.4% (88.6, 96.8)	14.6% (13.4, 16.1)	71.7% (51.4, 87.4)
	Attorney General	91.7% (86.1, 96.0)	15.4% (14.1, 17.0)	70.8% (49.4, 88.3)
	Com. Agriculture	91.7% (85.7, 96.0)	13.9% (12.7, 15.4)	71.3% (48.9, 87.7)
	Com. Insurance*	93.1% (88.3, 96.7)	14.6% (13.6, 15.8)	76.6% (61.9, 89.4)
	Com. Labor*	92.6% (86.4, 96.3)	15.3% (14.1, 16.7)	74.2% (54.5, 89.5)
	School Super.*	93.2% (87.3, 96.9)	17.7% (16.5, 19.2)	72.2% (52.0, 88.3)
2016 General	U.S. President	96.4% (93.5, 98.3)	8.6% (8.0, 9.4)	92.8% (87.4, 96.2)
	U.S. Senator	94.0% (90.4, 97.0)	7.6% (6.9, 8.5)	89.3% (82.4, 94.0)
2018 General	Governor*	97.4% (95.1, 98.8)	9.0% (8.5, 9.7)	94.1% (89.9, 97.0)
	Lt. Governor	96.6% (94.2, 98.3)	9.3% (8.7, 10.0)	93.8% (89.4, 96.8)
	Sec. of State	96.7% (93.8, 98.6)	10.0% (9.4, 10.9)	94.1% (88.5, 97.1)
	Attorney General	96.7% (94.2, 98.5)	9.9% (9.3, 10.5)	93.8% (90.0, 96.5)
	Com. Agriculture	97.2% (95.0, 98.6)	7.7% (7.2, 8.4)	95.1% (91.7, 97.3)
	Com. Insurance*	96.9% (94.4, 98.6)	8.8% (8.3, 9.6)	95.0% (91.0, 97.5)
	Com. Labor	96.6% (94.1, 98.3)	8.5% (7.9, 9.2)	94.9% (90.9, 97.4)
	School Super.*	97.1% (94.7, 98.7)	7.8% (7.3, 8.5)	94.1% (89.7, 96.9)
	Public Serv. Com. 3	97.0% (94.4, 98.6)	9.5% (8.9, 10.3)	93.6% (88.7, 96.8)
	Public Serv. Com. 5	97.1% (94.9, 98.7)	9.0% (8.5, 9.8)	93.9% (89.4, 96.9)
2018 Runoff	Sec. of State	96.4% (93.4, 98.3)	10.9% (10.1, 11.9)	88.0% (79.4, 94.4)
	Public Serv. Com. 3	96.3% (93.4, 98.3)	12.0% (11.2, 13.2)	88.5% (76.3, 95.4)
2020 General	U.S. President	96.9% (94.6, 98.4)	9.3% (8.8, 10.0)	94.3% (91.0, 96.6)
	U.S. Senator	97.0% (95.0, 98.5)	8.7% (8.2, 9.3)	95.1% (92.2, 97.1)
	Public Serv. Com. 1*	97.0% (94.9, 98.5)	7.3% (6.7, 7.9)	94.2% (90.9, 96.5)
	Public Serv. Com. 4*	97.4% (95.7, 98.7)	7.8% (7.3, 8.4)	94.9% (92.0, 97.0)
2021 Runoff	U.S. Senator (Perdue)	96.9% (94.7, 98.5)	10.6% (10.0, 11.3)	95.0% (91.5, 97.3)
	U.S. Senator (Loeffler)*	97.0% (95.0, 98.4)	10.9% (10.4, 11.7)	94.1% (90.2, 96.7)
	Public Serv. Com. 4*	97.0% (95.1, 98.5)	9.5% (9.0, 10.1)	94.8% (91.5, 97.2)
2022 General	U.S. Senator*	97.2% (95.0, 98.6)	11.0% (10.5, 11.7)	94.7% (91.1, 97.3)
	Governor*	97.5% (95.8, 98.7)	5.5% (5.1, 6.1)	95.0% (92.1, 97.2)
	Lt. Governor	97.1% (95.0, 98.5)	7.7% (7.2, 8.3)	94.5% (91.0, 96.9)
	Sec. of State	97.1% (95.2, 98.5)	5.1% (4.6, 5.6)	95.1% (92.2, 97.2)
	Attorney General	97.1% (95.0, 98.6)	7.5% (7.0, 8.1)	95.3% (91.8, 97.6)
	Com. Agriculture*	97.0% (95.0, 98.4)	5.9% (5.4, 6.5)	94.7% (91.2, 97.1)
	Com. Insurance*	97.4% (95.6, 98.7)	6.3% (5.8, 6.8)	94.8% (91.7, 97.0)
	Com. Labor*	97.2% (95.2, 98.5)	6.6% (6.1, 7.1)	94.8% (91.7, 97.0)
	School Super.*	97.2% (95.1, 98.6)	6.2% (5.7, 6.8)	95.3% (92.5, 97.3)

* Indicates that the Black candidate of choice was Black.

