

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

Page 1

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

ANNIE LOIS GRANT, et al., )  
)  
Plaintiffs, )  
) CIVIL ACTION  
vs. ) FILE NO.:  
) 1:22-CV-00122-SCJ  
BRAD RAFFENSPERGER, in his )  
)  
official capacity as the )  
Georgia Secretary of State, )  
et al., )  
)  
Defendants. )

---

COAKLEY PENDERGRASS, et al. )  
)  
Plaintiffs, )  
) CIVIL ACTION  
vs. ) FILE NO.  
) 1:21-CV-05339-SCJ  
BRAD RAFFENSPERGER, et al., )  
)  
Defendants. )

---

THE VIDEOTAPED DEPOSITION OF:

Loren Collingwood, Ph.D.

Tuesday, February 28th, 2023

10 a.m.

via Zoom videoconference

\*\*\*\*\*

Amanda A. Bilbrey, CCR

## 1 APPEARANCES OF COUNSEL:

2 On behalf of the Plaintiffs:

3 JONATHAN HAWLEY, ESQUIRE  
4 MIKE JONES, ESQUIRE  
Elias Law Group  
5 250 Massachusetts Ave Northwest  
Suite 400  
6 Washington, D.C. 20002  
Phone: 206-656-0179  
7 jhawley@elias.law  
mjones@elias.law

8 On behalf of the Defendants:

9 DONALD P. BOYLE, JR., ESQUIRE  
10 Taylor English Duma, LLP  
1600 Parkwood Circle  
11 Suite 200  
Atlanta, Georgia 30339  
12 Phone: (678) 336-7249  
dboyle@taylorenghish.com

13 Also Present: Jonathan Miller, Videographer  
14 CASSIE MITCHELL, ESQUIRE  
15 WilmerHale, LLP  
16 7 World Trade Center  
250 Greenwich Street  
17 New York, New York 10007  
cassie.mitchell@wilmerhale.com

18 TIFFANY AGUIAR, ESQUIRE  
19 Crowell & Moring  
3 Park Plaza  
20 20th Floor  
Irvine, California 92614  
21 Phone: (949) 798-1351  
taguiar@crowell.com

22 \* \* \*

C O N T E N T S  
E X A M I N A T I O N

	Page
Cross-Examination by Mr. Boyle.....	5

E X H I B I T S

Defendants'		Page
Exhibit No.	Description	Marked
Exhibit 1	Plaintiffs' Initial Disclosures in Grant	10
Exhibit 2	Plaintiffs' Initial Disclosures in Pendergrass	11
Exhibit 3	Plaintiffs' Second Amended Initial Disclosures in Grant	12
Exhibit 4	Plaintiffs' Second Amended Initial Disclosures in Pendergrass	12
Exhibit 5	Dr. Loren Collingwood's Curriculum Vitae	18
Exhibit 6	University of New Mexico Screenshots	21
Exhibit 7	Dr. Loren Collingwood's January 2022 Expert Report in Grant	24
Exhibit 8	Dr. Loren Collingwood's January 2022 Expert Report in Pendergrass	25
Exhibit 9	Collingwood Research Website Screenshots	33
Exhibit 10	Collingwood Research "Who We Are" Website Screenshots	34
Exhibit 11	Dr. Loren Collingwood's December 2022 Expert Report in Grant	44
Exhibit 12	Dr. Loren Collingwood's December 2022 Expert Report in Pendergrass	44

## P R O C E E D I N G S

Deposition of Loren Collingwood, Ph.D.

Tuesday, February 28th, 2023

(The deposition commenced at 9:59 a.m.)

THE VIDEOGRAPHER: We are on the record  
February 28th, 2023, at approximately 9:59 a.m.  
Eastern Time. This will be the videotaped  
deposition of Dr. Loren Collingwood. Would  
counsel please identify themselves and who they  
represent for the record.

MR. BOYLE: I'm Donald Boyle, and I  
represent the defendants in the two cases, Grant  
v. Raffensperger and Pendergrass v.  
Raffensperger.

MR. HAWLEY: My name is Jonathan Hawley from  
Elias Law Group, and I represent the Pendergrass  
and Grant plaintiffs.

THE VIDEOGRAPHER: Would the court reporter  
please swear in the witness.

LOREN COLLINGWOOD, PH.D.,  
having been first duly sworn  
to tell the truth under oath,  
testified as follows:

MR. BOYLE: This will be the deposition of  
Professor Loren Collingwood, taken by the



1 defendants in these two cases. The deposition is  
2 being taken by agreement and notice and for all  
3 purposes allowed under the Federal Rules of Civil  
4 Procedure. If the stipulation is agreeable with  
5 counsel for the plaintiffs, I propose that we  
6 agree that all objections except as to the form  
7 of the question or responsiveness of the answer  
8 are reserved until such time as this deposition  
9 may be used in hearing or otherwise.

10 Is that acceptable?

11 MR. HAWLEY: Yes.

12 CROSS-EXAMINATION

13 BY MR. BOYLE:

14 Q Okay. Could you state your full name and  
15 address for the record, please.

16 A Loren Collingwood, [REDACTED]  
17 [REDACTED], Albuquerque, New Mexico [REDACTED].

18 Q Professor, again, my name is Don Boyle.  
19 I'll be taking your deposition this morning, and I  
20 appreciate your appearing by Zoom. Just to confirm, I  
21 think you're two hours behind the east, is that right,  
22 so it's just after 8 o'clock out there?

23 A Correct.

24 Q Okay. Again, I appreciate that. You  
25 understand you just had your oath taken, and it's just

1 as if you were in court to tell the truth?

2 A Yes.

3 Q Have you ever had a deposition taken before?

4 A Yes.

5 Q Okay. How many times?

6 A Probably between six to eight, maybe.

7 Q At least some of those were in your capacity  
8 as an expert witness; is that correct?

9 A They were all in my capacity.

10 Q Okay. All as an expert witness. Okay.  
11 When was the last deposition you gave before today?

12 A Probably in -- the one that comes to mind  
13 was in maybe August. I think it was August, maybe  
14 September last year, 2022.

15 Q All right. Well, it always helps to go over  
16 deposition basics, both for -- for me and for the  
17 witness, and I'll do that just briefly. The reporter  
18 is taking down everything I say, everything you say,  
19 and if counsel have any objections they'd be taken  
20 down as well. So it's important that we all respond  
21 in words or express ourselves in words rather than  
22 gestures.

23 Do you understand that?

24 A Yes.

25 Q You can ask me to rephrase any question that

1 comes out confusing or that you don't understand, and  
2 I'll be happy to rephrase it.

3 Is that all right?

4 A Yes.

5 Q It's also important for purposes of the  
6 record that we try not to interrupt each other.

7 Is that okay?

8 A Correct.

9 Q I don't expect this to go the full day, but  
10 we'll probably want to take breaks every hour or so.  
11 That's customary. So you just let me know if we're  
12 getting along to, you know, about an hour or so or at  
13 any time if you want to take a break. As long as a  
14 question is not pending, you just let me know and we  
15 can do that.

16 Is that all right?

17 A Sounds good.

18 MR. BOYLE: Mr. Hawley, is the witness going  
19 to read and sign?

20 MR. HAWLEY: Yes, please.

21 BY MR. BOYLE:

22 Q Mr. Collingwood, do you have any health  
23 problems or are you on any medication that would  
24 prevent you from giving full and clear answers to my  
25 questions today?

1 A No.

2 Q Is there anybody in the room with you while  
3 you're testifying today?

4 A No.

5 Q Could you let me know what you did  
6 specifically to prepare to testify today? And I  
7 know -- I know you've prepared several reports. But  
8 specifically with a view to giving a deposition on  
9 February 28th, what have you done?

10 A I met with counsel for one to two hours.

11 Q Okay. Anything else?

12 A I reviewed some of my documents related to  
13 this case. But, you know, I don't remember exactly --  
14 (audio distortion.)

15 THE COURT REPORTER: Mr. Collingwood, you  
16 broke up a little bit. Could you repeat that,  
17 please.

18 THE WITNESS: Sorry. I reviewed some of the  
19 documents related to the case.

20 MR. BOYLE: Thank you. All right.

21 BY MR. BOYLE:

22 Q Mr. Collingwood, I've enabled the screen  
23 share, and I've put up on the screen initial  
24 disclosures in the Grant case.

25 Can you see that?

1 A Yeah.

2 Q I am going to scroll down --

3 MR. HAWLEY: Mr. Boyle, I'm sorry to  
4 interrupt. At least on my screen share, the PDF  
5 is fairly small. Most of the screen share is  
6 taken up by the file folder. So I'm not sure if  
7 there's a way to enlarge the PDF so it's easier  
8 to read, but that could just be a problem on my  
9 end.

10 BY MR. BOYLE:

11 Q Professor Collingwood, can you see it? How  
12 does the document appear to you?

13 A It is -- it is small. I will have to kind  
14 of go through and, you know, take a look. It's kind  
15 of small. I could probably read it.

16 Q Okay. I just enlarged the font. Does that  
17 help?

18 MR. HAWLEY: No. The -- the -- I wish I  
19 could describe it better. But the PDF is  
20 essentially of the entire screen share, the PDF  
21 is sort of off to one side, maybe taking up only  
22 a quarter. The rest of it's the file folder.  
23 I'm not sure if there's a way to make the PDF the  
24 entire screen share?

25 MR. BOYLE: Oh. I see what you're saying.

1 I see what you're saying. Let me see. Let me do  
2 this. All right. How's that?

3 MR. HAWLEY: There we go. Now the PDF is --

4 THE WITNESS: Yeah. That's good.

5 MR. BOYLE: Okay. Yeah. What I -- yeah. I  
6 understand what the problem was. Okay. So we'll  
7 mark this as Exhibit 1, the Grant Initial  
8 Disclosures from March 28th.

9 (Defendants' Exhibit No. 1 was marked for  
10 identification.)

11 BY MR. BOYLE:

12 Q And there is an Attachment B., Professor,  
13 your name is there as an expert witness designated by  
14 the plaintiffs.

15 Do you see that?

16 A I do.

17 Q Okay. And is it your recollection that in  
18 or around March of 2022, the plaintiffs informed you  
19 that you would be disclosed as a witness in the Grant  
20 case?

21 A That sounds about right, yeah.

22 Q Okay. I'm done with that. I've now put up  
23 as Exhibit 2 Plaintiffs' Initial Disclosures in the  
24 Pendergrass case.

25 Do you see that document on the screen?

1 A Yes.

2 Q And I'll do the same thing. I'll scroll  
3 down to the Exhibit B -- or, excuse me -- Attachment  
4 B. And, again, you're identified there as an expert  
5 in the Pendergrass case, and this was March 28th of  
6 2022.

7 Same question: Do you recall being informed  
8 you would be disclosed as an expert in the Pendergrass  
9 case?

10 A Yeah.

11 (Defendants' Exhibit No. 2 was marked for  
12 identification.)

13 BY MR. BOYLE:

14 Q And now I have up on the screen -- this  
15 would be Exhibit 3, the Second Amended Initial  
16 Disclosures in the Grant case.

17 Do you see that?

18 A Yes.

19 Q It says Grant and then initial -- second  
20 amended?

21 A Uh-huh.

22 Q Okay. I'm going to scroll down here to the  
23 Attachment B in the second disclosures. Again, your  
24 name is there in Attachment B; correct?

25 A Correct.

1 Q And this document was dated February 3rd,  
2 2023. Here, in contrast to the earlier disclosure,  
3 there's a -- there's a fuller description of the  
4 topics of your testimony there.

5 Do you see that?

6 A Yep.

7 Q Okay. It says: Demographic analysis,  
8 socioeconomic disparities across racial groups, and  
9 political participation across racial groups.

10 And are you prepared to testify with  
11 opinions on those areas?

12 A Yes.

13 MR. BOYLE: Okay. We're done with that.

14 (Defendants' Exhibit No. 3 was marked for  
15 identification.)

16 BY MR. BOYLE:

17 Q And then just to close it out, we'll look at  
18 the same in Pendergrass. So I've now put up on the  
19 screen as Exhibit 4 Pendergrass Second Amended Initial  
20 Disclosures.

21 Do you see that, Professor?

22 A Yes.

23 (Defendants' Exhibit No. 4 was marked for  
24 identification.)

25 BY MR. BOYLE:



1 Q And I'll do the same thing; I'll go down to  
2 Attachment B. Again, you're identified and, again,  
3 there's the fuller topic description; correct?

4 A Yes.

5 Q Dr. Collingwood, you -- I believe you  
6 testified earlier that you have given deposition  
7 testimony as an expert previously. Could you tell me  
8 about those prior instances when you've given expert  
9 testimony; what was the nature of the case and what  
10 was the nature of your testimony?

11 A Let's see. One was to do with -- sorry --  
12 Section 2 voting rights, school board in New York  
13 State, and then another was to do with a redistricting  
14 case in Illinois. Both topics had racially polarized  
15 voting. Another on redistricting, also statewide  
16 redistricting, in Texas. And I'd have to go back and  
17 look, if I can look at my CV.

18 Q Yeah. Why don't we -- I've got your CV.  
19 And if you've got a copy there handy, we can -- can do  
20 that, by all means look at it.

21 A Oh. Then another one -- that would be an  
22 older version. Hold on. Let me think.

23 Q Well, tell you what. Dr. Collingwood, as  
24 Exhibit 5, I've put up on the screen your CV that was  
25 part of your -- your most recent report, updated

1 December 9, 2022.

2 Do you see that?

3 A Yeah. Yes.

4 BY MR. BOYLE:

5 Q And if it would help, I could scroll down to  
6 the appropriate part of this CV and find your prior  
7 testimony.

8 A Yeah. That -- some of the other -- these  
9 were like hearings and stuff.

10 Q Uh-huh.

11 A Yeah. So.

12 Q Let me see. I think it's on page -- like  
13 the 16th page here. Here we go.

14 A Yeah. Yeah. Then this one here in Texas --  
15 or, sorry -- Kansas, Faith Rivera. And this case,  
16 LULAC Texas, which is related to SP1. That sounds  
17 about it. That's about five. Five or six.

18 Q I'm sorry. You mentioned a Kansas case.  
19 Which one of these is the Kansas case?

20 A That's Faith Rivera et al. versus Scott  
21 Schwab -- Schwab and Michael Abbott.

22 Q And you mentioned the Illinois case. So  
23 that's East St. Louis branch of NAACP versus Illinois  
24 State Board of Elections?

25 A Correct.

1 Q So what was the -- what was the nature of  
2 your testimony in that case, the Illinois case?

3 A That was a racially polarized voting  
4 analysis in the communities in and around East  
5 St. Louis related to the redistricting bill or map  
6 that the state had generated.

7 Q Okay. So you didn't look -- for your  
8 purposes in that case you didn't look statewide, you  
9 just looked in the -- looked around the East St. Louis  
10 area?

11 A Correct.

12 MR. BOYLE: I know this looks funny, but  
13 they have the lights go off in my office if I  
14 don't move, so.

15 THE WITNESS: Oh, yeah. That's like a --  
16 like one of those bathroom kind of things. Yeah.

17 BY MR. BOYLE:

18 Q All right. Tell me about your work in the  
19 LULAC case in Texas. What were -- what was the nature  
20 of your report there?

21 A That's related to, like, data preparation.  
22 It's related to voter election bill SP1 -- or election  
23 administration. So the main task is joining data sets  
24 together from different counties, voter files,  
25 conducting race prediction at the individual level,

1 that kind of thing.

2 Q So it doesn't sound like that -- your work  
3 in that case had anything to do directly with  
4 redistricting?

5 A Not in that case, no.

6 Q Did I hear you right, though, that you did  
7 do some work regarding statewide redistricting in  
8 Texas?

9 A Yeah. I might be getting these two mixed  
10 up. I worked on both of them. It's -- it's possible  
11 that one just isn't listed on here. But it's the --  
12 there's a bunch of different plaintiffs versus Abbott.  
13 So that -- yeah. I'd have to figure out -- I think  
14 the plaintiff that I'm working with is called Fair  
15 Maps. But I've submitted a report for that as well.

16 Q Do you know where that case is pending, what  
17 court it's pending in?

18 A I think it's San Antonio, but I could be  
19 wrong. I think it's the Western District of Texas.

20 Q Have you given -- so, I'm sorry -- before we  
21 move on, does that cover the cases in which you've  
22 given a deposition, to the extent you can remember?

23 A Yeah. I'm almost a hundred percent on that.

24 Q Have you given testimony at a trial?

25 A Yeah. I -- yeah.

1 Q Okay. Tell me about the instances you can  
2 remember. And if you need to refer to your CV, go  
3 ahead.

4 A Right. The Johnson -- no -- well, so both  
5 Johnson, et al., and -- that was Wisconsin -- and East  
6 St. Louis, like, the trial, the expert testimony was  
7 given via written documents. So I'm not sure if that  
8 counts. I think it does. And then the Rivera et al.  
9 Kansas case, I gave testimony. And then the top two  
10 on the CV here, I gave testimony. But it may have  
11 been in a hearing, not a trial. I think one was at  
12 trial, one was a hearing. I have a hard time figuring  
13 out which one's which. So that's Lower Brule and  
14 Walen and Henderson.

15 Q To your knowledge, has your testimony ever  
16 been excluded by a court?

17 A Not to my knowledge.

18 Q Have you ever testified on behalf of a  
19 political jurisdiction of any kind, state or lower --  
20 state or local defending a redistricting plan or  
21 scheme?

22 A In the Walen case, I testified with an  
23 intervenor that was on behalf of -- that was joined  
24 with the state.

25 Q Who was the intervener?

1           A       The Native American Rights Foundation or  
2 Fund. I --

3           Q       To the extent you know, what was their  
4 position in the case that they sought to intervene?

5           A       They were seeking to uphold the  
6 redistricting plan in a specific area of North Dakota.

7           Q       Has the court ruled on that yet?

8           A       They're -- the -- the plaintiff was seeking  
9 a preliminary injunction and that was declined, I  
10 believe. And I think we have a trial in June, maybe.

11          Q       And so to your understanding, you may be  
12 called to testify at that trial?

13          A       Yeah. I think there's a good chance of  
14 that.

15          Q       So other than that one instance of working  
16 for the intervening Native American tribe in the North  
17 Dakota case, have you otherwise only testified for  
18 plaintiffs in redistricting litigation to the extent  
19 you've been involved in redistricting litigation?

20          A       Yeah, I think so.

21          Q       All right. I'll keep your CV up on the  
22 screen. Again, this is Exhibit 5, and I'm going to  
23 scroll up to the top.

24               (Defendants' Exhibit No. 5 was marked for  
25 identification.)

1 BY MR. BOYLE:

2 Q And tell me about your -- your  
3 education that you've -- your formal education that  
4 you've received, Professor.