Table 7: Election Results in the Focus Area — Vote Share of Black-Preferred Candidates

		Focus Area	CD 3	CD 6	CD 11	CD 13	CD 14
2012 General	U.S. President	39.5%	32.2%	28.0%	32.7%	74.8%	29.8%
2014 General	U.S. Senator	40.2%	32.2%	28.6%	32.6%	75.8%	30.7%
	Governor	40.4%	32.6%	27.9%	32.7%	75.0%	33.1%
	Lt. Governor	36.1%	28.1%	24.1%	28.1%	71.8%	27.8%
	Sec. of State	36.8%	28.8%	24.6%	28.9%	72.6%	28.4%
	Attorney General	37.3%	29.7%	24.8%	29.0%	73.3%	28.7%
	Com. Agriculture	35.9%	28.0%	23.8%	28.1%	71.3%	27.5%
	Com. Insurance	37.3%	29.1%	25.0%	29.3%	73.3%	28.7%
	Com. Labor	37.4%	29.2%	24.9%	29.5%	73.3%	29.0%
	School Super.	39.1%	30.9%	27.0%	31.5%	74.6%	30.9%
2016 General	U.S. President	41.8%	31.6%	35.8%	36.7%	77.7%	27.8%
	U.S. Senator	37.7%	28.7%	28.9%	32.2%	73.7%	26.4%
2018 General	Governor	44.7%	32.8%	38.6%	40.0%	80.9%	30.1%
	Lt. Governor	43.9%	32.3%	37.4%	39.3%	79.9%	30.1%
	Sec. of State	44.6%	33.1%	37.9%	39.7%	80.5%	30.7%
	Attorney General	44.3%	33.3%	37.5%	39.5%	79.8%	30.6%
	Com. Agriculture	42.6%	31.3%	35.5%	37.6%	78.7%	29.2%
	Com. Insurance	43.7%	32.1%	36.7%	38.6%	80.2%	30.0%
	Com. Labor	43.0%	31.6%	35.8%	38.0%	79.2%	29.7%
	School Super.	42.4%	31.1%	34.8%	37.3%	78.9%	29.1%
	Public Serv. Com. 3	44.5%	32.9%	37.6%	39.6%	80.6%	30.3%
	Public Serv. Com. 5	43.9%	32.3%	36.8%	38.8%	80.2%	30.1%
2018 Runoff	Sec. of State	41.6%	30.4%	36.5%	35.8%	76.9%	28.3%
	Public Serv. Com. 3	42.6%	31.4%	37.5%	37.0%	77.4%	29.1%
2020 General	U.S. President	45.7%	34.7%	42.3%	42.3%	80.3%	31.2%
	U.S. Senator	44.7%	33.8%	39.9%	40.9%	80.4%	30.8%
	Public Serv. Com. 1	43.4%	32.6%	37.8%	39.2%	80.1%	29.6%
	Public Serv. Com. 4	44.0%	33.1%	38.3%	39.8%	80.5%	30.2%
2021 Runoff	U.S. Senator (Perdue)	46.1%	35.2%	40.5%	41.7%	82.2%	32.3%
	U.S. Senator (Loeffler)	46.6%	35.6%	41.3%	42.4%	82.5%	32.4%
	Public Serv. Com. 4	45.1%	34.1%	38.8%	40.5%	81.7%	31.5%
2022 General	U.S. Senator	46.6%	35.3%	42.7%	42.4%	83.4%	31.9%
	Governor	41.8%	31.3%	36.0%	37.0%	80.6%	27.8%
	Lt. Governor	43.4%	32.4%	38.4%	38.8%	81.5%	29.2%
	Sec. of State	41.0%	30.8%	34.5%	36.3%	79.1%	27.5%
	Attorney General	43.1%	32.4%	37.9%	38.6%	81.2%	29.2%
	Com. Agriculture	41.6%	30.8%	35.5%	36.5%	80.8%	27.9%
	Com. Insurance	41.6%	31.2%	35.4%	36.7%	80.3%	28.3%
	Com. Labor	42.2%	31.5%	36.3%	37.3%	81.2%	28.4%
	School Super.	41.7%	31.1%	35.6%	37.0%	80.4%	28.3%