5 A I got my undergraduate at California State  
6 University Chico, it was at Cal State in California in  
7 psychology and a minor in poli sci. And then took  
8 some time off and then went to get my Ph.D. in  
9 political science at the University of Washington.  
10 And along the way I got a master's degree in political  
11 science, and then a couple years in as part of the  
12 program, and then I graduated in 2012 with my Ph.D. in  
13 political science.

14 Q All right. You were breaking up a little  
15 bit for me there, but you got your Ph.D. in political  
16 science in 2012?

17 A Yeah. Yeah.

18 Q Okay. And I believe it said on your CV --  
19 or I picked this up somewhere -- your dissertation was  
20 the Pursuit of Victory and Incorporation: Elite  
21 Strategy, Group Pressure, and Cross Racial  
22 Mobilization?

23 A Yeah. Correct.

24 Q So specifically what were you -- what was  
25 the subject of your -- of your dissertation?

1           A       Yeah. The -- yeah. The main focus is  
2       investigating when and where Anglo or white candidates  
3       mobilized Latino and black voters to vote, kind of  
4       making cross-racial appeals. Stuff like that. That  
5       was the kind of main focus of it.

6           Q       And what were you doing in between getting  
7       your bachelor's degree and -- and going to University  
8       of Washington?

9           A       I worked at a political polling firm called  
10      Greenberg Quinlan Rosner. They're just sort of a D.C.  
11      firm. So I worked there for about three or four  
12      years.

13          Q       What kind of work did you do?

14          A       Well, I started out as a field associate,  
15      which was basically setting up -- managing the  
16      calendar for surveys and focus groups mainly, and  
17      maybe helping to work with in-depth interviews both  
18      domestically and internationally. I did that for a  
19      year or two. And then worked as an assistant analyst,  
20      which is kind of helping draft reports, PowerPoints,  
21      based off of surveys and focus groups and stuff and --  
22      for a wide array of clients.

23          Q       And you said some of those interviews you  
24      were doing were international?

25          A       Yeah, we did some international work. Yeah.



1 Q Was that as to -- as to issues in other  
2 countries, or what other people -- what people in  
3 other countries thought about issues in the United  
4 States?

5 A It was mostly, like, working in -- in a --  
6 in sort of an -- often in an electoral environment in  
7 other countries. Like helping craft campaign strategy  
8 and stuff like that for, you know, a particular  
9 client.

10 Q I'm going to put another document up here.  
11 What I've got on the screen is a printout of your  
12 webpage from the University of New Mexico.

13 Do you see that?

14 A Yes.

15 Q Okay. So that will be Exhibit 6.

16 (Defendants' Exhibit No. 6 was marked for  
17 identification.)

18 BY MR. BOYLE:

19 Q Is that a webpage that you maintain as far  
20 as the content, or does somebody else do that for you?

21 A I mean, I don't have direct access to the  
22 website. If that's what -- but I can, you know,  
23 contact someone and say, hey, can you update this or  
24 that.

25 Q Right. Okay. So as I understand from your

1 webpage, you've -- and from your CV, you've been an  
2 associate -- you are an associate professor since 2020  
3 at the University of New Mexico; correct?

4 A In December 2020 is when I started.

5 Q Okay. And it says your research area is  
6 American politics; is that correct?

7 A That's correct.

8 Q Turning to the second page, it says under  
9 biography your research interests include American  
10 politics, as well as race and ethnic politics with a  
11 particular emphasis on Latino politics and  
12 immigration; is that correct?

13 A Correct.

14 Q Tell me what you did between getting your  
15 Ph.D. at University of Washington and going to the  
16 University of New Mexico.

17 A So I got my Ph.D., and then I was an  
18 assistant professor at University of California  
19 Riverside for six or seven years. And then I was an  
20 associate professor there for maybe one year. And  
21 then, you know, then I moved to University of New  
22 Mexico after that.

23 Q What kind of work did you do at University  
24 of California Riverside?

25 A Pretty much the same thing I'm doing now.

1 It's a little bit -- yeah. Pretty much just doing  
2 research, writing articles, working on these books  
3 that I've been working on, and, you know, teaching a  
4 variety of classes related to American politics and --  
5 and also race and ethnic politics.

6 Q On your webpage as I'm scrolling down -- no.  
7 I'm sorry. On your CV. Your CV on the first page  
8 says research fields include American politics,  
9 political behavior methods, race and ethnic politics  
10 and immigration; is that correct?

11 A Correct.

12 Q What do you mean by political behavior?

13 A So people who do research in American  
14 politics, usually they do tend to focus more on  
15 either, like, voting and how groups interface with the  
16 political system and -- or they focus on, like,  
17 Congress or the presidency or something. And so the  
18 former, voting and groups and how groups interact with  
19 the system, kind of individual people and how they,  
20 you know, try to get something out of politics or not.  
21 That would be generally conceived of as political  
22 behavior.

23 Q So it's looking more from the voter side  
24 rather than from a candidate side?

25 A No. It's maybe not quite that clear.

1 It's -- it's, you know, elections based work and  
2 research is, you know, broadly seen as political  
3 behavior, I would say. And then institutions is more  
4 just like people who study elites in Congress or court  
5 systems, the executive, that kind of thing. It may be  
6 a bit of a gray area where it comes to exactly what  
7 candidates are doing, because then they are also the  
8 elected officials. But yeah. One example might be  
9 where, you know, you have a hypothetical candidate,  
10 they make some sort of an appeal, and then you see  
11 whether survey respondents who are, quote, voters in  
12 this idea, how they respond to that. So you can see  
13 there's kind of an interface between the two.

14 Q Okay. Dr. Collingwood, I've put up on the  
15 screen -- this will be Exhibit 7. This is a copy of  
16 your report in the Grant case dated January 13th.

17 Do you see that?

18 A I do.

19 (Defendants' Exhibit No. 7 was marked for  
20 identification.)

21 BY MR. BOYLE:

22 Q And I can just scroll through it slowly,  
23 just to show you the whole thing is here. Let me go  
24 ahead and put up also your report in the Pendergrass  
25 case. So the -- the Grant case report was dated

1 January 13th, Pendergrass report was dated January  
2 3rd.

3 Do you see that?

4 A I do.

5 MR. BOYLE: So we'll make the Pendergrass  
6 Initial Report Exhibit 8.

7 (Defendants' Exhibit No. 8 was marked for  
8 identification.)

9 BY MR. BOYLE:

10 Q Are these two reports the same?

11 A I think so.

12 Q I mean, as I went through it, it looked like  
13 the formatting might have been slightly different, but  
14 you appeared to have the same figures and tables from  
15 what I could tell --

16 A Yeah.

17 Q -- and the explanatory text.

18 A I think that's right.

19 Q Okay. Any reason why the dates of the two  
20 would be any different?

21 A There was some -- some sort of something  
22 with the -- with the filing with the legal side, where  
23 they were filing in maybe different courts or  
24 different jurisdictions or something that I didn't  
25 quite understand, yeah, because I'm not a lawyer.

1 Q Yeah. Sure.

2 A That would be the only -- the only thing.

3 Q Yeah. Sure. Yeah. Well, I mean, I'm  
4 not -- you understand I'm not asking you about when  
5 they were filed. It's just the date you've got there  
6 on the table with your signature --

7 A Yeah.

8 Q You've got January 3rd on Pendergrass and  
9 you've got January 13th on Grant. So are you saying  
10 counsel asked you to put those dates on there, or do  
11 you remember?

12 A I think it was with -- I filed the first one  
13 and then, you know, with -- ten days later we had to  
14 file another one. And so I just, you know, wanted to  
15 make sure that that was on that date. So I just  
16 signed a new document.

17 Q Let me go back to your CV for a minute. It  
18 says on the first page there -- do you see it? I've  
19 got up on the screen?

20 A I do see it.

21 Q You've got two books listed that you've  
22 written?

23 A Correct.

24 Q One was on sanctuary cities in 2019,  
25 Sanctuary Cities: The Politics of Refuge; and the

1 2020 book, Campaigning in a Racially Diversifying  
2 America. Let's talk about Sanctuary Cities book  
3 first. I see you had a co-author there?

4 A Yes.

5 Q How did you divide the labor on that book?

6 A I would say I do most of the scientific  
7 work, i.e. statistics and data analysis and various  
8 writeups. And that co-author focuses more on kind of  
9 the historical kind of background, the over time  
10 development, some of the archival work that we did as  
11 well. And maybe kind of linking up the broader  
12 narrative of the main themes. It's about something  
13 like that.

14 Q Did you specifically address redistricting  
15 in that book?

16 A I don't think so.

17 Q Or racially polarized voting?

18 A No, I don't think so.

19 Q How about your second book, Campaigning in a  
20 Racially Diversifying America, did you add address  
21 redistricting in that book?

22 A I'm trying to think. It's not like the core  
23 topic, redistricting, but -- no, I don't think so. I  
24 don't think so.

25 Q Did you address racially polarized voting in

1 that book?

2 A I would say broadly, yeah. It's a -- you  
3 know, the way that I, say, maybe do it in a -- in a  
4 court case. Not to that level, but it's certainly  
5 like a underlying kind of part of my model is the  
6 degree of racially polarized voting, more or less, in  
7 a jurisdiction.

8 Q What do you mean by your "model"?

9 A Just kind of like when we expect to see  
10 white candidates making appeals to minority voters.  
11 So it would be, you know, like a situation where  
12 there's not as much racially polarized voting would be  
13 a situation where, you know, we might expect to see  
14 white candidates mobilizing black voters more, for  
15 example.

16 Q Let's go into your CV. Now I'm going to  
17 scroll down to page 8 where you list courses taught,  
18 or the title is teaching experience.

19 Is that a comprehensive list of the courses  
20 you've taught?

21 A Yeah, I think. I mean, right now, you know,  
22 maybe there's one or two more classes since then that  
23 I -- that I've taught. But this is about right.

24 Q Do you address redistricting in any of these  
25 courses?



1 A Yeah.

2 Q Which ones?

3 A The one on the Voting Rights Act  
4 specifically. I think the one on race and ethnic  
5 politics to some degree. And then a lot of my -- my  
6 class on statistical programming and data science for  
7 the social sciences, at least the current version  
8 addresses redistricting. Not as like a -- from a race  
9 or race angle. But just because there's a lot of GIS  
10 and data gathering, and lends itself to a lot of  
11 statistical programming. So I use kind of it as a  
12 case -- case example throughout the course.

13 Q And in your CV going up, you had your books  
14 on the first page and then you have a number of  
15 articles listed. It's like 40 articles listed on  
16 pages 2 to 5. Do any of your published books or  
17 articles use this methodology that you've used in  
18 these two cases, Grant and Pendergrass?

19 A Yeah. I mean, they would. It's a pretty --  
20 it's a pretty -- it's a pretty common thing to use  
21 census data and look at, like, voting. But that  
22 specific methodology, it's not quite like racially  
23 polarized voting, I would say, in that you might write  
24 a whole paper specifically about the methodology of  
25 racially polarized voting.

1           Q     So is it accurate that the methodology  
2     you've used in your two reports in these two cases --  
3     or I guess four reports in these two cases -- has not  
4     been part of any article you've published that's been  
5     peer-reviewed?

6           A     No, I wouldn't say that. I would have to go  
7     back and look at all these, you know, the data for all  
8     these different papers and kind of recall, you know,  
9     how we set it up and -- and what we looked at.

10          Q     Okay. Well, maybe it will come to you. I  
11     mean, if, you know, if you -- before the deposition is  
12     over if you can think of one specific example, just  
13     let me know and we can talk about it.

14          A     Sounds good.

15          Q     You have a separate company called  
16     Collingwood Research; is that right?

17          A     That's right.

18          Q     I've put up on the share screen a printout  
19     of the webpage for Collingwood Research. It lists our  
20     services. It shows --

21                 Do you see that?

22          A     Yes.

23          Q     It says demography, racially polarized  
24     voting analysis, redistricting, expert testimony, data  
25     analytics, and survey research.

1 Are those topics covered by Collingwood  
2 Research?

3 A Yes.

4 Q Let's look at the description of racially  
5 polarized voting analysis. It says there: We examine  
6 whether racially polarized voting, or RPV, when voters  
7 from different groups vote differently is present in a  
8 political/governmental jurisdiction, RPV is a key  
9 component of demonstrating violations of the U.S.  
10 Voting Rights Act.

11 That's an accurate description of your  
12 services with regard to RPV?

13 A Yes.

14 Q Professor, do you personally believe race  
15 and politics can be separated for purposes of  
16 analyzing polarized voting?

17 A I'm not really sure if I -- maybe you could  
18 rephrase that question.

19 Q Yeah. So, in other words, when -- when any  
20 analyst is looking at racially polarized voting or is  
21 looking at polarized voting, is there a way to  
22 separate the effect of race on polarized voting -- or  
23 polarized voting based on race versus polarized voting  
24 based on partisan politics?

25 A That's pretty difficult to do with the kind

1 of way that's typically done in court cases. I mean,  
2 I know people look at certain things, but it's  
3 pretty -- it's pretty tough to do in the context of,  
4 say, NVRA cases, I would say.

5 Q So if you see a pattern of racially  
6 polarized voting, based on your analysis of the data,  
7 you don't believe there's a way to determine if that's  
8 caused just by partisan political preference rather  
9 than by race?

10 A Well, typically when I look at polarized  
11 voting, specifically look to ask -- to look at the  
12 bivariate relationship between racial identification  
13 in a group and vote preference. And so party is not  
14 usually considered as a matter.

15 Q Okay. And you weren't asked to look in  
16 these two cases at the role of partisanship in voting  
17 patterns, were you?

18 A No, I was not.

19 Q This webpage, Exhibit 9, also talks about  
20 Collingwood Research's work with redistricting. It  
21 says: We develop electoral districts designed to  
22 ensure fair elections, equitable representation, and  
23 electoral outcomes that comply with the standards  
24 outlined by federal and state voting rights laws.

25 Is that an accurate description of what

1 y'all do?

2 A Yeah.

3 (Defendants' Exhibit No. 9 was marked for  
4 identification.)

5 BY MR. BOYLE:

6 Q So do you personally draw redistricting maps  
7 with software?

8 A Yeah.

9 Q And you use the Maptitude software?

10 A Sometimes. I've started to use a little bit  
11 more Dave's Redistricting because it's -- there's a  
12 variety of reasons. It's a little more user-friendly.  
13 But I've used both.

14 Q Could you spell that for me?

15 A Dave, D-a-v-e, apostrophe S, space,  
16 Redistricting.

17 Q Got it.

18 A It's a little -- you know, it sounds kind of  
19 a funny name for a software package. But you know how  
20 these tech people are nowadays. Yeah.

21 Q Yep. Right. But you haven't been asked to  
22 draw redistricting maps in these two cases, Grant and  
23 Pendergrass, have you?

24 A No.

25 Q Have you reviewed the illustrative plans

1 involved in this case?

2 A I have not.

3 Q I've put up as Exhibit 10 another part of  
4 the website for Collingwood Research, and it says who  
5 we are and it shows yourself and some other members of  
6 your group; right?

7 A Correct.

8 (Defendants' Exhibit No. 10 was marked for  
9 identification.)

10 BY MR. BOYLE:

11 Q Were any of the folks that are listed on  
12 this webpage involved in your reports in these two  
13 cases?

14 A Not specifically.

15 Q What role did they have?

16 A Most of these people help me with, like,  
17 underlying co-development that I then turn into  
18 statistical software that's usually publicly  
19 available. So some of the methods that we're  
20 developing, you know, they work on that.

21 Q Could you be a little more specific about  
22 how they -- what they do and how they do it.

23 A Well, so we do a lot of data collection,  
24 like with API development, application programming  
25 interface, pinging census data. So I'm working on an

1 Arc package dealing with pulling in all the various  
2 data that, say, could be used in this project, in this  
3 type of analysis. So, you know, they help kind of  
4 write functions, software functions, that do those  
5 types of processes so that it can be generalized to  
6 other -- other environments, other situations.

7 Q So is -- is Collingwood Research essentially  
8 the vehicle that you use for your expert consulting  
9 work?

10 A Yeah. I -- it -- it's certainly -- it -- I  
11 mean, I do, you know, survey work as well for various  
12 groups. But effectively, yeah. That's -- that's  
13 true. I do -- you know, I do a variety of things, but  
14 the expert work that I do comes through Collingwood  
15 Research.

16 Q Okay. What other work does Collingwood --  
17 what other work do you do through Collingwood Research  
18 besides expert work?

19 A I do, like, I work with a variety of, like,  
20 polling survey companies. So I was previously a --  
21 you know, worked in my time between undergraduate and  
22 grad, you know, I did all that consulting work. So a  
23 lot of those people will have different either other  
24 polling firms, consulting firms now, or they still  
25 work at the places I used to work. And I help write

1 statistical software code for them for a variety of  
2 projects. And, you know, sometimes these people help  
3 me with that too.

4 Q But how long has Collingwood Research been  
5 in existence?

6 A It did start going maybe 2021, 2020. But,  
7 like, when I formed the LLC. But I've been doing  
8 stuff just kind of by myself sort of as a sole  
9 proprietor for probably 10 or 15 years.

10 Q Who owns Collingwood Research?

11 A I'm the -- me, and then I guess my wife has  
12 a small portion of it.

13 Q And what's her name?

14 A Sarah Dreier.

15 Q Has Collingwood Research done any work on  
16 behalf of a Secretary of State or other statewide  
17 official in defense of a redistricting plan?

18 A Not yet.

19 Q Do you think you may in the future?

20 A I could see it happening.

21 Q Okay. Are you able to tell me about it, or  
22 is it confidential?

23 A No, no, no. I just -- I imagine in the next  
24 round of redistricting work more of that type of thing  
25 will happen. Kind of people fall off and people come



1 in. It's an old crowd doing this type of work.

2 Q Sure. I'm going to hop back to your CV  
3 here, and your expert work described there on page 16.  
4 So it appears that from that -- that long paragraph at  
5 the top of the page on 16, that you've done some  
6 redistricting analysis and mapping for -- but then the  
7 clients, I don't see any statewide clients here. They  
8 seem to be --

9 A That's right.

10 Q -- they seem to be some counties?

11 A Yeah. A couple counties and school boards.

12 Q For your expert litigation work, have you  
13 ever looked at Voting Rights Acts in Senate Factor 5  
14 before this case? Again, as for your work in expert  
15 consulting.

16 A I think not to this degree.

17 Q Can you be -- do you have a specific  
18 recollection of a specific case?

19 A I think the East Ramapo case we did a -- a  
20 totality of circumstances analysis, which therefore  
21 included Senate Factor 5.

22 Q And that was in New York?

23 A Correct.

24 Q So what was at issue there?

25 A That was an at-large school board, and

1 plaintiff basically, you know, was seeking a  
2 single-member district for the school board.

3 Q And what was the outcome in that case, if  
4 it's not still going on?

5 A Yeah. It's completed. It's a -- it's a  
6 single-member district setup. Yeah.

7 Q So that's a change from the way it was  
8 before the litigation?

9 A Correct.

10 Q How about Senate Factor 8, have you looked  
11 at Senate Factor 8 for purposes of consulting in or  
12 testifying in litigation?

13 A Again, pretty much same answer.

14 Q Okay. Before your work in these two cases,  
15 had you studied Georgia voting patterns?

16 A Well, my book does a lot of research on the  
17 black belt. And so I don't think I've written a paper  
18 specifically about Georgia, but I've done a lot of  
19 analysis about voting in the South, which obviously  
20 includes Georgia.

21 Q Can you recall the names of any particular  
22 papers? Or if you've got your CV in front of you, can  
23 you -- can you look at it and tell me of any  
24 particular papers that looked at voting patterns in  
25 the South.

1           A       We've got a paper in Texas here on sanctuary  
2 city politics. I think I've got --

3           Q       Which number is that?

4           A       Let me see. It's maybe 20 -- my ordering on  
5 this might be slightly different than the one you  
6 have. I might have printed the older version of the  
7 report here.

8           Q       I see.

9           A       It's like 25 or 26. 25 to 27 probably.

10          Q       I see it. 26, co-authored with O'Brien and  
11 Tafoya 2020?

12          A       That's right. Then there's another one,  
13 maybe 21, Public Opposition to Sanctuary Cities in  
14 Texas.

15          Q       Yes.

16          A       We've got that. And then probably most of  
17 the rest would be in the -- in the book that I wrote.  
18 Yeah. It would be in the book that I wrote.

19          Q       And when you say "the book," you mean  
20 Campaigning in a Racially Diversifying America?

21          A       Yeah. That one, yeah. And then the other  
22 stuff would incorporate the South, but maybe wasn't  
23 specific about the South.

24          Q       How did you first learn that you would be  
25 retained by the plaintiffs as an expert in these two

1 cases?

2 A I just think one of the -- one of the  
3 lawyers just reached out to me from Elias Law Group  
4 and asked if I could write a report on Senate Factor  
5 5. So I think it was either probably just a phone  
6 call or like a, you know, that kind of thing.

7 Q Okay. Was Senate Factor 8 also part of the  
8 assignment at the beginning?

9 A No. I think that came in a little bit  
10 later. It just became sort of clear to kind of -- the  
11 two were obviously related, and so that kind of came  
12 out later.

13 Q When you started your report or your  
14 analysis, were you told what plaintiffs were seeking  
15 to prove in these two cases?

16 A I don't think so. I don't think so. I  
17 might have seen the complaint. There's a good chance  
18 I did. A lot of times I get the complaint and then I  
19 can see kind of, you know, what's been alleged or what  
20 have you. But, you know, obviously I'm familiar with  
21 Senate Factor 5 and so I kind of knew, you know, what  
22 to do.

23 Q Sure. And I understand you're charging \$400  
24 an hour for your work in the case?

25 A That's correct.

1 Q Okay. How much have you billed in total for  
2 these two cases?

3 A Probably between 25 and 30-ish k.

4 Q Where do you send your bills?

5 A Just to, you know, one of the point people,  
6 one of the lawyers.

7 Q At Elias Law Group?

8 A Correct.

9 Q How much more do you expect to bill, whether  
10 in terms of hours or dollars, in these two cases?

11 A It's hard to put a number on that. It just  
12 depends on how long -- whether the trial gets moved or  
13 what have you to another cycle and then I have to redo  
14 the analysis. But, I mean, the core of the work is  
15 done, so probably not that much more.

16 Q And we're going to put up on the screen your  
17 updated reports in the two cases in a minute. But  
18 just to -- to clarify, I think you said earlier you  
19 believed your reports for -- your initial reports from  
20 January of last year for the two cases were  
21 essentially identical except for some possible  
22 formatting; is that right?

23 A That's right.

24 Q And is it your recollection that the same is  
25 true for the updated reports that you did in December

1 of last year for the two cases?

2 A Also true.

3 Q So -- so essentially what you've done is do  
4 one report, one in January of '22, one in December  
5 of 2022, for the two cases. You haven't -- you  
6 haven't done different work for the two cases?

7 A That's right.

8 Q What's your ordinary hourly rate for a  
9 government entity that hires you for litigation?

10 A It would be about the same.

11 Q I'm going to put up your updated reports on  
12 the screen here. All right. Do you see on the screen  
13 there expert report of Dr. Loren Collingwood in Grant,  
14 December 12th, 2022?

15 A Yes.

16 Q And then if I go to the next PDF, expert  
17 report of Dr. Loren Collingwood, in Pendergrass.

18 Do you see that?

19 A Yes.

20 MR. BOYLE: So we'll mark the Grant report  
21 as 11 and the Pendergrass -- excuse me. Start  
22 over.

23 The Grant December report as 11; Pendergrass  
24 December report as 12.

25

1 (Defendants' Exhibit Nos. 11 and 12 were marked for  
2 identification.)

3 BY MR. BOYLE:

4 Q All right. I'm just going to -- I may just  
5 be talking about since -- since I think we've got  
6 agreement that your report in the two cases is  
7 identical, so we're now going to be talking about the  
8 updated reports from December. I'll just take --  
9 arbitrarily, I'll just pick Pendergrass, which is No.  
10 12, and I'll scroll down here to page 3 where you list  
11 your data sources that you've relied on in the middle  
12 of the page on page 3. It says: My opinions are  
13 based on.

14 Do you see that?

15 A Yep.

16 Q And you list the American Community Survey.  
17 What is that?

18 A That's like a census product. It's a -- it  
19 basically provides population-level data about  
20 different geographic units, and updates every year  
21 based on a five-year running average. And it's a  
22 household population survey.

23 Q And then you also looked at '20 and '22  
24 statewide, county, and precinct level voting  
25 registration and aggregate turnout data from the

1 Georgia Secretary of State; right?

2 A That's right.

3 Q And 2010 to 2022 statewide voter turnout  
4 data from the Georgia Secretary of State; right?

5 A Correct.

6 Q And 2014 to 2022 county level voter turnout  
7 data from the Georgia Secretary of State; right?

8 A Yes.

9 Q And the 2020 cooperative elections study.  
10 What is the cooperative elections study?

11 A That's a survey run out of, I think, some  
12 professors at Harvard and Tufts. It's is a very large  
13 survey. They do it probably every two years, usually  
14 around election time. It's, you know, the standard  
15 political behavior survey questions are in the study,  
16 and it's large enough where you can do county level  
17 breakdowns and analysis.

18 Q Other than being given the complaint, as  
19 you've testified earlier, the complaints in the two  
20 cases, did plaintiffs' counsel give you any  
21 information, data, or other sources for you to  
22 possibly rely on in your work?

23 A I think the 2022 precinct or county returns,  
24 counsel provided that to me.

25 Q Anything else from counsel?



1           A     I don't think so. The Georgia Secretary of  
2     State is -- the data transparency process is one of  
3     the best I've seen.

4           Q     So do you mean by that that it was easy for  
5     you to get the data you needed from the Georgia  
6     Secretary of State?

7           A     Yeah. There's a lot of good publicly  
8     available data. Maybe Washington is the only other  
9     state I've seen that it's as -- as good for political  
10    scientists to do research with.

11          Q     Did plaintiffs' counsel tell you to assume  
12    anything for purposes of your work in these two cases?

13          A     No. I think they would know better than to  
14    do that.

15          Q     Have you ever worked with any of the  
16    plaintiff law firms before?

17          A     Yeah. I've worked with Elias Law Group  
18    previously.

19          Q     In what cases?

20          A     I think the LULAC versus Pate in Iowa, and I  
21    think also this SB1 case in Texas. I forget the name  
22    of the Abbott -- I think it's also LULAC versus  
23    Abbott.

24          Q     How about the -- the ACLU Foundation of  
25    Georgia? That's one of the plaintiff law firms. Have

1 you worked with them before?

2 A No.

3 Q Have you worked at the law firm of Wilmer  
4 Cutler Pickering before?

5 A I don't think so.

6 Q Have you worked with the ACLU foundation  
7 more broadly, not just ACLU Georgia?

8 A I have worked with various iterates of  
9 statewide or local ACLUs, yes.

10 Q Do you remember which cases those were?

11 A The New York Ramapo case. NICLU, which is  
12 New York Civil Liberties Union. I think it's the ACLU  
13 version of New York, was one of the litigants. And  
14 then the Kansas Schwab case, ACLU was one of the  
15 firms. But I don't think I've worked -- you know, I  
16 didn't work really with those lawyers. I was -- I  
17 just wasn't interacting with them too much in that  
18 case.

19 Q Have you ever talked to any of the named  
20 plaintiffs in these two cases, the Pendergrass and  
21 Grant cases?

22 A No.

23 Q Are there any corporations providing grants  
24 for any of the research work that you do either at the  
25 University of New Mexico or through Collingwood

1 Research?

2 A Not that I'm aware of.

3 MR. BOYLE: Well, we've been going for about  
4 an hour and 20. You want to take a 10-minute  
5 break, folks? That sound good?

6 THE WITNESS: Sounds good.

7 MR. BOYLE: Okay. Why don't we reconvene at  
8 11:30.

9 THE VIDEOGRAPHER: The time is 11:20. We're  
10 off the record.

11 (A recess was taken from 11:20 a.m. to 11:32 a.m.)

12 MR. BOYLE: Let's go back on.

13 THE VIDEOGRAPHER: Standby a moment, please.  
14 The time is 11:32. We're back on the record.

15 BY MR. BOYLE:

16 Q Dr. Collingwood, why did you prepare a  
17 second report in these two cases at the end of 2022?

18 A Well, the main reason is there was an  
19 election, the general election, that I wanted to  
20 analyze in a similar manner as what I had done  
21 previously. And I think also there was some updated  
22 American Community Survey, ACS, data that I also  
23 wanted to incorporate just to stay up-to-speed with,  
24 you know, the times.

25 Q Okay. Did you do any original research for

1 the report? When I say "the report," either your  
2 first or your second reports.

3 A Well, I mean, I -- all the, you know, data  
4 analysis, statistics presented, tables generated, that  
5 was all, you know, original research.

6 Q Okay. Yeah. Maybe that's not a good  
7 question.

8 A Yeah.

9 Q Let me start over.

10 I understand you -- you did your own data  
11 analysis, but you didn't go out and do any actual data  
12 collection of your own. You relied on a collection of  
13 data from other people; right?

14 A Great question. Correct, yes.

15 Q Did you prepare any drafts of your first  
16 report or your second reports?

17 A Yeah, there would have been some -- some  
18 drafts. Yeah.

19 Q Were those drafts that you kept internally  
20 to yourself, or were those drafts you circulated with  
21 other people before revising?

22 A They would be circulated with counsel.

23 Q Can you say in the number of hours how long  
24 it took you to prepare your -- your first set of  
25 reports for the two cases?

1           A     If I can quickly do a -- just give me one  
2     second.

3           Q     Sure.

4           A     Yeah. I would say the first one is probably  
5     around 40 hours-ish, and maybe 30-ish for the second  
6     one, something like that. I don't know exactly. But,  
7     you know, somewhere around there.

8           Q     And, again, you charged your \$400 hourly  
9     rate for that work in preparing the two reports?

10          A     Correct.

11          Q     And when I say the two -- I know it's a  
12     little confusing, but we'll just sort of look at the  
13     January, the two January reports as the first  
14     report --

15          A     Yes. I understand.

16          Q     -- and the two December reports as the  
17     second report.

18                     Is that fair?

19          A     Yes.

20          Q     Did you interview anybody for either of  
21     these reports?

22          A     No.

23          Q     Did you visit Georgia as part of your work  
24     for either of these reports?

25          A     No.

1 Q Tell me about the software that you used for  
2 these reports.

3 A I use R, just single letter R. It's a  
4 statistical programming language.

5 Q And who develops that?

6 A They're the initial founders. I think one  
7 guy was called Robert Gentleman actually, which is a  
8 pretty sweet name. And another person with R as their  
9 first name. And this was maybe in the '90s, late  
10 '90s.

11 And it was based on an earlier program  
12 called S and S-plus, which one of the main developers  
13 was James Chamberlain [sic], I think is his name, or  
14 someone like that. Maybe Chamberlain. And that came  
15 out of Bell Labs, I think, and all that research. And  
16 so that's kind of the origination. And there's a core  
17 team of R developers or R core team. I don't know,  
18 eight or nine people, based out of U.S., Europe, and  
19 other places. And then there's a variety of different  
20 individual package developers that's open-source  
21 based.

22 Q I'm going to put your CV back up on the  
23 screen.

24 Can you see that?

25 A Yeah.

1           Q     So on page 6 you have a section there that  
2     says software in it, and it has several entries for an  
3     R package. Why is that listed, and does that relate  
4     to what you were just talking about?

5           A     It does. So one of my kind of sort of  
6     academic interests is software development in R  
7     specifically. These are various projects. Some that,  
8     you know, have a decent user base. Others it's more  
9     smaller or internal, just for me and my co-authors or  
10    potentially in consulting that we work on. So anyone  
11    can basically get one of these packages and use it, if  
12    they have the requisite R skills to be able to use the  
13    software.

14          Q     How did you acquire the skills to use the R  
15    software?

16          A     I went to my graduate training. I went to a  
17    program that -- at the University of Washington that  
18    also had a -- sort of like a degree or a side degree  
19    in political methodology, applied statistics. And so  
20    I took lots of classes with biostatisticians and  
21    statistics professors, and everybody -- that's what  
22    everybody used in the statistics departments. And so  
23    I started doing that and found that I really enjoyed  
24    it and -- you know, it's hard in life to have a job  
25    that you like and enjoy, so I thought I'd just keep

1 rolling with that.

2 Q So in your expert consulting work  
3 specifically, your expert litigation consulting work,  
4 have you generally been using these R packages of  
5 software?

6 A Yeah. Except for when we're drawing, like,  
7 maps and stuff. That's a different, you know, as we  
8 discussed earlier.

9 Q Right. Okay. In preparing your reports in  
10 the case, did you review any hearing or trial  
11 testimony or deposition transcripts?

12 A I don't think so.

13 Q Did anyone give you any assistance in  
14 preparing the two reports?

15 A I mean, I shared my draft with counsel, but  
16 I wouldn't call that assistance.

17 Q Other than taking into account the  
18 intervening election between your first and second  
19 reports and drawing on new data that was available,  
20 did you make any other changes between your first and  
21 second report in the -- in the sense of correcting any  
22 observed errors in the first report or changing your  
23 conclusions?

24 A There might have been one small thing that I  
25 noticed that I fixed. But it's so minor I don't even



1 recall what it was, and it didn't change any  
2 substantive conclusion. Yeah. The report is fairly  
3 similar. I mean, the layperson way to think about it  
4 would be it's a -- basically the same report, just  
5 updated with new data, and the new data are in line  
6 with what I had observed previously.

7 Q Dr. Collingwood, let's start going through  
8 your second report. I've got up here on the screen  
9 the Pendergrass report, which was Exhibit 12.

10 A Sounds good.

11 Q Okay. So on the second page you have your  
12 background and qualifications, and I believe we've  
13 gone over this.

14 A Yes. Yes.

15 Q In that Kansas case that you -- it's listed  
16 here in the third paragraph, Rivera v. Schwab?

17 A Yes.

18 Q Am I correct that the court in that case  
19 found there was no constitutional violation?

20 MR. HAWLEY: Objection, calls for a legal  
21 conclusion. You can answer, Dr. Collingwood.

22 BY MR. BOYLE:

23 Q Are you aware?

24 A The trial court did, and I think the state  
25 supreme court overturned that.

1           Q     Let's go to the next page where you've got  
2     your executive summary. I'm going to try to enlarge  
3     this a little bit. Your third bullet point, based on  
4     my reading, is a new -- is new from your first report.  
5     You talk about black Georgians being disadvantaged  
6     socioeconomically in the prior bullets, and then in  
7     the third bullet you say: This means the political  
8     system does not respond to black Georgians in the same  
9     way it responds to white Georgians.

10                 Why do you draw that conclusion?

11           A     Well, if you didn't have these gaps in  
12     health and poverty and educational attainment, you  
13     wouldn't have voter turnout disparities. And if you  
14     don't have voter turnout disparities, basically the  
15     political system is going to have to respond to voting  
16     blocks equally based on the proportion of their  
17     population, because there's no variability in, you  
18     know, composition. Given that there is, it's just not  
19     really possible for the system to respond accordingly.  
20     That's not how politics works. And you can see that,  
21     you know, in a lot of places.

22           Q     The next bullet point refers to the black  
23     belt region of Georgia.

24                 Do you see that?

25           A     Yeah.

1 Q How do you define the black belt region of  
2 Georgia?

3 A I'd have to go in and look at exactly how I  
4 define it in the, you know, report. It's sort of  
5 general. But off the top of my head, the general  
6 benchmark is counties with 40-percent-plus black  
7 populations, or kind of historical basically  
8 slave-owning agricultural regions.

9 Q So you think that's defined later in the  
10 report? We'll get to that as we page through?

11 A Yeah.

12 Q Okay. And about the middle of the page  
13 where it says "my opinions are based on," you've  
14 now -- you've now shown that you're relying on data  
15 through 2022, which is a difference from your earlier  
16 report, I think; is that right?

17 A That's right.

18 Q Under analysis on the bottom of that page,  
19 you talk about Senate Factor 5, and that you were  
20 asked to examine that. You've talked to me about that  
21 already; right?

22 A Correct.

23 Q As I go to the next page where you talk  
24 about Senate Factor 8 at the top of page 4, did you  
25 identify specific issues in the report to which

1 elected officials are less responsive --

2 A No.

3 Q -- as you say there?

4 A No, I don't think so.

5 Q Can you say as you sit here today what  
6 issues are unique to black voters in Georgia that are  
7 different from issues that pertain to white voters in  
8 Georgia?

9 A In Georgia specifically, I would, you know,  
10 again, focus on the things I looked at. Which were,  
11 you know, black voters or black people in Georgia have  
12 worse health, worse education outcomes, lower levels  
13 of income. So certainly basically the broader realm  
14 of health and economics. There's going to be other  
15 issues, you know, that are very specific to the black  
16 community, but I didn't undertake a very detailed  
17 analysis of that in the context of Georgia.

18 Q Can you identify any issues that are a  
19 particularized need of black voters that are not also  
20 needs of white voters in a similar socioeconomic  
21 position to those black voters?

22 A Well, broadly, one -- one thing would be,  
23 you know, racial discrimination, policing. But I  
24 didn't undertake a very, you know, specific  
25 examination of those issues in Georgia. And then

1 voting rights.