Table 8: Vote Share of Black-Preferred Candidates — Illustrative Map

		CD 6
2012 General	U.S. President	62.3%
2014 General	U.S. Senator	62.7%
	Governor	62.0%
	Lt. Governor	58.2%
	Sec. of State	58.9%
	Attorney General	58.9%
	Com. Agriculture	57.6%
	Com. Insurance	59.8%
	Com. Labor	59.7%
	School Super.	61.3%
2016 General	U.S. President	67.0%
	U.S. Senator	61.8%
2018 General	Governor	70.6%
	Lt. Governor	69.4%
	Sec. of State	70.1%
	Attorney General	69.3%
	Com. Agriculture	67.8%
	Com. Insurance	69.5%
	Com. Labor	68.3%
	School Super.	67.9%
	Public Serv. Com. 3	70.1%
	Public Serv. Com. 5	69.4%
2018 Runoff	Sec. of State	65.7%
	Public Serv. Com. 3	66.3%
2020 General	U.S. President	71.1%
	U.S. Senator	70.4%
	Public Serv. Com. 1	69.5%
	Public Serv. Com. 4	70.0%
2021 Runoff	U.S. Senator (Perdue)	71.7%
	U.S. Senator (Loeffler)	72.2%
	Public Serv. Com. 4	70.8%

Table 9: List of Candidates in Statewide Elections, 2012–2022

		Democratic Candidate	Dem. Cand. Race	Republican Candidate	Rep. Cand. Race
2012 General	U.S. President	Barack Obama	Black	Mitt Romney	White
2014 General	U.S. Senator	Michelle Nunn	White	David Perdue	White
	Governor	Jason Carter	White	John Nathan Deal	White
	Lt. Governor	Connie Stokes	Black	L. S. 'Casey' Cagle	White
	Sec. of State	Doreen Carter	Black	Brian Kemp	White
	Attorney General	Gregory Hecht	White	Samuel Olens	White
	Com. Agriculture	Christopher Irvin	White	Gary Black	White
	Com. Insurance	Elizabeth Johnson	Black	Ralph Hudgens	White
	Com. Labor	Robbin Shipp	Black	J. Mark Butler	White
	School Super.	Valarie Wilson	Black	Richard Woods	White
2016 General	U.S. President	Hillary Clinton	White	Donald Trump	White
	U.S. Senator	Jim Barksdale	White	Johnny Isakson	White
2018 General	Governor	Stacey Abrams	Black	Brian Kemp	White
	Lt. Governor	Sarah Riggs Amico	White	Geoff Duncan	White
	Sec. of State	John Barrow	White	Brad Raffensperger	White
	Attorney General	Charlie Bailey	White	Chris Carr	White
	Com. Agriculture	Fred Swann	White	Gary Black	White
	Com. Insurance	Janice Laws	Black	Jim Beck	White
	Com. Labor	Richard Keatley	White	Mark Butler	White
	School Super.	Otha Thornton	Black	Richard Woods	White
	Public Serv. Com. 3	Lindy Miller	White	Chuck Eaton	White
	Public Serv. Com. 5	Dawn Randolph	White	Tricia Pridemore	White
2018 Runoff	Sec. of State	John Barrow	White	Brad Raffensperger	White
	Public Serv. Com. 3	Lindy Miller	White	Chuck Eaton	White
2020 General	U.S. President	Joe Biden	White	Donald Trump	White
	U.S. Senator	Jon Ossoff	White	David Perdue	White
	Public Serv. Com. 1	Robert Bryant	Black	Jason Shaw	White
	Public Serv. Com. 4	Daniel Blackman	Black	Lauren McDonald	White
2021 Runoff	U.S. Senator (Perdue)	Jon Ossoff	White	David Perdue	White
	U.S. Senator (Loeffler)	Raphael Warnock	Black	Kelly Loeffler	White
	Public Serv. Com. 4	Daniel Blackman	Black	Lauren McDonald	White
2022 General	U.S. Senator	Raphael Warnock	Black	Herschel Junior Walker	Black
	Governor	Stacey Abrams	Black	Brian Kemp	White
	Lt. Governor	Charlie Bailey	White	Burt Jones	White
	Sec. of State	Bee Nguyen	Asian	Brad Raffensperger	White
	Attorney General	Jennifer "Jen" Jordan	White	Chris Carr	White
	Com. Agriculture	Nakita Hemingway	Black	Tyler Harper	White
	Com. Insurance	Janice Laws Robinson	Black	John King	White
	Com. Labor	William "Will" Boddie, Jr	Black	Bruce Thompson	White
	School Super.	Alisha Thomas Searcy	Black	Richard Woods	White