2 Q So in part B you're talking about  
3 socioeconomic disparities. And you look at the  
4 American Community Survey, right, or ACS; correct?

5 A Correct.

6 Q And following page 4, on the next two pages  
7 you've got some tables from the ACS; is that right?

8 A Correct.

9 Q Table 1, okay, and then the next page, Table  
10 2. That's also from the ACS?

11 A Yeah, just updated with time.

12 Q Okay. Well, did you -- did you create these  
13 tables yourself, or are these -- are these copies from  
14 documents from the ACS?

15 A No, I created them.

16 Q Okay. And for purposes of those two tables  
17 that you created, did you do any additional analysis  
18 of the ACS data, or did you just pull out what was in  
19 the ACS?

20 A Yeah. These are just the kind of variables  
21 of, you know, in this case, income, education, some  
22 health measures. I wanted a couple for each of those  
23 different categories. There's probably a bunch more  
24 variables I could've looked at. But these are the  
25 ones I did -- I chose, and they just -- I mean, they

1 tell the story. So I didn't really feel the need to  
2 keep going.

3 Q Would you agree there are places in Georgia  
4 where the black median household income is higher than  
5 the white median household income?

6 A I'm trying to think on my analysis, looking  
7 at some of the areas, I did see there's a few spots  
8 where, say, quarter turnout was higher. There's  
9 certainly going to be some -- probably some areas in  
10 Georgia, in and around Atlanta, that probably has a  
11 higher -- black folks there are doing better than,  
12 say, white folks in other parts of the state. But I  
13 was looking mainly at, you know, kind of overall  
14 averages and things.

15 Q But do you know of any -- do you know of any  
16 locality, you know, whether it's a county or a city or  
17 a neighborhood where the measured black median income  
18 is higher than the measured white median income in the  
19 same locality?

20 A Yeah. I'm -- I would have to go and look at  
21 the data more closely on that. It's probably the case  
22 somewhere, but I just can't think off the top of my  
23 head, you know, exactly where that would be.

24 Q Going to part C, page 7, effect on political  
25 participation. You say in the first sentence of that

1 section: Socioeconomic disparities like these  
2 unquestionably affect political participation.

3 Do you agree with that sentence?

4 A Yes.

5 Q And is that true -- is that sentence true  
6 for voters regardless of their race?

7 A It is.

8 Q Tell me -- at the end of that paragraph, you  
9 have a reference to a hookworm eradication program.  
10 Why is that relevant?

11 A Well, No. 1, I don't get a lot of chances to  
12 write about hookworms. No. 2, it's a very interesting  
13 study, because it -- it uses this program from, like,  
14 the '30s that applied a randomization process to the  
15 counties that got an eradication program. And then  
16 the idea is those counties then -- the health of the  
17 people there were better, and that later on they had  
18 people, like, many decades later had higher levels of  
19 education and also higher levels of political  
20 participation in voter turnout. And so it's a unique  
21 way to get at something that just is done in a kind of  
22 unique fashion that we don't normally see.

23 Q How did you come across this, if you came  
24 across this Henderson paper or book where Henderson  
25 talks about it?

1           A     Yeah. It's a paper. It's -- I've been  
2 familiar with it for, you know, a couple years because  
3 I like the design of the study. It was just  
4 innovative. And I've been trying to do similar  
5 studies in other -- other contexts, not related to  
6 this report or anything. So I knew that that was kind  
7 of one study that showed that, you know, socioeconomic  
8 status/education is related to political  
9 participation.

10           Q     Okay. Going to the end of Subsection 1  
11 there, there's a paragraph: This means the political  
12 system does not respond.

13                     Do you see that?

14           A     Yeah.

15           Q     As I read your -- your first report compared  
16 to the second report, this is a new paragraph.

17                     Is that your recollection?

18           A     That sounds right.

19           Q     Why was this paragraph added?

20           A     Well, it was just part of the theme. To try  
21 to connect, you know, to kind of begin to incorporate  
22 Section -- or Factor 8 in a bit. Just to kind of  
23 raise that as a, like, you know, something to consider  
24 for the court.

25           Q     So did you feel, in going back to your first



1 report, that you hadn't sufficiently looked at Factor  
2 8?

3 A Well, I was so zoomed in on Senate Factor 5  
4 in the initial report, because, you know, it was very  
5 data intensive and -- and that takes a lot of, you  
6 know, effort and time. And then as I kind of backed  
7 out and looked at things, I thought, well, this seems  
8 to be related also to, you know, Factor 8.

9 Q So is it your opinion that there are  
10 specific issues which the political system is  
11 unresponsive politically to black voters on, like,  
12 more than white voters?

13 A Yeah. It's my opinion that there is clear  
14 gaps in health, education, other economic issues. And  
15 so black Georgians are disproportionately not getting  
16 what they need out of the system -- the political  
17 system to close that gap. If they had more  
18 representation -- they would have better  
19 representation if the voter turnout equaled that of,  
20 say, white Georgians. It would be -- while there  
21 would still be more white-supported elected officials,  
22 not necessarily white elected officials, but  
23 white-supported elected officials via the voters,  
24 there would still be more -- better representation for  
25 black voters on those issues.

1 Q Your socioeconomic factors that you're  
2 analyzing in Tables 1 and 2 apply to black voters as a  
3 whole, right, not any particular economic stratum of  
4 black voters; right?

5 A That's right. It's a comparison of all  
6 black -- black voters or people that go over the age  
7 of 18 relative to white -- white voters or white  
8 people over age 18.

9 Q Okay. And if I understand you correctly,  
10 your opinion is -- is that the data show socioeconomic  
11 disadvantages to black voters generally in the State  
12 of Georgia compared to white voters; therefore your  
13 opinion is a political system is less responsive to  
14 black voters as a whole compared to white voters as a  
15 whole, otherwise there would not be those differences?

16 A There still might be differences, but the  
17 differences could be related to something else.

18 Q Such as?

19 A There's a variety of things. I can't really  
20 say exactly what that might be. But political systems  
21 --

22 Q You didn't analyze --

23 A Right. Right. Yeah.

24 Q You didn't analyze what those other factors  
25 might be in your report?

1 A I don't think so.

2 Q The next subsection you're talking about  
3 voter turnout. And at the top of page 8, to calculate  
4 voter turnout for both black and white Georgians, you  
5 divided the total number of black and white people who  
6 voted by the total number of the respective registered  
7 voter counts; correct?

8 A Correct.

9 Q Did you do any analysis of voters classified  
10 as other or unknown as opposed to black or white?

11 A I don't think so. It's possible that those  
12 categories got wrapped up in some of the data  
13 compilation and code, but I didn't analyze those other  
14 groups.

15 Q Did you only use active voters, or did you  
16 use active and non-active voters in the denominator  
17 used for the calculation for turnout?

18 A I didn't -- well, the -- so on the -- the  
19 state provides data broken down by both county and in  
20 some cases precinct, and there's a variety of columns  
21 in there. One I think is called registered voters. I  
22 can't recall off the top of my head whether there are  
23 separate divisions for active and inactive in there.  
24 But whatever that kind of registered voters total is,  
25 that's what I would have used.

1 Q And you've got Sub-A statewide analysis, and  
2 you found that generally in the years that you've  
3 looked at white turnout was higher than black turnout,  
4 with the exception for the 2012 being the narrowest  
5 gap of the years you've looked at there, right, in  
6 Table 3?

7 A Yeah. That's correct.

8 Q And 2012 was the year President Obama ran  
9 for reelection; correct?

10 A Correct.

11 Q Is it your opinion that higher motivation of  
12 black voters in that particular election may have  
13 affected the turnout gap?

14 A That is a pretty plausible hypothesis.

15 Q So motivation -- voter motivation is a  
16 factor that goes into turnout of voters for both black  
17 and white voters; correct?

18 A Certainly individual level or group-based  
19 motivation, you know, can, you know, effect turnout.  
20 Yeah.

21 Q So based on 2012, would you agree that black  
22 voters are able to turn out in nearly the same  
23 percentages as white voters if they choose to do so in  
24 Georgia?

25 A There is certainly that possibility, yes.

1 Q On Table 3, is that a table that you  
2 generated or is that something -- a table that you  
3 pulled from another source?

4 A Well, this is -- we, you know, this is data  
5 that I brought in from Secretary of State data. And I  
6 think in some cases I had to collapse it; in other  
7 cases it might be statewide available information. So  
8 this is just taken, you know, directly from the  
9 Secretary of State data.

10 Q Okay. Just to clarify, I think I hear what  
11 you're saying. This is not a table that you copied  
12 from another document. The data you pulled from  
13 Secretary of State, you created this table yourself?

14 A Right. So, yeah. My general process in  
15 this case is I'm not -- nothing here is copy and  
16 pasted from like a website and just smashed on there.  
17 But the data could -- there might be a -- a table  
18 that's exactly this, but almost for sure there is not.  
19 I think the way that it works is each year there is  
20 some sort of statewide voter turnout measure somewhere  
21 in the Secretary of State documents. And so I will  
22 take that and put it into, like, an Excel file or  
23 something and then, you know, generate the table so  
24 that you can see the, you know, trend, you know, gaps  
25 and things.

1 Q This actually goes to the previous section.  
2 There was a Footnote 3 under voter turnout where you  
3 said you gathered data for the 2020 and 2022 general  
4 elections. And your footnote says the data was  
5 previously available at the Secretary of State.

6 Why -- is it no longer available? Is that  
7 why you say previously?

8 A Yeah. The original data that I gathered for  
9 2020 was on this link, and then when I went to rewrite  
10 the report that link had changed. So I just wanted to  
11 be transparent about that, that if, you know, if you  
12 went to click on that you might not get anything.

13 Q But you don't know whether there's a new  
14 link somewhere? You didn't look for the new link?

15 A I -- I did not. I mean, I -- I think I --  
16 actually I probably looked around and then it wasn't  
17 becoming readily available, and so, you know, I just  
18 kept -- moved on.

19 Q All right. You then have the countywide  
20 analysis, Subsection B. You have several tables  
21 following -- or figures following. You say on the  
22 bottom of page 8 you compared the share of counties'  
23 white registrants who voted in 2022 against the share  
24 of the counties black registrants who voted in 2022.  
25 In these following figures, let's just take Figure 1

1 to start. Are these essentially -- the figures in  
2 this section just essentially visual representations  
3 of spreadsheets, spreadsheet data?

4 A Yeah. That would be one way to think about  
5 it, yeah.

6 Q Is there a reason why you have it shown as a  
7 rectangle, if you will, and not a square? In other  
8 words, the X axis is longer than the Y axis?

9 A That's an interesting point. There -- that  
10 is not done -- I think I tend to try to widen my  
11 figures as a -- just as a -- sort of a write-out  
12 general rule of visualization. But there's no -- I'm  
13 not trying to do that to, like, make it look one way  
14 or the other. It's probably just built-in the way  
15 that I set up my figures in general and default.

16 Q So in Figure 1, is each one of these circles  
17 a county?

18 A That's right. Yeah.

19 Q And then the size of the circle is supposed  
20 to show the relative size of the voter population?

21 A It's either that or the county population.

22 Q The whole county population?

23 A Yeah. I think one of the two. So, you  
24 know, you imagine.

25 Q But you don't know which one?

1           A       I would have to look in my report. I would.  
2       You know, I'm sure there's a note about that.

3           Q       You think there's a note in the report  
4       itself?

5           A       Yeah, I would think so. But I would have  
6       to, you know, read it -- reread it.

7           Q       Okay. So it looks like there are two dots  
8       above the line on Figure 1?

9           A       Yeah. I think there is -- yeah. Yeah. I  
10      think two. It's -- I say that in the above paragraph.

11          Q       Oh. You do?

12          A       Chattahoochee and Liberty.

13          Q       Chattahoochee and Liberty.

14          A       Yeah.

15          Q       Do you know anything about those two  
16      counties that would account for why they're higher --  
17      why they're above the blue line?

18          A       I don't.

19          Q       Okay. Let's go to Figure 2, turnout by  
20      county 2020, white/black differential based on voter  
21      registration. So this is the -- Figure 1 was 2022;  
22      this is now 2020. I assume this is still  
23      Chattahoochee and Liberty above the blue line?

24          A       I think I made a note about that in there,  
25      but I think that's right.



1 Q You've got Figures 3 and 4 on the next page.  
2 I think this -- this is an error, right, on the  
3 caption for Figure 3. It says 2020, whereas the top  
4 of the chart shows 2022?

5 A Go down a little bit. Yeah. That must be.

6 Q Okay. Well, that clarifies it. That's  
7 fine.

8 A Sorry about that.

9 Q So now you're looking at turnout based on  
10 voting age population in these two Figures 3 and 4;  
11 right?

12 A That's right. Yeah.

13 Q Are you aware Georgia has automatic voter  
14 registration?

15 A I -- that sounds -- that sounds right.

16 Q As part of your work, did you look at  
17 overall voter registration rates for Georgia?

18 A Yeah. I think that's what those other  
19 percent of registration is based on, overall  
20 registration.

21 Q You mean the previous two figures?

22 A I think so. Yeah. There.

23 Q Yeah. But you have it by county. I mean  
24 did you look at, like, total --

25 A Oh. I see what you're saying.

1           Q     -- overall voter black registration in  
2     Georgia versus white?

3           A     I'd have to look if there's like a specific  
4     note on that. I mean, the analysis was -- this  
5     analysis here is definitely geared around kind of  
6     breaking it down by county, and so that's why, you  
7     know, there's so many plots. But I can't recall off  
8     the top of my head.

9           Q     Why did you look at voting age population  
10    for Figures 3 and 4?

11          A     That's just kind of two ways that we look at  
12    voter turnout, or two kind of generic, general ways.  
13    Is because sometimes there might be registration gaps  
14    between, say, whites and blacks in this case. And by  
15    looking at VAP, or voting age population, at least  
16    between black and white, you can see if there's, you  
17    know, your general trends continue or if there's  
18    something of note that would, you know, maybe make you  
19    shift your opinion. But it's kind of two ways of  
20    cutting the cheese or whatever. That's -- may be not  
21    the appropriate metaphor. But slicing the apple.  
22    They both, you know, they're very consistent with one  
23    another.

24          Q     Then on Figure 5 you've got explanatory  
25    paragraph where you said you looked at -- well, tell

1 me what you were doing there. You talk about 2014 to  
2 2018 elections.

3 A So this is effectively the same thing that  
4 we did above. It just then walks through each -- the  
5 same set of results, but for each election.

6 Q Right. Okay. So 5, 6, and 7, you're  
7 saying --

8 A So I guess the same general -- yeah.

9 Q Right. So 5 is 2018 --

10 A Yeah.

11 Q I apologize. I'm talking over you.

12 A No worries.

13 Q And Figure 6 is 2016 and Figure 7 is 2014;  
14 correct?

15 A Correct.

16 Q Let's go back to Figure 5. Are you aware in  
17 2018 Stacey Abrams, who is African-American, was  
18 running for governor as a Democrat?

19 A Yes.

20 Q Okay. Did you consider whether that may  
21 have affected black voter motivation and therefore  
22 black voter turnout in 2018?

23 A I mean, I, you know, as a -- I didn't  
24 particularly write about specific types of candidates  
25 in different elections. But, you know, I'm very --

1 I'm pretty familiar with that. You know, as someone  
2 who doesn't live in Georgia and read the news in  
3 Georgia, I'm pretty familiar with -- that election got  
4 a lot of attention, like, through the New York Times,  
5 Washington Post, kind of nationally. So I'm familiar  
6 with that -- that election. So it makes sense that  
7 that's why you see that. Yeah.

8 Q Because if you -- I mean, if you look in  
9 Figure 5 and you see -- I'm counting at least five  
10 counties above the blue line. It looks like maybe six  
11 or seven are right on the blue line in Figure 5.

12 Would you agree with that?

13 A Yeah. It's -- that -- it's hard to say  
14 exactly. But it's definitely, you know, a little  
15 different than the -- than the other ones.

16 Q Yeah.

17 A Yeah.

18 Q But then if we go back up to Figures 1 and  
19 2, the white/black differential based on registrants,  
20 there aren't as many dots above the blue line in  
21 Figures 1 and 2 for the 2022 and 2020 elections as in  
22 2018; right?

23 A Yeah. I mean, without doing a, you know,  
24 detailed kind of -- you know, had to spreadsheet them  
25 all out and count them all up, but that certainly

1 would be my initial take. I agree.

2 Q Okay. And then you turn to a precinct level  
3 analysis on page 14 of your report. And I believe the  
4 second paragraph here on page 14 is -- is new to the  
5 second report. And you start off by saying the  
6 analysis of precinct level turnout does not change the  
7 core substance of the reported findings.

8 Do you agree? Is that a new paragraph in  
9 the second report?

10 A I don't -- may -- maybe. But, I mean, I did  
11 a precinct analysis in the first one. So it could be  
12 that I'm just kind of starting that paragraph up and  
13 then moving into 2022.

14 Q Well, tell me why are you saying that? Why  
15 would you say that the analysis does not change the  
16 core substance of the report? What are you trying to  
17 say there?

18 A Because I'm adding data, and so I wanted to  
19 make a statement that with this additional 2022 data  
20 that nothing has really kind of changed  
21 systematically. And it's possible -- I'd have to go  
22 back and look at the first report -- it might be the  
23 case that I didn't do the 2020 precinct analysis also  
24 in 2020. I did it in earlier years or something like  
25 that. But I would have to look. But I remember doing

1 a precinct analysis. But that would be the -- the  
2 only reason, is I'm kind of -- every time I'm updating  
3 something and saying, hey, I'm bringing in new 2022  
4 data. At least, you know, the findings are  
5 consistent.

6 Q Okay. Well, I mean, one -- one way to read  
7 that sentence, you would agree with me it appears as  
8 if you were -- you thought somebody might -- might  
9 read the analysis of precinct level turnout as  
10 weakening your conclusions from the first report and  
11 that's why you made that statement. But that's not  
12 what you were saying?

13 A No. It's -- so you have the -- you're  
14 lining them up across the two reports, and then you're  
15 also lining it across the geography. It's possible  
16 that once you move down to the lower geography,  
17 patterns are somehow disrupted that what you saw in  
18 the aggregate county data. So that's a pretty common  
19 thing that we'll do, is we'll look at different units,  
20 what we would say units of analysis. And so then when  
21 I did that and looked at the precinct relative to the  
22 county and then across time, pretty much everything is  
23 pointing in the same direction.

24 Q And your Footnote 4 on this page, again, is  
25 referring to data that you -- I guess you had for the

1 first report then was no longer there when you did the  
2 second report?

3 A Yeah. The link. I still had the same data,  
4 right, I downloaded the data into a CSV file or  
5 whatever, Excel file. And -- from the website. And  
6 so I still had it and used it, but it just wasn't on  
7 the website for a reference link.

8 Q So you say at the top of page, page 14, that  
9 in looking at the precincts you wanted to reduce the  
10 influence of outliers so you only used precincts with  
11 more than 100 blacks and 100 whites; correct?

12 A That's right.

13 Q All right. So there were -- there were  
14 possibly precincts that had a majority of black voters  
15 that you didn't consider because they had fewer than  
16 100 black or white voters; correct?

17 A That's right. I did various robustness  
18 checks, and the findings are basically the same  
19 whether you include or exclude those. But I -- in my  
20 experience, when you go down to really small precinct  
21 sizes you can have these outlier effects that sort of  
22 can affect the results. And so as a general practice,  
23 you know, as a data kind of quality control check,  
24 I -- I often try to minimize very, very small  
25 precincts.

1 Q And then you have figures following on  
2 page 15, Figures 8 and 9. And am I correct the  
3 caption on Figure 9 has a typo; it should say 2022 on  
4 Figure 9 --

5 A Yeah.

6 Q -- correct?

7 A I'm sorry.

8 Q On page 16 you discuss analyzing black and  
9 white voter turnout rates in the Atlanta metro area  
10 and the black belt.

11 A Correct.

12 Q And you have a footnote where you list the  
13 counties in the Atlanta/Sandy Springs/Alpharetta metro  
14 area; right?

15 A Yeah.

16 Q Do you have a similar listing for the  
17 counties in the black belt that you're analyzing?

18 A Hold on a second.

19 Q You need to look for something?

20 A Yeah. So I -- it should be in there, I  
21 think.

22 Q All right.

23 A Yeah. We'll get to it. Let me look over  
24 here.

25 Q Yeah. Okay. On page 20 -- page 20 you have



1 a listing of black belt.

2 A Okay. All right.

3 Q I'll just skip ahead to that. So we're  
4 there on page 20.

5 Do you see that?

6 A Yeah. Yeah.

7 Q What was your source for determining that  
8 those counties listed in -- on page 20 are the black  
9 belt area of Georgia?

10 A I think I used a variety of Google searches  
11 combined with, like, a sort of 40 percent base. You  
12 know, I'm not sure if I settled on any -- exactly what  
13 the source was off the top of my head. But it seemed  
14 to be a very agreed-upon sort of subset of Georgia  
15 counties.

16 Q Going back to Sub D where we started on  
17 page 16, you then have -- you have figures 10, 11, 12,  
18 13, 14, and 15. What's the source of your data for  
19 those figures 10 through 15?

20 A These are the same source that I did. It's  
21 basically replicated of the same data I used for the  
22 other analyses, which is data off the Secretary of  
23 State website. And then just subset to the specific  
24 counties under investigation for the two different  
25 analyses.

1 Q Okay. So 10 through 14 don't have nearly as  
2 many dots as we were seeing earlier, and that's  
3 because you've got a smaller number of counties you're  
4 analyzing; correct?

5 A That's exactly right.

6 Q Yeah. In 14 and 15, as you say, you're  
7 looking at precincts in these Atlanta/Sandy  
8 Springs/Alpharetta counties, and that's a lot more  
9 dots because each dot is a precinct; right?

10 A Exactly.

11 Q We're going to go up to page 16 again. The  
12 last sentence in page 16 -- on -- you say: This  
13 result -- well, the second-to-last sentence: Black  
14 turnout was not higher than white turnout in any of  
15 the counties. This result is consistent with the 2022  
16 election, except black turnout very slightly exceeded  
17 white turnout in only three counties -- Clayton,  
18 Henry, and Rockdale -- when using voting age  
19 population rather than registration as the  
20 denominator; is that correct?

21 A Right.

22 Q Are you aware that Clayton, Henry, and  
23 Rockdale are majority black counties?

24 A Off the top of my head, no. Assuming that  
25 you're providing accurate information, now I am.

1 Q Okay. Yeah. That's not supposed to be a  
2 trick question. That's my understanding based on the  
3 2020 data.

4 A Yeah.

5 Q But you weren't aware of that?

6 A Yeah.

7 Q If we go to page 20 where you're talking  
8 about the black belt, I notice you didn't list Thomas  
9 County. Are you familiar with Thomas County?

10 A No.

11 Q So you don't know why that would or wouldn't  
12 be included?

13 A No.

14 Q Did you -- did you remove any county from  
15 this list of black belt counties on page 20 after  
16 doing your analysis?

17 A No. That wouldn't happen, because you don't  
18 have this small data size situation like what you  
19 might have with precincts.

20 Q Okay. So if we look on figure 17, 2020  
21 turnout as percentage of voting age population in the  
22 black belt area, this figure appears to be showing at  
23 least six counties where the black turnout is higher  
24 than the white turnout in the black belt; is that  
25 right?

1           A     Yeah. And then one looks -- maybe two are  
2     very, very even.

3           Q     Okay.

4           A     Yeah.

5           Q     As you sit here today, are you able to tell  
6     me which counties those are that are above the blue  
7     line?

8           A     No.

9                     MR. BOYLE: Let's go off the record for a  
10    second.

11                    THE VIDEOGRAPHER: The time is 12:33. We're  
12    off the record.

13                    (A recess was taken from 12:33 p.m. to 1:20 p.m.)

14                    THE VIDEOGRAPHER: The time is 1:20. We're  
15    back on the record.

16    BY MR. BOYLE:

17           Q     Dr. Collingwood, we were looking at Exhibit  
18    12, your Pendergrass December 2022 report. We're now  
19    on page 24. I've got the screen share up.

20                    Do you see that Subsection F?

21           A     Yes.

22           Q     So in this section, as it says, you're  
23    looking at the relationship between turnout in 2020  
24    and socioeconomic disparities. I wonder if you could  
25    just tell me generally what it is you were trying to

1 accomplish in this section.

2 A Here is where I look at how black voter  
3 turnout varies based on socioeconomics pretty much,  
4 and looking at data across a variety of different data  
5 sets and years.

6 Q If we go to the page in Figures 22 and 23,  
7 these figures are a little different because now you  
8 have this blue trend line shaded with gray. What's --  
9 how is that blue line drawn?

10 A Oh. That's the regression coefficient slope  
11 of the relationship between, in this case, percent  
12 black less than high school in a county and black  
13 turnout. So the basic idea here is you can see that  
14 slope trend line going down in a negative direction,  
15 which means there's a statistically significant  
16 relationship between the share of the black population  
17 that has a high school education or less and being  
18 less likely to vote.

19 Q Okay. We'll talk about these -- these five  
20 or six figures in more detail. But as I scroll  
21 through, 22 and 23 are fairly flat, although they do  
22 go down a little bit towards the right. As I go to 24  
23 and 25, they're also fairly flat. Now they're going  
24 up a little bit. 26 and 27, to me, appear to me to be  
25 a much more dramatic slope on them than the previous

1 four figures.

2 Would you agree with that?

3 A It's definitely a steeper slope. Yeah.

4 Q Okay. And is that -- that regression  
5 coefficient slope blue line on these figures, is that  
6 simply something that's created by the software, or --  
7 or is that something you had to -- you had some role  
8 in creating other than putting the data in in the  
9 first place?

10 A No. It's just a -- a standard linear  
11 regression coefficient slope.

12 Q Okay.

13 A It's very common. Any social scientist  
14 would -- if they plugged in the same data, they would  
15 get the same result.

16 Q Okay. So on these charts in Subsection F,  
17 in your opinion is this showing causality or just  
18 correlation between the factors on the X and Y axes?

19 A These are correlations. More directed  
20 because they're regression correlation. But -- or  
21 regression coefficient. But they are effectually  
22 observational, which is -- reduces to generally  
23 correlational.

24 Q And in your analysis for your report, you  
25 did not do a similar study of white turnout rates as

1 you did in Subsection F for black turnout rates?

2 A That's right.

3 Q And in these Figures 22 and 23, you're  
4 looking at high school education versus turnout. 24  
5 and 25 you're looking at percentage with a BA or  
6 higher versus black turnout, and then you have in 26  
7 and 27 percentage below poverty level and turnout.

8 Since you didn't do a similar analysis for  
9 white turnout rates, are you able to say that -- are  
10 you able to say that the effect on turnout that you've  
11 seen for black voters is a racial issue versus an  
12 educational issue or an economic issue?

13 A Well, yeah. I think you can say that,  
14 because we've already established that black people  
15 are voting at lower percentages than -- than white  
16 people. So while the very specific analysis in this  
17 case is only among -- or is using data about black  
18 folks in these different areas combined with  
19 information from the initial analysis, I think you can  
20 make the case pretty strongly.

21 Q Okay. I mean, but your earlier tables in  
22 the report showed that statewide black voters or black  
23 citizens of Georgia lagged behind white citizens on  
24 pretty much all the -- all the metrics that you had,  
25 whether it was income or education, whether it was

1 high school education or college education; correct?

2 A Yeah. Yeah.

3 Q And by showing that for black voters, for  
4 example, on Figure 22, as the higher percentage -- as  
5 the percentage of black voters with less than a high  
6 school education goes up, turnout goes down, you don't  
7 know whether that's also true for white voters?

8 A I don't.

9 Q On a footnote on 24, on Footnote 7, you said  
10 you excluded counties with a thousand registered black  
11 voters or fewer.

12 Why did you use that cutoff?

13 A It's -- it's just kind of an even thousand.  
14 There's not very many counties that fit that bill,  
15 and, you know, it's just -- that's not a lot of people  
16 for a county to have that few of registered black  
17 voters. So, you know, in social science we have to  
18 kind of set cutoffs. I try to set those cutoffs not  
19 at all based on correlations with how the results  
20 might change as an a priori design. I tend to try to  
21 choose sensible numbers based on experiences with  
22 these types of data. Sometimes I used 10, 25, 50,  
23 100. In this case, 1,000 made sense.

24 Q What is the -- the gray shading on Figure 22  
25 around the blue line? What's that showing?



1           A       That shows that at least around that point  
2       what's known as the 95 percent confidence interval.  
3       And so kind of the -- the range that if we did this  
4       type of analysis with slightly different data or like,  
5       you know, 1,000 times, 950 times, we would hit  
6       somewhere in that range for that, say, percent black  
7       less than high school at that point that we're looking  
8       at. So basically it's a confidence band standard to  
9       try to include those to show statistical uncertainty.

10          Q       On page 31 you have Subsection G. This  
11       appeared to be a new subsection from your  
12       December 2022 reports.

13               Why did you add this section?

14          A       Just like with the earlier analysis on  
15       differential and turnout between whites and blacks, I  
16       wanted to also examine the relationship between these  
17       socioeconomic variables that I had included in the  
18       initial draft with voter turnout in 2022 election.

19          Q       So in this, I guess, sections F and G,  
20       looking at 2020 and 2022 election data, you're not  
21       saying that black voters are unable to vote in  
22       Georgia, are you?

23          A       No, I'm not saying that anywhere at all in  
24       the report.

25          Q       And are you at all commenting on whether

1 race in Georgia is a barrier to voting?

2 A Well, yeah. I would say that just based on  
3 the data that I look at, all else equal, if you're  
4 black versus white -- this is a very important, all  
5 else equal -- your probability of turning out to vote  
6 is going to be lower.

7 Q But as far as external factors preventing a  
8 black voter from exercising the right to vote, you're  
9 not commenting on any such external factors, are you?  
10 Preventing somebody from voting in a particular cycle?

11 A I guess could you give me an example of an  
12 external factor?

13 Q Well, I mean, like, you know, there used to  
14 be a law that -- there used to be a white primary, and  
15 if you weren't white you couldn't vote in it. I mean,  
16 you know, do you know of anything like that preventing  
17 a black voter today from voting?

18 A I don't know of any specific race-specific  
19 laws like what Georgia and many other southern states  
20 had previously, if that's what you mean. Yeah. I'm  
21 not commenting on that.

22 Q Are you -- have you concluded that racism in  
23 Georgia causes the lower levels of voting  
24 participation by black voters in Georgia compared to  
25 white voters in Georgia?

1           A     I don't have a specific measure of racism  
2     that's associated with voter turnout here. A social  
3     scientist would likely look at all of this and  
4     potentially say the reasons we're seeing this is -- is  
5     because of that. But those variables don't measure  
6     that specifically. So it would have to be taken under  
7     a more holistic analysis, which some people would make  
8     that case. I'm a little bit -- in this case, I just  
9     want to focus on the actual variables that I'm looking  
10    at.

11          Q     You're really -- you're just -- you're just  
12    analyzing the data?

13          A     That's right.

14          Q     You've used -- you've used the term "social  
15    scientist" a couple times in the last few minutes.  
16    Are you a social scientist?

17          A     Yeah.

18          Q     Do you have a degree in social science?

19          A     Well, political science is a social science  
20    field, so, yes.

21          Q     Do you have an opinion that Georgia's recent  
22    redistricting maps or prior redistricting maps, say  
23    since 2010, have caused the lower levels of black  
24    participation that you've found in your data analysis?

25          A     I can't speak to those directly. I haven't

1 looked at them directly for this report.

2 Q Turning to page 44 you have a Section 3,  
3 other forms of voter participation. And as you say  
4 there at the first sentence: The next section  
5 examines disparities between blacks and whites among  
6 other modes of voter participation.

7 And it says you used the 2020 Cooperative  
8 Election Study. Explain what that is in detail.

9 A So the data set that I briefly discussed  
10 earlier, it's a survey of voters or eligible voters, I  
11 believe, usually around four -- 30- to 60,000  
12 respondents across the United States at least 18-plus  
13 age. And it asks a bunch of questions. It's  
14 conducted by a couple of folks, I think, out of  
15 Harvard and a couple other places. A lot of political  
16 scientists contribute modules and questions to it.

17 So it's one of the top two or three data  
18 sources for people who do political behavior research  
19 and political science in American politics, and it's  
20 widely used, widely published off of. And so I was  
21 able to download that. That's what's known as a  
22 common content form, which is free. So you can  
23 download that and then subset just to the state here  
24 of Georgia. It still yields a pretty sizable sample  
25 size.

1           Q     Explain your last sentence there on the  
2     first paragraph where you say the tabulations  
3     presented below include survey weights.

4                     What are survey weights and why did you  
5     include them?

6           A     So when you're doing, say, a tabulation or a  
7     frequency, you're not maybe doing a more expansive,  
8     potentially complicated survey regression,  
9     multivariate regression, you -- in order to better  
10    approximate the population that you're trying to make  
11    a statement about, you usually include survey weights.  
12    And a weight is basically -- it accounts for the fact  
13    that some people answer -- some groups of people  
14    answer -- take the survey at higher rates than other  
15    groups, and so it basically corrects for that on  
16    things like education and gender, for example, where  
17    we know that certain groups of people just are hard to  
18    get into a survey. And so this is a pretty common  
19    procedure, and everybody who does public opinion  
20    research will use survey weights for this type of  
21    thing.

22          Q     Okay. In Footnote 10 on page 34, you say  
23    weighting the data here has the effect of growing the  
24    sample size of the data set to P [sic] 1,557  
25    respondents. Were you trying to get to 1,557, or is

1 that just how it worked out?

2 A That -- that's just how it worked out.  
3 It's -- the weight is, you know, kind of the overall  
4 weight that's provided. I didn't create the weight.  
5 And sometimes it has the effect of boosting, basically  
6 weighting the individual more than another individual.  
7 So in this case, that's kind of what happened. But it  
8 doesn't -- it doesn't change the overall distribution  
9 or the frequency distribution of, say, the percent of  
10 people who contacted official or anything like that.  
11 It's just kind of a process in the weighting procedure  
12 that can happen sometimes.

13 Q All right. And you say that the survey  
14 asked a battery of political participation questions,  
15 and then you analyzed -- analyzed the answers.

16 A Yeah.

17 Q I notice for -- for several of these  
18 questions -- so in Table 4 you have under -- you have  
19 5.92 percent of -- hold on. Strike that. Strike  
20 that.

21 First Table 4, political attendance, both  
22 the -- the white respondents answering yes and the  
23 black respondents answering yes were both under 10  
24 percent; right?

25 A That's correct.

1 Q And in Table 6, campaign work, there's less  
2 than a 2 percent difference between the white and the  
3 black respondents saying yes; correct?

4 A Two percentage point.

5 Q Same thing on Table 7, the difference is  
6 less than 2 percent for political protest attendance;  
7 right?

8 A Sorry. Two percentage points. The percent  
9 difference actually would be quite higher, but the  
10 percentage point difference is -- is not. Is less  
11 than 2 percent.

12 Q Yeah. Okay. So I see what you're saying.  
13 You're saying --

14 A Yeah, yeah, yeah.

15 Q -- 6.21 percent is -- is -- let me do the  
16 math. I mean, it's -- it's maybe 3 percent more than  
17 4.42 percent; right?

18 A Yeah.

19 Q But still for whites as a whole, only  
20 6.21 percent said they had attended a political  
21 protest of any kind, whereas -- and blacks said  
22 4.42 percent?

23 A That's -- that's correct.

24 Q That's what the data show; right?

25 A Yeah, that's what the data show.

1 Q On Table 10, campaign contacts, you'd agree  
2 the responses there for whites and blacks are pretty  
3 similar, aren't they?

4 A They're statistically indistinguishable.

5 Q Table 11 is also pretty close, isn't it?

6 A Also statistically indistinguishable.

7 Q And it's your opinion that the differences  
8 that you see in these Tables 4 to 11 are due to  
9 socioeconomic differences between black and white  
10 voters?

11 A Well, this analysis, that's certainly one of  
12 the -- one of the differences, but it could also be  
13 long-running discrimination in Georgia. I -- this  
14 analysis doesn't allow me to say specifically why  
15 these differences are. I can just see that there are  
16 differences.

17 Q You then come to a conclusion on page 38 of  
18 your report. You say: These findings provide strong  
19 evidence for presence of Senate Factor 5 in the state  
20 of Georgia.

21 Could you elaborate on that at all?

22 A Well, just, I mean, across pretty much every  
23 seen analysis there's a difference between white and  
24 black political participation, which is related to  
25 socioeconomic barriers, which reduces black voter



1 participation pretty much across the board. And then  
2 when we shift it to a different analysis, looking at  
3 the individual level types of political acts that  
4 people will do, you know, in general, that broadly  
5 corroborated the earlier analysis. So I just think  
6 it's very hard to dispute that Senate Factor 5 isn't  
7 present in the state of Georgia.

8 Q You don't mention Senate Factor 8 in your  
9 conclusion, do you?

10 A It's not there.

11 Q Your report doesn't comment at all on the  
12 current redistricting maps in Georgia, does it?

13 A That's correct.

14 Q Are you planning to adopt any part of this  
15 report into a published work, book or article of any  
16 kind?

17 A Not in any sort of book or article. It's  
18 possible that, you know, some of the statistical code  
19 that I write that pulls in, grabs data from the U.S.  
20 census and ACS can be used into something. But not  
21 the specifics of anything in this report.