* Excludes candidates in the 2020 Special Election for U.S. Senate

Maxwell Palmer

CONTACT	<p>Department of Political Science Boston University 232 Bay State Road Boston, MA 02215</p> <p><i>E-mail:</i> mbpalmer@bu.edu <i>Website:</i> www.maxwellpalmer.com <i>Phone:</i> (617) 358-2654</p>
APPOINTMENTS	<p>Boston University, Boston, Massachusetts</p> <p>Associate Professor, Department of Political Science, 2021–Present</p> <p>Director of Advanced Programs, Dept. of Political Science, 2020–Present</p> <p>Civic Tech Fellow, Faculty of Computing & Data Sciences, 2021–Present</p> <p>Faculty Fellow, Initiative on Cities, 2019–Present</p> <p>Assistant Professor, Department of Political Science, 2014–2021</p> <p>Junior Faculty Fellow, Hariri Institute for Computing, 2017–2020</p>
EDUCATION	<p>Harvard University, Cambridge, Massachusetts</p> <p>Ph.D., Political Science, May 2014.</p> <p>A.M., Political Science, May 2012.</p> <p>Bowdoin College, Brunswick, Maine</p> <p>A.B., Mathematics & Government and Legal Studies, May 2008.</p>
BOOK	<p><i>Neighborhood Defenders: Participatory Politics and America's Housing Crisis</i> (with Katherine Levine Einstein and David M. Glick). 2019. New York, NY: Cambridge University Press.</p> <ul style="list-style-type: none"> – Selected chapters republished in <i>Political Science Quarterly</i>. – Reviewed in <i>Perspectives on Politics</i>, <i>Political Science Quarterly</i>, <i>Economics 21</i>, <i>Public Books</i>, and <i>City Journal</i>. – Covered in Vox's "The Weeds" podcast, CityLab, Slate's "Gabfest," Curbed, Brookings Institution Up Front.
REFEREED ARTICLES	<p>Einstein, Katherine Levine, Joseph Ornstein, and Maxwell Palmer. 2022. "Who Represents the Renters?" <i>Housing Policy Debate</i>.</p> <p>Einstein, Katherine Levine, David Glick, and Maxwell Palmer. 2022. "Developing a pro-housing movement? Public distrust of developers, fractured coalitions, and the challenges of measuring political power." <i>Interest Groups & Advocacy</i> 11:189–208.</p>

Einstein, Katherine Levine, David Glick, Luisa Godinez Puig, and Maxwell Palmer. 2022. "Still Muted: The Limited Participatory Democracy of Zoom Public Meetings." *Urban Affairs Review*.

Glick, David M. and Maxwell Palmer. 2022. "County Over Party: How Governors Prioritized Geography Not Particularism in the Distribution of Opportunity Zones." *British Journal of Political Science* 52(4): 1902–1910.

de Benedictis-Kessner, Justin and Maxwell Palmer. 2021. "Driving Turnout: The Effect of Car Ownership on Electoral Participation." *Political Science Research and Methods*.

Einstein, Katherine Levine and Maxwell Palmer. 2021. "Land of the Freeholder: How Property Rights Make Voting Rights." *Journal of Historical Political Economy* 1(4): 499–530.

Godinez Puig, Luisa, Katharine Lusk, David Glick, Katherine L. Einstein, Maxwell Palmer, Stacy Fox, and Monica L. Wang. 2020. "Perceptions of Public Health Priorities and Accountability Among US Mayors." *Public Health Reports* (October 2020).

Einstein, Katherine Levine, David M. Glick, and Maxwell Palmer. 2020. "Can Mayors Lead on Climate Change? Evidence from Six Years of Surveys." *The Forum* 18(1).

Ban, Pamela, Maxwell Palmer, and Benjamin Schneer. 2019. "From the Halls of Congress to K Street: Government Experience and its Value for Lobbying." *Legislative Studies Quarterly* 44(4): 713–752.

Palmer, Maxwell and Benjamin Schneer. 2019. "Postpolitical Careers: How Politicians Capitalize on Public Office." *Journal of Politics* 81(2): 670–675.

Einstein, Katherine Levine, Maxwell Palmer, and David M. Glick. 2019. "Who Participates in Local Government? Evidence from Meeting Minutes." *Perspectives on Politics* 17(1): 28–46.

– Winner of the **Heinz Eulau Award**, American Political Science Association, 2020.

Einstein, Katherine Levine, David M. Glick, and Maxwell Palmer. 2019. "City Learning: Evidence of Policy Information Diffusion From a Survey of U.S. Mayors." *Political Research Quarterly* 72(1): 243–258.

Einstein, Katherine Levine, David M. Glick, Maxwell Palmer, and Robert Pressel. 2018. "Do Mayors Run for Higher Office? New Evidence on Progressive Ambition." *American Politics Research* 48(1) 197–221.

Ansolabehere, Stephen, Maxwell Palmer and Benjamin Schneer. 2018. “**Divided Government and Significant Legislation, A History of Congress from 1789-2010.**” *Social Science History* 42(1): 81–108.

Edwards, Barry, Michael Crespín, Ryan D. Williamson, and Maxwell Palmer. 2017. “**Institutional Control of Redistricting and the Geography of Representation.**” *Journal of Politics* 79(2): 722–726.

Palmer, Maxwell. 2016. “**Does the Chief Justice Make Partisan Appointments to Special Courts and Panels?**” *Journal of Empirical Legal Studies* 13(1): 153–177.

Palmer, Maxwell and Benjamin Schneer. 2016. “**Capitol Gains: The Returns to Elected Office from Corporate Board Directorships.**” *Journal of Politics* 78(1): 181–196.

Gerring, John, Maxwell Palmer, Jan Teorell, and Dominic Zarecki. 2015. “**Demography and Democracy: A Global, District-level Analysis of Electoral Contestation.**” *American Political Science Review* 109(3): 574–591.

OTHER PUBLICATIONS

Einstein, Katherine Levine, David M. Glick and Maxwell Palmer. 2020. “**Neighborhood Defenders: Participatory Politics and America’s Housing Crisis.**” *Political Science Quarterly* 135(2): 281–312.

Ansolabehere, Stephen and Maxwell Palmer. 2016. “**A Two Hundred-Year Statistical History of the Gerrymander.**” *Ohio State Law Journal* 77(4): 741–762.

Ansolabehere, Stephen, Maxwell Palmer, and Benjamin Schneer. 2016. “**What Has Congress Done?**” in *Governing in a Polarized Age: Elections, Parties, and Political Representation in America*, eds. Alan Gerber and Eric Schickler. New York, NY: Cambridge University Press.

POLICY REPORTS

Glick, David M., Katherine Levine Einstein, and Maxwell Palmer. 2022. **Looking back on ARPA and America’s Cities: A Menino Survey Reflection.** Research Report. Boston University Initiative on Cities.

Einstein, Katherine Levine and Maxwell Palmer. 2022. **Representation in the Housing Process: Best Practices for Improving Racial Equity.** Research Report. The Boston Foundation.

Glick, David M., Katherine Levine Einstein, and Maxwell Palmer. 2022. **2021 Menino Survey of Mayors: Closing the Racial Wealth Gap.** Research Report. Boston University Initiative on Cities.

Glick, David M., Katherine Levine Einstein, and Maxwell Palmer. 2021. **2021**

Menino Survey of Mayors: Building Back Better. Research Report. Boston University Initiative on Cities.

Glick, David M., Katherine Levine Einstein, Maxwell Palmer, Stacy Fox, Katharine Lusk, Nicholas Henninger, and Songhyun Park. 2021. *2020 Menino Survey of Mayors: Policing and Protests*. Research Report. Boston University Initiative on Cities.

Glick, David M., Katherine Levine Einstein, Maxwell Palmer, and Stacy Fox. 2020. *2020 Menino Survey of Mayors: COVID-19 Recovery and the Future of Cities*. Research Report. Boston University Initiative on Cities.

de Benedictis-Kessner, Justin and Maxwell Palmer. 2020. *Got Wheels? How Having Access to a Car Impacts Voting*. *Democracy Docket*.

Palmer, Maxwell, Katherine Levine Einstein, and David Glick. 2020. *Counting the City: Mayoral Views on the 2020 Census*. Research Report. Boston University Initiative on Cities.