22 MR. BOYLE: Well, unless your counsel has  
23 any questions, I think you're done for the day,  
24 Professor. Thank you for taking the time to talk  
25 to me.

1 THE WITNESS: Thank you very much.

2 MR. HAWLEY: No, no questions from me.

3 THE VIDEOGRAPHER: This concludes the  
4 videotaped deposition. The time is 1:47 p.m.  
5 We're off the record.

6 (The deposition concluded at 1:47 p.m.)

7 MS. MITCHELL: Hi, this is Cassie Mitchell  
8 on the line. Amanda, can I request a copy of the  
9 transcript as well?

10 THE COURT REPORTER: Certainly, Ms.  
11 Mitchell. Can I have your contact information?

12 MS. MITCHELL: Yep. Can I put it in the  
13 chat for you?

14 THE COURT REPORTER: Absolutely, that would  
15 be perfect. Mr. Boyle, are you ordering the  
16 transcript today?

17 MR. BOYLE: Yes, please.

18 THE COURT REPORTER: And would you like the  
19 exhibits attached?

20 MR. BOYLE: Yes.

21 THE COURT REPORTER: And, Mr. Hawley, are  
22 you ordering the transcript today?

23 MR. HAWLEY: Yes.

24 THE COURT REPORTER: All right. Thank you  
25 very much. That's all I need.

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

Page 95

## E R R A T A S H E E T

In Re: Annie Lois Grant, et. al. v. Brad  
Raffensperger, et al.

Civil Action File No. 1:22-CV-00122-SCJ

AND

Coakley Pendergrass, et. al. v. Brad  
Raffensperger, et al.

Civil Action File No. 1:21-CV-05339-SCJ

In the United States District Court for the  
Northern District of Georgia - Atlanta Division

Deposition of Loren Collingwood, Ph.D., taken on  
Tuesday, February 28th, 2023.

I have read the transcript of my deposition and find  
that no changes are necessary \_\_\_\_\_.

Loren Collingwood, Ph.D.

or

Having read the transcript of my deposition, I wish to  
make the following changes: (Please state reason.)

Page \_\_\_\_\_, Line \_\_\_\_\_:

Page \_\_\_\_\_, Line \_\_\_\_\_:

Page \_\_\_\_\_, Line \_\_\_\_\_:

Page \_\_\_\_\_, Line \_\_\_\_\_:

\_\_\_\_\_  
Loren Collingwood, Ph.D.

## DISCLOSURE

STATE OF GEORGIA Deposition of:  
COUNTY OF PAULDING Loren Collingwood, Ph.D.  
Date: February 28th, 2023

Pursuant to Article 10.B of the Rules and Regulations of the Board of Court Reporting of the Judicial Council of Georgia, I make the following disclosure:

I am a Georgia Certified Court Reporter. I am here as a representative of Veritext Legal Solutions.

I am not disqualified for a relationship of interest under provisions of O.C.G.A. 9-11-28(c).

Veritext Legal Solutions was contacted by the offices of TAYLOR ENGLISH DUMA, LLP, to provide court reporting services for this deposition.

Veritext Legal Solutions will not be taking this deposition under any contract that is prohibited by O.C.G.A. 15-14-37(a) and (b).

Veritext Legal Solutions has no exclusive contract to provide reporting services with any party to the case, any counsel in the case, or any reporter or reporting agency from whom a referral might have been made to cover this deposition.

Veritext Legal Solutions will charge its usual and customary rates to all parties in the case, and a financial discount will not be given to any party to this litigation.

Th:

*Amanda Bilbrey*

AMANDA A. BILBREY, CCR  
5320-3477-0960-3840

## C E R T I F I C A T E

STATE OF GEORGIA)

COUNTY OF PAULDING)

I hereby certify that the foregoing transcript was taken down, as stated in the caption, and the proceedings were reduced to typewriting under my direction and control.

I further certify that the transcript is a true and correct record of the evidence given at the said proceedings.

I further certify that I am neither a relative or employee or attorney or counsel to any of the parties, nor financially or otherwise interested in this matter.

This the 9th day of March 2023.



AMANDA A. BILBREY, CCR

5320-3477-0960-3840

[&amp; - 30339]

Page 1

<b>&amp;</b>	53:9 77:17	<b>20002</b> 2:6	<b>206-656-0179</b>
<b>&amp;</b> 2:19	80:18	<b>2010</b> 44:3	2:6
<b>0</b>	<b>12:33</b> 80:11,13	87:23	<b>20th</b> 2:20
<b>00122</b> 1:6 95:3	<b>12th</b> 42:14	<b>2012</b> 19:12,16	<b>21</b> 3:16 39:13
<b>05339</b> 1:14	<b>13</b> 77:18	64:4,8,21	<b>22</b> 42:4 43:23
95:6	<b>13th</b> 24:16 25:1	<b>2014</b> 44:6 71:1	81:6,21 83:3
<b>1</b>	26:9	71:13	84:4,24
<b>1</b> 3:9 5:16 10:7	<b>14</b> 73:3,4 75:8	<b>2016</b> 71:13	<b>23</b> 81:6,21 83:3
10:9 57:9	77:18 78:1,6	<b>2018</b> 71:2,9,17	<b>24</b> 3:18 80:19
59:11 60:10	<b>15</b> 36:9 76:2	71:22 72:22	81:22 83:4
62:2 66:25	77:18,19 78:6	<b>2019</b> 26:24	84:9
67:16 68:8,21	<b>15-14-37</b> 96:14	<b>2020</b> 22:2,4	<b>24791</b> 96:23
72:18,21	<b>16</b> 37:3,5 76:8	27:1 36:6	97:19
<b>1,000</b> 84:23	77:17 78:11,12	39:11 44:9	<b>25</b> 3:19 39:9,9
85:5	<b>1600</b> 2:10	66:3,9 68:20	41:3 81:23
<b>1,557</b> 89:24,25	<b>16th</b> 14:13	68:22 69:3	83:5 84:22
<b>10</b> 1:21 3:9,22	<b>17</b> 79:20	72:21 73:23,24	<b>250</b> 2:5,16
34:3,8 36:9	<b>18</b> 3:15 62:7,8	79:3,20 80:23	<b>26</b> 39:9,10
47:4 77:17,19	88:12	85:20 88:7	81:24 83:6
78:1 84:22	<b>1:20</b> 80:13,14	<b>2021</b> 36:6	<b>27</b> 39:9 81:24
89:22 90:23	<b>1:21</b> 1:14 95:6	<b>2022</b> 3:17,19,23	83:7
92:1	<b>1:22</b> 1:6 95:3	3:25 6:14	<b>28th</b> 1:20 4:3,6
<b>10.b</b> 96:4	<b>1:47</b> 94:4,6	10:18 11:6	8:9 10:8 11:5
<b>100</b> 75:11,11,16	<b>2</b>	14:1 42:5,14	95:9 96:3
84:23	<b>2</b> 3:10 10:23	44:3,6,23	<b>3</b>
<b>10007</b> 2:17	11:11 13:12	47:17 55:15	<b>3</b> 2:19 3:12
<b>11</b> 3:11,23	29:16 57:10	66:3,23,24	11:15 12:14
42:21,23 43:1	59:12 62:2	68:21 69:4	43:10,12 64:6
77:17 92:5,8	68:19 72:19,21	72:21 73:13,19	65:1 66:2 69:1
<b>11:20</b> 47:9,11	91:2,6,11	74:3 76:3	69:3,10 70:10
<b>11:30</b> 47:8	<b>20</b> 39:4 43:23	78:15 80:18	88:2 91:16
<b>11:32</b> 47:11,14	47:4 76:25,25	85:12,18,20	<b>30</b> 41:3 49:5
<b>12</b> 3:12,14,25	77:4,8 79:7,15	<b>2023</b> 1:20 4:3,6	88:11
42:24 43:1,10	<b>200</b> 2:11	12:2 95:9 96:3	<b>30339</b> 2:11
		96:21 97:15	

[30s - aggregate]

Page 2

<b>30s</b> 59:14	<b>6</b>	<b>9th</b> 96:21 97:15	<b>act</b> 29:3 31:10
<b>31</b> 85:10	<b>6</b> 3:16 21:15,16	<b>a</b>	<b>action</b> 1:5,13
<b>33</b> 3:21	51:1 71:6,13	<b>a.m.</b> 1:21 4:4,6	95:3,6
<b>336-7249</b> 2:12	91:1	47:11,11	<b>active</b> 63:15,16
<b>34</b> 3:22 89:22	<b>6.21</b> 91:15,20	<b>abbott</b> 14:21	63:16,23
<b>38</b> 92:17	<b>60,000</b> 88:11	16:12 45:22,23	<b>acts</b> 37:13 93:3
<b>3rd</b> 12:1 25:2	<b>678</b> 2:12	<b>able</b> 36:21	<b>actual</b> 48:11
26:8	<b>7</b>	51:12 64:22	87:9
<b>4</b>	<b>7</b> 2:16 3:17	80:5 83:9,10	<b>actually</b> 50:7
<b>4</b> 3:13 12:19,23	24:15,19 58:24	88:21	66:1,16 91:9
55:24 57:6	71:6,13 84:9	<b>above</b> 68:8,10	<b>add</b> 27:20
69:1,10 70:10	91:5	68:17,23 71:4	85:13
74:24 90:18,21	<b>798-1351</b> 2:21	72:10,20 80:6	<b>added</b> 60:19
92:8	<b>8</b>	<b>abrams</b> 71:17	<b>adding</b> 73:18
<b>4.42</b> 91:17,22	<b>8</b> 3:19 5:22	<b>absolutely</b>	<b>additional</b>
<b>40</b> 29:15 49:5	25:6,7 28:17	94:14	57:17 73:19
55:6 77:11	38:10,11 40:7	<b>academic</b> 51:6	<b>address</b> 5:15
<b>400</b> 2:5 40:23	55:24 60:22	<b>acceptable</b> 5:10	27:14,20,25
49:8	61:2,8 63:3	<b>access</b> 21:21	28:24
<b>44</b> 3:24,25 88:2	66:22 76:2	<b>accomplish</b>	<b>addresses</b> 29:8
<b>5</b>	93:8	81:1	<b>administration</b>
<b>5</b> 3:4,15 13:24	<b>87122</b> 5:17	<b>account</b> 52:17	15:23
18:22,24 29:16	<b>9</b>	68:16	<b>adopt</b> 93:14
37:13,21 40:5	<b>9</b> 3:20 14:1	<b>accounts</b> 89:12	<b>affect</b> 59:2
40:21 55:19	32:19 33:3	<b>accurate</b> 30:1	75:22
61:3 70:24	76:2,3,4	31:11 32:25	<b>affected</b> 64:13
71:6,9,16 72:9	<b>9-11-28</b> 96:10	78:25	71:21
72:11 92:19	<b>90s</b> 50:9,10	<b>aclu</b> 45:24 46:6	<b>african</b> 71:17
93:6	<b>92614</b> 2:20	46:7,12,14	<b>age</b> 62:6,8
<b>5.92</b> 90:19	<b>949</b> 2:21	<b>aclus</b> 46:9	69:10 70:9,15
<b>50</b> 84:22	<b>95</b> 85:2	<b>acquire</b> 51:14	78:18 79:21
<b>5320-3477-0...</b>	<b>950</b> 85:5	<b>acs</b> 47:22 57:4	88:13
96:25 97:23	<b>9:59</b> 4:4,6	57:7,10,14,18	<b>agency</b> 96:17
		57:19 93:20	<b>aggregate</b>
			43:25 74:18

[agree - assistant]

Page 3

<b>agree</b> 5:6 58:3 59:3 64:21 72:12 73:1,8 74:7 82:2 92:1 <b>agreeable</b> 5:4 <b>agreed</b> 77:14 <b>agreement</b> 5:2 43:6 <b>agricultural</b> 55:8 <b>aguiar</b> 2:18 <b>ahead</b> 17:3 24:24 77:3 <b>al</b> 1:3,8,12,15 14:20 17:5,8 95:2,2,5,5 <b>albuquerque</b> 5:17 <b>alleged</b> 40:19 <b>allow</b> 92:14 <b>allowed</b> 5:3 <b>alpharetta</b> 76:13 78:8 <b>amanda</b> 1:25 94:8 96:24 97:22 <b>amended</b> 3:12 3:13 11:15,20 12:19 <b>america</b> 27:2 27:20 39:20 <b>american</b> 18:1 18:16 22:6,9 23:4,8,13 43:16 47:22	57:4 71:17 88:19 <b>analyses</b> 77:22 77:25 <b>analysis</b> 12:7 15:4 27:7 30:24 31:5 32:6 35:3 37:6 37:20 38:19 40:14 41:14 44:17 48:4,11 55:18 56:17 57:17 58:6 63:9 64:1 66:20 70:4,5 73:3,6,11,15,23 74:1,9,20 79:16 82:24 83:8,16,19 85:4,14 87:7 87:24 92:11,14 92:23 93:2,5 <b>analyst</b> 20:19 31:20 <b>analytics</b> 30:25 <b>analyze</b> 47:20 62:22,24 63:13 <b>analyzed</b> 90:15 90:15 <b>analyzing</b> 31:16 62:2 76:8,17 78:4 87:12 <b>angle</b> 29:9	<b>anglo</b> 20:2 <b>annie</b> 1:3 95:2 <b>answer</b> 5:7 38:13 53:21 89:13,14 <b>answering</b> 90:22,23 <b>answers</b> 7:24 90:15 <b>antonio</b> 16:18 <b>anybody</b> 8:2 49:20 <b>api</b> 34:24 <b>apologize</b> 71:11 <b>apostrophe</b> 33:15 <b>appeal</b> 24:10 <b>appeals</b> 20:4 28:10 <b>appear</b> 9:12 81:24 <b>appearances</b> 2:1 <b>appeared</b> 25:14 85:11 <b>appearing</b> 5:20 <b>appears</b> 37:4 74:7 79:22 <b>apple</b> 70:21 <b>application</b> 34:24 <b>applied</b> 51:19 59:14 <b>apply</b> 62:2	<b>appreciate</b> 5:20 5:24 <b>appropriate</b> 14:6 70:21 <b>approximate</b> 89:10 <b>approximately</b> 4:6 <b>arbitrarily</b> 43:9 <b>arc</b> 35:1 <b>archival</b> 27:10 <b>area</b> 15:10 18:6 22:5 24:6 76:9 76:14 77:9 79:22 <b>areas</b> 12:11 58:7,9 83:18 <b>array</b> 20:22 <b>article</b> 30:4 93:15,17 96:4 <b>articles</b> 23:2 29:15,15,17 <b>asked</b> 26:10 32:15 33:21 40:4 55:20 90:14 <b>asking</b> 26:4 <b>asks</b> 88:13 <b>assignment</b> 40:8 <b>assistance</b> 52:13,16 <b>assistant</b> 20:19 22:18
--	---	---	--



[associate - black]

Page 4

<b>associate</b> 20:14 22:2,2,20 <b>associated</b> 87:2 <b>assume</b> 45:11 68:22 <b>assuming</b> 78:24 <b>atlanta</b> 1:2 2:11 58:10 76:9,13 78:7 95:7 <b>attached</b> 94:19 <b>attachment</b> 10:12 11:3,23 11:24 13:2 <b>attainment</b> 54:12 <b>attendance</b> 90:21 91:6 <b>attended</b> 91:20 <b>attention</b> 72:4 <b>attorney</b> 97:12 <b>audio</b> 8:14 <b>august</b> 6:13,13 <b>author</b> 27:3,8 <b>authored</b> 39:10 <b>authors</b> 51:9 <b>automatic</b> 69:13 <b>available</b> 34:19 45:8 52:19 65:7 66:5,6,17 <b>ave</b> 2:5 <b>average</b> 43:21 <b>averages</b> 58:14	<b>aware</b> 47:2 53:23 69:13 71:16 78:22 79:5 <b>axes</b> 82:18 <b>axis</b> 67:8,8 <b>b</b> <b>b</b> 3:6 10:12 11:3,4,23,24 13:2 57:2 66:20 96:14 <b>ba</b> 83:5 <b>bachelor's</b> 20:7 <b>back</b> 13:16 26:17 30:7 37:2 47:12,14 50:22 60:25 71:16 72:18 73:22 77:16 80:15 <b>backed</b> 61:6 <b>background</b> 27:9 53:12 <b>band</b> 85:8 <b>barrier</b> 86:1 <b>barriers</b> 92:25 <b>base</b> 51:8 77:11 <b>based</b> 20:21 24:1 31:23,24 32:6 43:13,21 50:11,18,21 54:3,16 55:13 64:18,21 68:20 69:9,19 72:19 79:2 81:3	84:19,21 86:2 <b>basic</b> 81:13 <b>basically</b> 20:15 38:1 43:19 51:11 53:4 54:14 55:7 56:13 75:18 77:21 85:8 89:12,15 90:5 <b>basics</b> 6:16 <b>bathroom</b> 15:16 <b>battery</b> 90:14 <b>becoming</b> 66:17 <b>beginning</b> 40:8 <b>behalf</b> 2:2,8 17:18,23 36:16 <b>behavior</b> 23:9 23:12,22 24:3 44:15 88:18 <b>believe</b> 13:5 18:10 19:18 31:14 32:7 53:12 73:3 88:11 <b>believed</b> 41:19 <b>bell</b> 50:15 <b>belt</b> 38:17 54:23 55:1 76:10,17 77:1 77:9 79:8,15 79:22,24 <b>benchmark</b> 55:6	<b>best</b> 45:3 <b>better</b> 9:19 45:13 58:11 59:17 61:18,24 89:9 <b>bilbrey</b> 1:25 96:24 97:22 <b>bill</b> 15:5,22 41:9 84:14 <b>billed</b> 41:1 <b>bills</b> 41:4 <b>biography</b> 22:9 <b>biostatisticians</b> 51:20 <b>bit</b> 8:16 19:15 23:1 24:6 33:10 40:9 54:3 60:22 69:5 81:22,24 87:8 <b>bivariate</b> 32:12 <b>black</b> 20:3 28:14 38:17 54:5,8,22 55:1 55:6 56:6,11 56:11,15,19,21 58:4,11,17 61:11,15,25 62:2,4,6,6,11 62:14 63:4,5 63:10 64:3,12 64:16,21 66:24 68:20 70:1,16 71:21,22 72:19 75:14,16 76:8
---	---	--	--

**[black - cases]**

Page 5

76:10,17 77:1 77:8 78:13,16 78:23 79:8,15 79:22,23,24 81:2,12,12,16 83:1,6,11,14,17 83:22,22 84:3 84:5,10,16 85:6,21 86:4,8 86:17,24 87:23 90:23 91:3 92:9,24,25 <b>blacks</b> 70:14 75:11 85:15 88:5 91:21 92:2 <b>blocks</b> 54:16 <b>blue</b> 68:17,23 72:10,11,20 80:6 81:8,9 82:5 84:25 <b>board</b> 13:12 14:24 37:25 38:2 93:1 96:5 <b>boards</b> 37:11 <b>book</b> 27:1,2,5 27:15,19,21 28:1 38:16 39:17,18,19 59:24 93:15,17 <b>books</b> 23:2 26:21 29:13,16 <b>boosting</b> 90:5 <b>bottom</b> 55:18 66:22	<b>boyle</b> 2:9 3:4 4:11,11,24 5:13,18 7:18 7:21 8:20,21 9:3,10,25 10:5 10:11 11:13 12:13,16,25 14:4 15:12,17 19:1 21:18 24:21 25:5,9 33:5 34:10 42:20 43:3 47:3,7,12,15 53:22 80:9,16 93:22 94:15,17 94:20 <b>brad</b> 1:6,15 95:2,5 <b>branch</b> 14:23 <b>break</b> 7:13 47:5 <b>breakdowns</b> 44:17 <b>breaking</b> 19:14 70:6 <b>breaks</b> 7:10 <b>briefly</b> 6:17 88:9 <b>bringing</b> 74:3 <b>broader</b> 27:11 56:13 <b>broadly</b> 24:2 28:2 46:7 56:22 93:4 <b>broke</b> 8:16	<b>broken</b> 63:19 <b>brought</b> 65:5 <b>brule</b> 17:13 <b>built</b> 67:14 <b>bullet</b> 54:3,7,22 <b>bullets</b> 54:6 <b>bunch</b> 16:12 57:23 88:13 <b>c</b> <b>c</b> 3:1 4:1 58:24 96:10 97:1,1 <b>cal</b> 19:6 <b>calculate</b> 63:3 <b>calculation</b> 63:17 <b>calendar</b> 20:16 <b>california</b> 2:20 19:5,6 22:18 22:24 <b>call</b> 40:6 52:16 <b>called</b> 16:14 18:12 20:9 30:15 50:7,12 63:21 <b>calls</b> 53:20 <b>campaign</b> 21:7 91:1 92:1 <b>campaigning</b> 27:1,19 39:20 <b>candidate</b> 23:24 24:9 <b>candidates</b> 20:2 24:7 28:10,14 71:24	<b>capacity</b> 1:7 6:7,9 <b>caption</b> 69:3 76:3 97:5 <b>case</b> 8:13,19,24 10:20,24 11:5 11:9,16 13:9 13:14 14:15,18 14:19,22 15:2 15:2,8,19 16:3 16:5,16 17:9 17:22 18:4,17 24:16,25,25 28:4 29:12,12 34:1 37:14,18 37:19 38:3 40:24 45:21 46:11,14,18 52:10 53:15,18 57:21 58:21 65:15 70:14 73:23 81:11 83:17,20 84:23 87:8,8 90:7 96:16,16,19 <b>cases</b> 4:12 5:1 16:21 29:18 30:2,3 32:1,4 32:16 33:22 34:13 38:14 40:1,15 41:2 41:10,17,20 42:1,5,6 43:6 44:20 45:12,19 46:10,20,21
---	--	---	---

[cases - companies]

Page 6

47:17 48:25 63:20 65:6,7 <b>cassie</b> 2:15 94:7 <b>cassie.mitchell</b> 2:17 <b>categories</b> 57:23 63:12 <b>causality</b> 82:17 <b>caused</b> 32:8 87:23 <b>causes</b> 86:23 <b>ccr</b> 1:25 96:24 97:22 <b>census</b> 29:21 34:25 43:18 93:20 <b>center</b> 2:16 <b>certain</b> 32:2 89:17 <b>certainly</b> 28:4 35:10 56:13 58:9 64:18,25 72:25 92:11 94:10 <b>certified</b> 96:7 <b>certify</b> 97:4,8 97:11 <b>chamberlain</b> 50:13,14 <b>chance</b> 18:13 40:17 <b>chances</b> 59:11 <b>change</b> 38:7 53:1 73:6,15 84:20 90:8	<b>changed</b> 66:10 73:20 <b>changes</b> 52:20 95:11,13 <b>changing</b> 52:22 <b>charge</b> 96:19 <b>charged</b> 49:8 <b>charging</b> 40:23 <b>chart</b> 69:4 <b>charts</b> 82:16 <b>chat</b> 94:13 <b>chattahoochee</b> 68:12,13,23 <b>check</b> 75:23 <b>checks</b> 75:18 <b>cheese</b> 70:20 <b>chico</b> 19:6 <b>choose</b> 64:23 84:21 <b>chose</b> 57:25 <b>circle</b> 2:10 67:19 <b>circles</b> 67:16 <b>circulated</b> 48:20,22 <b>circumstances</b> 37:20 <b>cities</b> 26:24,25 27:2 39:13 <b>citizens</b> 83:23 83:23 <b>city</b> 39:2 58:16 <b>civil</b> 1:5,13 5:3 46:12 95:3,6	<b>clarifies</b> 69:6 <b>clarify</b> 41:18 65:10 <b>class</b> 29:6 <b>classes</b> 23:4 28:22 51:20 <b>classified</b> 63:9 <b>clayton</b> 78:17 78:22 <b>clear</b> 7:24 23:25 40:10 61:13 <b>click</b> 66:12 <b>client</b> 21:9 <b>clients</b> 20:22 37:7,7 <b>close</b> 12:17 61:17 92:5 <b>closely</b> 58:21 <b>coakley</b> 1:12 95:5 <b>code</b> 36:1 63:13 93:18 <b>coefficient</b> 81:10 82:5,11 82:21 <b>collapse</b> 65:6 <b>collection</b> 34:23 48:12,12 <b>college</b> 84:1 <b>collingwood</b> 1:19 3:20,22 4:2,8,20,25 5:16 7:22 8:15 8:22 9:11 13:5	13:23 24:14 30:16,19 31:1 32:20 34:4 35:7,14,16,17 36:4,10,15 42:13,17 46:25 47:16 53:7,21 80:17 95:9,11 95:25 96:2 <b>collingwood's</b> 3:15,17,19,23 3:25 <b>columns</b> 63:20 <b>combined</b> 77:11 83:18 <b>come</b> 30:10 36:25 59:23 92:17 <b>comes</b> 6:12 7:1 24:6 35:14 <b>commenced</b> 4:4 <b>comment</b> 93:11 <b>commenting</b> 85:25 86:9,21 <b>common</b> 29:20 74:18 82:13 88:22 89:18 <b>communities</b> 15:4 <b>community</b> 43:16 47:22 56:16 57:4 <b>companies</b> 35:20
---	--	--	---

[company - counties]

Page 7

<b>company</b> 30:15	<b>conducting</b>	<b>contexts</b> 60:5	71:14,15 75:11
<b>compared</b>	15:25	<b>continue</b> 70:17	75:16 76:2,6
60:15 62:12,14	<b>confidence</b>	<b>contract</b> 96:14	76:11 78:4,20
66:22 86:24	85:2,8	96:16	84:1 90:25
<b>comparison</b>	<b>confidential</b>	<b>contrast</b> 12:2	91:3,23 93:13
62:5	36:22	<b>contribute</b>	97:9
<b>compilation</b>	<b>confirm</b> 5:20	88:16	<b>correcting</b>
63:13	<b>confusing</b> 7:1	<b>control</b> 75:23	52:21
<b>complaint</b>	49:12	97:7	<b>correctly</b> 62:9
40:17,18 44:18	<b>congress</b> 23:17	<b>cooperative</b>	<b>corrects</b> 89:15
<b>complaints</b>	24:4	44:9,10 88:7	<b>correlation</b>
44:19	<b>connect</b> 60:21	<b>copied</b> 65:11	82:18,20
<b>completed</b> 38:5	<b>consider</b> 60:23	<b>copies</b> 57:13	<b>correlational</b>
<b>complicated</b>	71:20 75:15	<b>copy</b> 13:19	82:23
89:8	<b>considered</b>	24:15 65:15	<b>correlations</b>
<b>comply</b> 32:23	32:14	94:8	82:19 84:19
<b>component</b>	<b>consistent</b>	<b>core</b> 27:22	<b>corroborated</b>
31:9	70:22 74:5	41:14 50:16,17	93:5
<b>composition</b>	78:15	73:7,16	<b>could've</b> 57:24
54:18	<b>constitutional</b>	<b>corporations</b>	<b>council</b> 96:5
<b>comprehensive</b>	53:19	46:23	<b>counsel</b> 2:1 4:9
28:19	<b>consulting</b> 35:8	<b>correct</b> 5:23	5:5 6:19 8:10
<b>conceived</b>	35:22,24 37:15	6:8 7:8 11:24	26:10 44:20,24
23:21	38:11 51:10	11:25 13:3	44:25 45:11
<b>concluded</b>	52:2,3	14:25 15:11	48:22 52:15
86:22 94:6	<b>contact</b> 21:23	19:23 22:3,6,7	93:22 96:16
<b>concludes</b> 94:3	94:11	22:12,13 23:10	97:12
<b>conclusion</b> 53:2	<b>contacted</b>	23:11 26:23	<b>count</b> 72:25
53:21 54:10	90:10 96:11	34:7 37:23	<b>counties</b> 15:24
92:17 93:9	<b>contacts</b> 92:1	38:9 40:25	37:10,11 55:6
<b>conclusions</b>	<b>content</b> 21:20	41:8 44:5	59:15,16 66:22
52:23 74:10	88:22	48:14 49:10	66:24 68:16
<b>conducted</b>	<b>context</b> 32:3	53:18 55:22	72:10 76:13,17
88:14	56:17	57:4,5,8 63:7,8	77:8,15,24
		64:7,9,10,17	78:3,8,15,17,23

[counties - define]

Page 8

79:15,23 80:6 84:10,14 <b>counting</b> 72:9 <b>countries</b> 21:2 21:3,7 <b>counts</b> 17:8 63:7 <b>county</b> 43:24 44:6,16,23 58:16 63:19 67:17,21,22 68:20 69:23 70:6 74:18,22 79:9,9,14 81:12 84:16 96:2 97:3 <b>countywide</b> 66:19 <b>couple</b> 19:11 37:11 57:22 60:2 87:15 88:14,15 <b>course</b> 29:12 <b>courses</b> 28:17 28:19,25 <b>court</b> 1:1 4:18 6:1 8:15 16:17 17:16 18:7 24:4 28:4 32:1 53:18,24,25 60:24 94:10,14 94:18,21,24 95:7 96:5,7,12 <b>courts</b> 25:23	<b>cover</b> 16:21 96:17 <b>covered</b> 31:1 <b>craft</b> 21:7 <b>create</b> 57:12 90:4 <b>created</b> 57:15 57:17 65:13 82:6 <b>creating</b> 82:8 <b>cross</b> 3:4 5:12 19:21 20:4 <b>crowd</b> 37:1 <b>crowell</b> 2:19 <b>crowell.com</b> 2:21 <b>csv</b> 75:4 <b>current</b> 29:7 93:12 <b>curriculum</b> 3:15 <b>customary</b> 7:11 96:19 <b>cutler</b> 46:4 <b>cutoff</b> 84:12 <b>cutoffs</b> 84:18 84:18 <b>cutting</b> 70:20 <b>cv</b> 1:6,14 13:17 13:18,24 14:6 17:2,10 18:21 19:18 22:1 23:7,7 26:17 28:16 29:13 37:2 38:22	50:22 95:3,6 <b>cycle</b> 41:13 86:10 <b>d</b> <b>d</b> 4:1 33:15 77:16 <b>d.c.</b> 2:6 20:10 <b>dakota</b> 18:6,17 <b>data</b> 15:21,23 27:7 29:6,10 29:21 30:7,24 32:6 34:23,25 35:2 43:11,19 43:25 44:4,7 44:21 45:2,5,8 47:22 48:3,10 48:11,13 52:19 53:5,5 55:14 57:18 58:21 61:5 62:10 63:12,19 65:4 65:5,9,12,17 66:3,4,8 67:3 73:18,19 74:4 74:18,25 75:3 75:4,23 77:18 77:21,22 79:3 79:18 81:4,4 82:8,14 83:17 84:22 85:4,20 86:3 87:12,24 88:9,17 89:23 89:24 91:24,25 93:19	<b>date</b> 26:5,15 96:3 <b>dated</b> 12:1 24:16,25 25:1 <b>dates</b> 25:19 26:10 <b>dave</b> 33:15 <b>dave's</b> 33:11 <b>day</b> 7:9 93:23 96:21 97:15 <b>days</b> 26:13 <b>dboyle</b> 2:12 <b>dealing</b> 35:1 <b>decades</b> 59:18 <b>december</b> 3:23 3:25 14:1 22:4 41:25 42:4,14 42:23,24 43:8 49:16 80:18 85:12 <b>decent</b> 51:8 <b>declined</b> 18:9 <b>default</b> 67:15 <b>defendants</b> 1:9 1:16 2:8 3:7 4:12 5:1 10:9 11:11 12:14,23 18:24 21:16 24:19 25:7 33:3 34:8 43:1 <b>defending</b> 17:20 <b>defense</b> 36:17 <b>define</b> 55:1,4
---	---	--	---

[defined - doing]

Page 9

<b>defined</b> 55:9	<b>designated</b>	83:18 85:4	88:5
<b>definitely</b> 70:5	10:13	93:2	<b>disproportion...</b>
72:14 82:3	<b>designed</b> 32:21	<b>differential</b>	61:15
<b>degree</b> 19:10	<b>detail</b> 81:20	68:20 72:19	<b>dispute</b> 93:6
20:7 28:6 29:5	88:8	85:15	<b>disqualified</b>
37:16 51:18,18	<b>detailed</b> 56:16	<b>differently</b> 31:7	96:9
87:18	72:24	<b>difficult</b> 31:25	<b>disrupted</b>
<b>democrat</b> 71:18	<b>determine</b> 32:7	<b>direct</b> 21:21	74:17
<b>demographic</b>	<b>determining</b>	<b>directed</b> 82:19	<b>dissertation</b>
12:7	77:7	<b>direction</b> 74:23	19:19,25
<b>demography</b>	<b>develop</b> 32:21	81:14 97:7	<b>distortion</b> 8:14
30:23	<b>developers</b>	<b>directly</b> 16:3	<b>distribution</b>
<b>demonstrating</b>	50:12,17,20	65:8 87:25	90:8,9
31:9	<b>developing</b>	88:1	<b>district</b> 1:1,1
<b>denominator</b>	34:20	<b>disadvantaged</b>	16:19 38:2,6
63:16 78:20	<b>development</b>	54:5	95:7,7
<b>departments</b>	27:10 34:17,24	<b>disadvantages</b>	<b>districts</b> 32:21
51:22	51:6	62:11	<b>diversifying</b>
<b>depends</b> 41:12	<b>develops</b> 50:5	<b>disclosed</b> 10:19	27:1,20 39:20
<b>deposition</b> 1:18	<b>difference</b>	11:8	<b>divide</b> 27:5
4:2,4,8,24 5:1,8	55:15 91:2,5,9	<b>disclosure</b> 12:2	<b>divided</b> 63:5
5:19 6:3,11,16	91:10 92:23	96:1,6	<b>division</b> 1:2
8:8 13:6 16:22	<b>differences</b>	<b>disclosures</b> 3:9	95:7
30:11 52:11	62:15,16,17	3:10,12,14	<b>divisions</b> 63:23
94:4,6 95:9,10	92:7,9,12,15,16	8:24 10:8,23	<b>document</b> 9:12
95:13 96:2,12	<b>different</b> 15:24	11:16,23 12:20	10:25 12:1
96:14,17	16:12 25:13,20	<b>discount</b> 96:19	21:10 26:16
<b>depth</b> 20:17	25:23,24 30:8	<b>discrimination</b>	65:12
<b>describe</b> 9:19	31:7 35:23	56:23 92:13	<b>documents</b>
<b>described</b> 37:3	39:5 42:6	<b>discuss</b> 76:8	8:12,19 17:7
<b>description</b> 3:7	43:20 50:19	<b>discussed</b> 52:8	57:14 65:21
12:3 13:3 31:4	52:7 56:7	88:9	<b>doing</b> 20:6,24
31:11 32:25	57:23 71:25	<b>disparities</b> 12:8	22:25 23:1
<b>design</b> 60:3	72:15 74:19	54:13,14 57:3	24:7 36:7 37:1
84:20	77:24 81:4,7	59:1 80:24	51:23 58:11



[doing - et]

Page 10

71:1 72:23 73:25 79:16 89:6,7 <b>dollars</b> 41:10 <b>domestically</b> 20:18 <b>don</b> 5:18 <b>donald</b> 2:9 4:11 <b>dot</b> 78:9 <b>dots</b> 68:7 72:20 78:2,9 <b>download</b> 88:21,23 <b>downloaded</b> 75:4 <b>dr</b> 3:15,17,19 3:23,25 4:8 13:5,23 24:14 42:13,17 47:16 53:7,21 80:17 <b>draft</b> 20:20 52:15 85:18 <b>drafts</b> 48:15,18 48:19,20 <b>dramatic</b> 81:25 <b>draw</b> 33:6,22 54:10 <b>drawing</b> 52:6 52:19 <b>drawn</b> 81:9 <b>dreier</b> 36:14 <b>drive</b> 5:16 <b>due</b> 92:8 <b>duly</b> 4:21	<b>duma</b> 2:10 96:11 <b>e</b> <b>e</b> 3:1,2,6 4:1,1 33:15 95:1,1,1 97:1,1 <b>earlier</b> 12:2 13:6 41:18 44:19 50:11 52:8 55:15 73:24 78:2 83:21 85:14 88:10 93:5 <b>easier</b> 9:7 <b>east</b> 5:21 14:23 15:4,9 17:5 37:19 <b>eastern</b> 4:7 <b>easy</b> 45:4 <b>economic</b> 61:14 62:3 83:12 <b>economics</b> 56:14 <b>education</b> 19:3 19:3 56:12 57:21 59:19 60:8 61:14 81:17 83:4,25 84:1,1,6 89:16 <b>educational</b> 54:12 83:12 <b>effect</b> 31:22 58:24 64:19 83:10 89:23 90:5	<b>effectively</b> 35:12 71:3 <b>effects</b> 75:21 <b>effectually</b> 82:21 <b>effort</b> 61:6 <b>eight</b> 6:6 50:18 <b>either</b> 23:15 35:23 40:5 46:24 48:1 49:20,24 67:21 <b>elaborate</b> 92:21 <b>elected</b> 24:8 56:1 61:21,22 61:23 <b>election</b> 15:22 15:22 44:14 47:19,19 52:18 64:12 71:5 72:3,6 78:16 85:18,20 88:8 <b>elections</b> 14:24 24:1 32:22 44:9,10 66:4 71:2,25 72:21 <b>electoral</b> 21:6 32:21,23 <b>elias</b> 2:4 4:16 40:3 41:7 45:17 <b>elias.law</b> 2:7,7 <b>eligible</b> 88:10 <b>elite</b> 19:20 <b>elites</b> 24:4	<b>emphasis</b> 22:11 <b>employee</b> 97:12 <b>enabled</b> 8:22 <b>english</b> 2:10 96:11 <b>enjoy</b> 51:25 <b>enjoyed</b> 51:23 <b>enlarge</b> 9:7 54:2 <b>enlarged</b> 9:16 <b>ensure</b> 32:22 <b>entire</b> 9:20,24 <b>entity</b> 42:9 <b>entries</b> 51:2 <b>environment</b> 21:6 <b>environments</b> 35:6 <b>equal</b> 86:3,5 <b>equaled</b> 61:19 <b>equally</b> 54:16 <b>equitable</b> 32:22 <b>eradication</b> 59:9,15 <b>error</b> 69:2 <b>errors</b> 52:22 <b>esquire</b> 2:3,4,9 2:15,18 <b>essentially</b> 9:20 35:7 41:21 42:3 67:1,2 <b>established</b> 83:14 <b>et</b> 1:3,8,12,15 14:20 17:5,8
--	--	--	--