Einstein, Katherine Levine, Maxwell Palmer, Stacy Fox, Marina Berardino, Noah Fischer, Jackson Moore-Otto, Aislinn O'Brien, Marilyn Rutecki and Benjamin Wuesthoff. 2020. *COVID-19 Housing Policy*. Research Report. Boston University Initiative on Cities.

Einstein, Katherine Levine, Maxwell Palmer, David Glick, and Stacy Fox. 2020. *Mayoral Views on Cities' Legislators: How Representative are City Councils?* Research Report. Boston University Initiative on Cities.

Einstein, Katherine Levine and Maxwell Palmer. 2020. *"Newton and other communities must reform housing approval process."* *The Boston Globe*.

Einstein, Katherine Levine, David Glick, Maxwell Palmer and Stacy Fox. 2020. *"2019 Menino Survey of Mayors."* Research Report. Boston University Initiative on Cities.

Palmer, Maxwell, Katherine Levine Einstein, David Glick, and Stacy Fox. 2019. *Mayoral Views on Housing Production: Do Planning Goals Match Reality?* Research Report. Boston University Initiative on Cities.

Wilson, Graham, David Glick, Katherine Levine Einstein, Maxwell Palmer, and Stacy Fox. 2019. *Mayoral Views on Economic Incentives: Valuable Tools or a Bad Use of Resources?*. Research Report. Boston University Initiative on Cities

Einstein, Katherine Levine, David Glick, Maxwell Palmer and Stacy Fox. 2019. *"2018 Menino Survey of Mayors."* Research Report. Boston University Initiative

on Cities.

Einstein, Katherine Levine, Katharine Lusk, David Glick, Maxwell Palmer, Christiana McFarland, Leon Andrews, Aliza Wasserman, and Chelsea Jones. 2018. *“Mayoral Views on Racism and Discrimination.”* National League of Cities and Boston University Initiative on Cities.

Einstein, Katherine Levine, David Glick, and Maxwell Palmer. 2018. *“As the Trump administration retreats on climate change, US cities are moving forward.”* The Conversation.

Einstein, Katherine Levine, David M. Glick, Maxwell Palmer, and Robert Presel. 2018. *“Few big-city mayors see running for higher office as appealing.”* LSE United States Politics and Policy Blog.

Einstein, Katherine Levine, David Glick, and Maxwell Palmer. 2018. *“2017 Menino Survey of Mayors.”* Research Report. Boston University Initiative on Cities.

Williamson, Ryan D., Michael Crespin, Maxwell Palmer, and Barry C. Edwards. 2017. *“This is how to get rid of gerrymandered districts.”* *The Washington Post*, Monkey Cage Blog.

Palmer, Maxwell and Benjamin Schneer. 2015. *“How and why retired politicians get lucrative appointments on corporate boards.”* *The Washington Post*, Monkey Cage Blog.

CURRENT PROJECTS

“A Partisan Solution to Partisan Gerrymandering: The Define-Combine Procedure” (with Benjamin Schneer and Kevin DeLuca).

– Covered in *Fast Company*

“Descended from Immigrants and Revolutionists: How Family Immigration History Shapes Legislative Behavior in Congress” (with James Feigenbaum and Benjamin Schneer).

“The Gender Pay Gap in Congressional Offices” (with Joshua McCrain).

“Racial Disparities in Local Elections” (with Katherine Levine Einstein).

“Renters in an Ownership Society: Property Rights, Voting Rights, and the Making of American Citizenship.” Book Project. With Katherine Levine Einstein.

“Menino Survey of Mayors 2021.” Co-principal investigator with David M. Glick and Katherine Levine Einstein.

GRANTS
AND AWARDS

The Boston Foundation Grant. “2022 Greater Boston Housing Report Card” (Co-principal investigator). 2022. \$70,000.

The Rockefeller Foundation, “Menino Survey of Mayors” (Co-principal investigator). 2021. \$355,000.

American Political Science Association, **Heinz Eulau Award**, for the best article published in *Perspectives on Politics* during the previous calendar year, for “**Who Participates in Local Government? Evidence from Meeting Minutes.**” (with Katherine Levine Einstein and David M. Glick). 2020.

Boston University Initiative on Cities, COVID-19 Research to Action Seed Grant. “How Are Cities Responding to the COVID-19 Housing Crisis?” 2020. \$8,000.

The Rockefeller Foundation, “Menino Survey of Mayors” (Co-principal investigator). 2017. \$325,000.

Hariri Institute for Computing, Boston University. Junior Faculty Fellow. 2017–2020. \$10,000.

The Rockefeller Foundation, “2017 Menino Survey of Mayors” (Co-principal investigator). 2017. \$100,000.

The Center for Finance, Law, and Policy, Boston University, Research Grant for “From the Capitol to the Boardroom: The Returns to Office from Corporate Board Directorships,” 2015.

Senator Charles Sumner Prize, Dept. of Government, Harvard University. 2014.
Awarded to the best dissertation “from the legal, political, historical, economic, social or ethnic approach, dealing with means or measures tending toward the prevention of war and the establishment of universal peace.”

The Center for American Political Studies, Dissertation Research Fellowship on the Study of the American Republic, 2013–2014.

The Tobin Project, Democracy and Markets Graduate Student Fellowship, 2013–2014.

The Dirksen Congressional Center, Congressional Research Award, 2013.

The Institute for Quantitative Social Science, Conference Travel Grant, 2014.

The Center for American Political Studies, Graduate Seed Grant for “Capitol Gains: The Returns to Elected Office from Corporate Board Directorships,” 2014.

The Institute for Quantitative Social Science, Research Grant, 2013.

Bowdoin College: High Honors in Government and Legal Studies; Philo Sherman Bennett Prize for Best Honors Thesis in the Department of Government, 2008.

SELECTED
PRESENTATIONS

“A Partisan Solution to Partisan Gerrymandering: The Define-Combine Procedure.” MIT Election Data and Science Lab, 2020.

“Who Represents the Renters?” Local Political Economy Conference, Washington, D.C., 2019.

“Housing and Climate Politics,” Sustainable Urban Systems Conference, Boston University 2019.

“Redistricting and Gerrymandering,” American Studies Summer Institute, John F. Kennedy Presidential Library and Museum, 2019.

“The Participatory Politics of Housing,” Government Accountability Office Seminar, 2018.

“Descended from Immigrants and Revolutionists: How Immigrant Experience Shapes Immigration Votes in Congress,” Congress and History Conference, Princeton University, 2018.

“Identifying Gerrymanders at the Micro- and Macro-Level.” Hariri Institute for Computing, Boston University, 2018.

“How Institutions Enable NIMBYism and Obstruct Development,” Boston Area Research Initiative Spring Conference, Northeastern University, 2017.

“Congressional Gridlock,” American Studies Summer Institute, John F. Kennedy Presidential Library and Museum, 2016.

“Capitol Gains: The Returns to Elected Office from Corporate Board Directorships,” Microeconomics Seminar, Department of Economics, Boston University, 2015.

“A Two Hundred-Year Statistical History of the Gerrymander,” Congress and History Conference, Vanderbilt University, 2015.

“A New (Old) Standard for Geographic Gerrymandering,” Harvard Ash Center Workshop: How Data is Helping Us Understand Voting Rights After Shelby County, 2015.

“Capitol Gains: The Returns to Elected Office from Corporate Board Directorships,” Boston University Center for Finance, Law, and Policy, 2015.

“Capitol Gains: The Returns to Elected Office from Corporate Board Directorships,” Bowdoin College, 2014.

American Political Science Association: 2013, 2014, 2015, 2016, 2018, 2019, 2020

Midwestern Political Science Association: 2012, 2013, 2014, 2017, 2019

Southern Political Science Association: 2015, 2018

European Political Science Association: 2015

EXPERT
TESTIMONY
AND CONSULTING

Bethune-Hill v. Virginia (3:14-cv-00852-REP-AWA-BMK), U.S. District Court for the Eastern District of Virginia. Prepared expert reports and testified on racial predominance and racially polarized voting in selected districts of the 2011 Virginia House of Delegates map. (2017)

Thomas v. Bryant (3:18-CV-441-CWR-FKB), U.S. District Court for the Southern District of Mississippi. Prepared expert reports and testified on racially polarized voting in a district of the 2012 Mississippi State Senate map. (2018–2019)

Chestnut v. Merrill (2:18-cv-00907-KOB), U.S. District Court for the Northern District of Alabama. Prepared expert reports and testified on racially polarized voting in selected districts of the 2011 Alabama congressional district map. (2019)

Dwight v. Raffensperger (No. 1:18-cv-2869-RWS), U.S. District Court for the Northern District of Georgia. Prepared expert reports and testified on racially polarized voting in selected districts of the 2011 Georgia congressional district map. (2019)

Bruni, et al. v. Hughs (No. 5:20-cv-35), U.S. District Court for the Southern District of Texas. Prepared expert reports and testified on the use of straight-ticket voting by race and racially polarized voting in Texas. (2020)

Caster v. Merrill (No. 2:21-cv-1536-AMM), U.S. District Court for the Northern District of Alabama. Prepared expert report and testified on racially polarized voting in selected districts of the 2021 Alabama congressional district map. (2022)

Pendergrass v. Raffensperger (1:21-CV-05339-SCJ), U.S. District Court for the Northern District of Georgia. Prepared expert reports and testified on racially polarized voting in selected districts of the 2021 Georgia congressional district map. (2022)

Grant v. Raffensperger (1:22-CV-00122-SCJ), U.S. District Court for the Northern District of Georgia. Prepared expert reports and testified on racially polarized voting in selected districts of the 2021 Georgia state legislative district maps.

(2022)

Galmon, et al. v. Ardoin (3:22-cv-00214-SDD-SDJ), U.S. District Court for the Middle District of Louisiana. Prepared expert reports and testified on racially polarized voting for the 2021 Louisiana congressional district map. (2022)

Racially Polarized Voting Consultant, Virginia Redistricting Commission, August 2021.

The General Court of the Commonwealth of Massachusetts, Joint Committee on Housing, Hearing on Housing Production Legislation. May 14, 2019. Testified on the role of public meetings in housing production.

TEACHING

Boston University

- *Introduction to American Politics* (PO 111; Fall 2014, Fall 2015, Fall 2016, Fall 2017, Spring 2019, Fall 2019, Fall 2020)
- *Congress and Its Critics* (PO 302; Fall 2014, Spring 2015, Spring 2017, Spring 2019)
- *Data Science for Politics* (PO 399; Spring 2020, Spring 2021, Fall 2021, Fall 2022)
- *Formal Political Theory* (PO 501; Spring 2015, Spring 2017, Fall 2019, Fall 2020)
- *American Political Institutions in Transition* (PO 505; Spring 2021, Fall 2021)
- *Prohibition* (PO 540; Fall 2015, Fall 2022)
- *Political Analysis (Graduate Seminar)* (PO 840; Fall 2016, Fall 2017)
- *Graduate Research Workshop* (PO 903/4; Fall 2019, Spring 2020)

SERVICE

Boston University

- Research Computing Governance Committee, 2021–.
- Initiative on Cities Faculty Advisory Board, 2020–2022.
- Undergraduate Assessment Working Group, 2020-2021.
- College of Arts and Sciences
 - Search Committee for the Faculty Director of the Initiative on Cities, 2020–2021.
 - General Education Curriculum Committee, 2017–2018.
- Department of Political Science
 - Director of Advanced Programs (Honors & B.A./M.A.). 2020–.
 - Political Methodology Search Committee, 2021.

- Delegate, Chair Selection Advisory Process, 2021.
- Comprehensive Exam Committee, American Politics, 2019.
- Comprehensive Exam Committee, Political Methodology, 2016, 2017, 2021.
- Co-organizer, Research in American Politics Workshop, 2016–2018.
- American Politics Search Committee, 2017.
- American Politics Search Committee, 2016.
- Graduate Program Committee, 2014–2015, 2018–2019, 2020–2021.

Co-organizer, *Boston University Local Political Economy Conference*, August 29, 2018.

Editorial Board Member, *Legislative Studies Quarterly*, 2020–Present

Malcolm Jewell Best Graduate Student Paper Award Committee, Southern Political Science Association, 2019.

Reviewer: *American Journal of Political Science*; *American Political Science Review*; *Journal of Politics*; *Quarterly Journal of Political Science*; *Science*; *Political Analysis*; *Legislative Studies Quarterly*; *Public Choice*; *Political Science Research and Methods*; *Journal of Law, Economics and Organization*; *Election Law Journal*; *Journal of Empirical Legal Studies*; *Urban Affairs Review*; *Applied Geography*; *PS: Political Science & Politics*; Cambridge University Press; Oxford University Press.

Elected Town Meeting Member, Town of Arlington, Mass., Precinct 2. April 2021–Present.

Arlington Election Reform Committee Member, August 2019–April 2022.

Coordinator, **Harvard Election Data Archive**, 2011–2014.

OTHER EXPERIENCE

Charles River Associates, Boston, Massachusetts 2008–2010

Associate, Energy & Environment Practice

Economic consulting in the energy sector for electric and gas utilities, private equity, and electric generation owners. Specialized in Financial Modeling, Resource Planning, Regulatory Support, Price Forecasting, and Policy Analysis.

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