[et - files]

Page 11

<p>95:2,2,5,5  <b>ethnic</b> 22:10  23:5,9 29:4  <b>europe</b> 50:18  <b>everybody</b>  51:21,22 89:19  <b>evidence</b> 92:19  97:9  <b>exactly</b> 8:13  24:6 49:6 55:3  58:23 62:20  65:18 72:14  77:12 78:5,10  <b>examination</b>  3:4 5:12 56:25  <b>examine</b> 31:5  55:20 85:16  <b>examines</b> 88:5  <b>example</b> 24:8  28:15 29:12  30:12 84:4  86:11 89:16  <b>exceeded</b> 78:16  <b>excel</b> 65:22  75:5  <b>except</b> 5:6  41:21 52:6  78:16  <b>exception</b> 64:4  <b>exclude</b> 75:19  <b>excluded</b> 17:16  84:10  <b>exclusive</b> 96:16  <b>excuse</b> 11:3  42:21</p>	<p><b>executive</b> 24:5  54:2  <b>exercising</b> 86:8  <b>exhibit</b> 3:7,9,10  3:12,13,15,16  3:17,19,20,22  3:23,25 10:7,9  10:23 11:3,11  11:15 12:14,19  12:23 13:24  18:22,24 21:15  21:16 24:15,19  25:6,7 32:19  33:3 34:3,8  43:1 53:9  80:17  <b>exhibits</b> 94:19  <b>existence</b> 36:5  <b>expansive</b> 89:7  <b>expect</b> 7:9 28:9  28:13 41:9  <b>experience</b>  28:18 75:20  <b>experiences</b>  84:21  <b>expert</b> 3:18,19  3:24,25 6:8,10  10:13 11:4,8  13:7,8 17:6  30:24 35:8,14  35:18 37:3,12  37:14 39:25  42:13,16 52:2  52:3</p>	<p><b>explain</b> 88:8  89:1  <b>explanatory</b>  25:17 70:24  <b>express</b> 6:21  <b>extent</b> 16:22  18:3,18  <b>external</b> 86:7,9  86:12</p> <hr/> <p><b>f</b></p> <hr/> <p><b>f</b> 80:20 82:16  83:1 85:19  97:1  <b>fact</b> 89:12  <b>factor</b> 37:13,21  38:10,11 40:4  40:7,21 55:19  55:24 60:22  61:1,3,8 64:16  86:12 92:19  93:6,8  <b>factors</b> 62:1,24  82:18 86:7,9  <b>fair</b> 16:14  32:22 49:18  <b>fairly</b> 9:5 53:2  81:21,23  <b>faith</b> 14:15,20  <b>fall</b> 36:25  <b>familiar</b> 40:20  60:2 72:1,3,5  79:9  <b>far</b> 21:19 86:7  <b>fashion</b> 59:22</p>	<p><b>february</b> 1:20  4:3,6 8:9 12:1  95:9 96:3  <b>federal</b> 5:3  32:24  <b>feel</b> 58:1 60:25  <b>fewer</b> 75:15  84:11  <b>field</b> 20:14  87:20  <b>fields</b> 23:8  <b>figure</b> 16:13  66:25 67:16  68:8,19,21  69:3 70:24  71:13,13,16  72:9,11 76:3,4  79:20,22 84:4  84:24  <b>figures</b> 25:14  66:21,25 67:1  67:11,15 69:1  69:10,21 70:10  72:18,21 76:1  76:2 77:17,19  81:6,7,20 82:1  82:5 83:3  <b>figuring</b> 17:12  <b>file</b> 1:5,14 9:6  9:22 26:14  65:22 75:4,5  95:3,6  <b>filed</b> 26:5,12  <b>files</b> 15:24</p>
---	--	---	--



[filing - gis]

Page 12

<b>filing</b> 25:22,23 <b>financial</b> 96:19 <b>financially</b> 97:13 <b>find</b> 14:6 95:10 <b>findings</b> 73:7 74:4 75:18 92:18 <b>fine</b> 69:7 <b>firm</b> 20:9,11 46:3 <b>firms</b> 35:24,24 45:16,25 46:15 <b>first</b> 4:21 23:7 26:12,18 27:3 29:14 39:24 48:2,15,24 49:4,13 50:9 52:18,20,22 54:4 58:25 60:15,25 73:11 73:22 74:10 75:1 82:9 88:4 89:2 90:21 <b>fit</b> 84:14 <b>five</b> 14:17,17 43:21 72:9 81:19 <b>fixed</b> 52:25 <b>flat</b> 81:21,23 <b>floor</b> 2:20 <b>focus</b> 20:1,5,16 20:21 23:14,16 56:10 87:9	<b>focuses</b> 27:8 <b>folder</b> 9:6,22 <b>folks</b> 34:11 47:5 58:11,12 83:18 88:14 <b>following</b> 57:6 66:21,21,25 76:1 95:13 96:6 <b>follows</b> 4:23 <b>font</b> 9:16 <b>footnote</b> 66:2,4 74:24 76:12 84:9,9 89:22 <b>foregoing</b> 97:4 <b>forget</b> 45:21 <b>form</b> 5:6 88:22 <b>formal</b> 19:3 <b>formatting</b> 25:13 41:22 <b>formed</b> 36:7 <b>former</b> 23:18 <b>forms</b> 88:3 <b>found</b> 51:23 53:19 64:2 87:24 <b>foundation</b> 18:1 45:24 46:6 <b>founders</b> 50:6 <b>four</b> 20:11 30:3 82:1 88:11 <b>free</b> 88:22 <b>frequency</b> 89:7 90:9	<b>friendly</b> 33:12 <b>front</b> 38:22 <b>full</b> 5:14 7:9,24 <b>fuller</b> 12:3 13:3 <b>functions</b> 35:4 35:4 <b>fund</b> 18:2 <b>funny</b> 15:12 33:19 <b>further</b> 97:8,11 <b>future</b> 36:19 <b>g</b> <b>g</b> 4:1 85:10,19 <b>gap</b> 61:17 64:5 64:13 <b>gaps</b> 54:11 61:14 65:24 70:13 <b>gathered</b> 66:3,8 <b>gathering</b> 29:10 <b>geared</b> 70:5 <b>gender</b> 89:16 <b>general</b> 47:19 55:5,5 65:14 66:3 67:12,15 70:12,17 71:8 75:22 93:4 <b>generalized</b> 35:5 <b>generally</b> 23:21 52:4 62:11 64:2 80:25 82:22	<b>generate</b> 65:23 <b>generated</b> 15:6 48:4 65:2 <b>generic</b> 70:12 <b>gentleman</b> 50:7 <b>geographic</b> 43:20 <b>geography</b> 74:15,16 <b>georgia</b> 1:1,7 2:11 38:15,18 38:20 44:1,4,7 45:1,5,25 46:7 49:23 54:23 55:2 56:6,8,9 56:11,17,25 58:3,10 62:12 64:24 69:13,17 70:2 72:2,3 77:9,14 83:23 85:22 86:1,19 86:23,24,25 88:24 92:13,20 93:7,12 95:7 96:2,5,7 97:2 <b>georgia's</b> 87:21 <b>georgians</b> 54:5 54:8,9 61:15 61:20 63:4 <b>gestures</b> 6:22 <b>getting</b> 7:12 16:9 20:6 22:14 61:15 <b>gis</b> 29:9
---	--	---	---

[give - higher]

Page 13

<b>give</b> 44:20 49:1 52:13 86:11 <b>given</b> 13:6,8 16:20,22,24 17:7 44:18 54:18 96:19 97:9 <b>giving</b> 7:24 8:8 <b>go</b> 6:15 7:9 9:14 10:3 13:1 13:16 14:13 15:13 17:2 24:23 26:17 28:16 30:6 42:16 47:12 48:11 54:1 55:3,23 58:20 62:6 68:19 69:5 71:16 72:18 73:21 75:20 78:11 79:7 80:9 81:6 81:22,22 <b>goes</b> 64:16 66:1 84:6,6 <b>going</b> 7:18 9:2 11:22 18:22 20:7 21:10 22:15 28:16 29:13 36:6 37:2 38:4 41:16 42:11 43:4,7 47:3 50:22 53:7 54:2,15 56:14	58:2,9,24 60:10,25 77:16 78:11 81:14,23 86:6 <b>good</b> 7:17 10:4 18:13 30:14 40:17 45:7,9 47:5,6 48:6 53:10 <b>google</b> 77:10 <b>government</b> 42:9 <b>governmental</b> 31:8 <b>governor</b> 71:18 <b>grabs</b> 93:19 <b>grad</b> 35:22 <b>graduate</b> 51:16 <b>graduated</b> 19:12 <b>grant</b> 1:3 3:9 3:12,18,24 4:12,17 8:24 10:7,19 11:16 11:19 24:16,25 26:9 29:18 33:22 42:13,20 42:23 46:21 95:2 <b>grants</b> 46:23 <b>gray</b> 24:6 81:8 84:24 <b>great</b> 48:14 <b>greenberg</b> 20:10	<b>greenwich</b> 2:16 <b>group</b> 2:4 4:16 19:21 32:13 34:6 40:3 41:7 45:17 64:18 <b>groups</b> 12:8,9 20:16,21 23:15 23:18,18 31:7 35:12 63:14 89:13,15,17 <b>growing</b> 89:23 <b>guess</b> 30:3 36:11 71:8 74:25 85:19 86:11 <b>guy</b> 50:7	94:2,21,23 <b>head</b> 55:5 58:23 63:22 70:8 77:13 78:24 <b>health</b> 7:22 54:12 56:12,14 57:22 59:16 61:14 <b>hear</b> 16:6 65:10 <b>hearing</b> 5:9 17:11,12 52:10 <b>hearings</b> 14:9 <b>help</b> 9:17 14:5 34:16 35:3,25 36:2 <b>helping</b> 20:17 20:20 21:7 <b>helps</b> 6:15 <b>henderson</b> 17:14 59:24,24 <b>henry</b> 78:18,22 <b>hey</b> 21:23 74:3 <b>hi</b> 94:7 <b>high</b> 81:12,17 83:4 84:1,5 85:7 <b>higher</b> 58:4,8 58:11,18 59:18 59:19 64:3,11 68:16 78:14 79:23 83:6 84:4 89:14 91:9
		<b>h</b>	
		<b>h</b> 3:6 95:1 <b>handy</b> 13:19 <b>happen</b> 36:25 79:17 90:12 <b>happened</b> 90:7 <b>happening</b> 36:20 <b>happy</b> 7:2 <b>hard</b> 17:12 41:11 51:24 72:13 89:17 93:6 <b>harvard</b> 44:12 88:15 <b>hawley</b> 2:3 4:15,15 5:11 7:18,20 9:3,18 10:3 53:20	

[hires - irvine]

Page 14

<b>hires</b> 42:9	<b>identification</b>	<b>indistinguish...</b>	<b>interesting</b>
<b>historical</b> 27:9	10:10 11:12	92:4,6	59:12 67:9
55:7	12:15,24 18:25	<b>individual</b>	<b>interests</b> 22:9
<b>hit</b> 85:5	21:17 24:20	15:25 23:19	51:6
<b>hold</b> 13:22	25:8 32:12	50:20 64:18	<b>interface</b> 23:15
76:18 90:19	33:4 34:9 43:2	90:6,6 93:3	24:13 34:25
<b>holistic</b> 87:7	<b>identified</b> 11:4	<b>influence</b> 75:10	<b>internal</b> 51:9
<b>hookworm</b>	13:2	<b>information</b>	<b>internally</b>
59:9	<b>identify</b> 4:9	44:21 65:7	48:19
<b>hookworms</b>	55:25 56:18	78:25 83:19	<b>international</b>
59:12	<b>illinois</b> 13:14	94:11	20:24,25
<b>hop</b> 37:2	14:22,23 15:2	<b>informed</b> 10:18	<b>internationally</b>
<b>hour</b> 7:10,12	<b>illustrative</b>	11:7	20:18
40:24 47:4	33:25	<b>initial</b> 3:9,10,12	<b>interrupt</b> 7:6
<b>hourly</b> 42:8	<b>imagine</b> 36:23	3:14 8:23 10:7	9:4
49:8	67:24	10:23 11:15,19	<b>interval</b> 85:2
<b>hours</b> 5:21 8:10	<b>immigration</b>	12:19 25:6	<b>intervene</b> 18:4
41:10 48:23	22:12 23:10	41:19 50:6	<b>intervener</b>
49:5	<b>important</b> 6:20	61:4 73:1	17:25
<b>household</b>	7:5 86:4	83:19 85:18	<b>intervening</b>
43:22 58:4,5	<b>inactive</b> 63:23	<b>injunction</b> 18:9	18:16 52:18
<b>how's</b> 10:2	<b>include</b> 22:9	<b>innovative</b> 60:4	<b>intervenor</b>
<b>huh</b> 11:21	23:8 75:19	<b>instance</b> 18:15	17:23
14:10	85:9 89:3,5,11	<b>instances</b> 13:8	<b>interview</b> 49:20
<b>hundred</b> 16:23	<b>included</b> 37:21	17:1	<b>interviews</b>
<b>hypothesis</b>	79:12 85:17	<b>institutions</b>	20:17,23
64:14	<b>includes</b> 38:20	24:3	<b>investigating</b>
<b>hypothetical</b>	<b>income</b> 56:13	<b>intensive</b> 61:5	20:2
24:9	57:21 58:4,5	<b>interact</b> 23:18	<b>investigation</b>
<b>i</b>	58:17,18 83:25	<b>interacting</b>	77:24
<b>i.e.</b> 27:7	<b>incorporate</b>	46:17	<b>involved</b> 18:19
<b>idea</b> 24:12	39:22 47:23	<b>interest</b> 96:9	34:1,12
59:16 81:13	60:21	<b>interested</b>	<b>iowa</b> 45:20
<b>identical</b> 41:21	<b>incorporation</b>	97:13	<b>irvine</b> 2:20
43:7	19:20		

[ish - level]

Page 15

<b>ish</b> 41:3 49:5,5 <b>issue</b> 37:24 83:11,12,12 <b>issues</b> 21:1,3 55:25 56:6,7 56:15,18,25 61:10,14,25 <b>iterates</b> 46:8	<b>kansas</b> 14:15 14:18,19 17:9 46:14 53:15 <b>keep</b> 18:21 51:25 58:2 <b>kept</b> 48:19 66:18 <b>key</b> 31:8 <b>kind</b> 9:13,14 15:16 16:1 17:19 20:3,5 20:13,20 22:23 23:19 24:5,13 27:8,9,11 28:5 28:9 29:11 30:8 31:25 33:18 35:3 36:8,25 40:6 40:10,11,19,21 50:16 51:5 55:7 57:20 58:13 59:21 60:6,21,22 61:6 63:24 70:5,11,12,19 72:5,24 73:12 73:20 74:2 75:23 84:13,18 85:3 90:3,7,11 91:21 93:16 <b>knew</b> 40:21 60:6 <b>know</b> 7:11,12 7:14 8:5,7,7,13 9:14 15:12	16:16 18:3 21:8,22 22:21 23:3,20 24:1,2 24:9 26:13,14 28:3,11,13,21 30:7,8,11,13 32:2 33:18,19 34:20 35:3,11 35:13,21,22 36:2 38:1 40:6 40:19,20,21 41:5 44:14 45:13 46:15 47:24 48:3,5 49:6,7,11 50:17 51:8,24 52:7 54:18,21 55:4 56:9,11 56:15,23,24 57:21 58:13,15 58:15,16,23 60:2,7,21,23 61:4,6,8 64:19 64:19 65:4,8 65:23,24,24 66:11,13,17 67:24,25 68:2 68:6,15 70:7 70:17,18,22 71:23,25 72:1 72:14,23,24 74:4 75:23 77:12 79:11 84:7,15,17 85:5 86:13,16	86:16,18 89:17 90:3 93:4,18 <b>knowledge</b> 17:15,17 <b>known</b> 85:2 88:21 <b>l</b> <b>labor</b> 27:5 <b>labs</b> 50:15 <b>lagged</b> 83:23 <b>language</b> 50:4 <b>large</b> 37:25 44:12,16 <b>late</b> 50:9 <b>latino</b> 20:3 22:11 <b>law</b> 2:4 4:16 40:3 41:7 45:16,17,25 46:3 86:14 <b>laws</b> 32:24 86:19 <b>lawyer</b> 25:25 <b>lawyers</b> 40:3 41:6 46:16 <b>layperson</b> 53:3 <b>learn</b> 39:24 <b>legal</b> 25:22 53:20 96:8,11 96:13,15,18 <b>lends</b> 29:10 <b>letter</b> 50:3 <b>level</b> 15:25 28:4 43:19,24 44:6 44:16 64:18
<b>j</b>			
<b>james</b> 50:13 <b>january</b> 3:17 3:19 24:16 25:1,1 26:8,9 41:20 42:4 49:13,13 <b>jhawley</b> 2:7 <b>job</b> 51:24 <b>johnson</b> 17:4,5 <b>joined</b> 17:23 <b>joining</b> 15:23 <b>jonathan</b> 2:3 2:14 4:15 <b>jones</b> 2:4 <b>jr</b> 2:9 <b>judicial</b> 96:5 <b>june</b> 18:10 <b>jurisdiction</b> 17:19 28:7 31:8 <b>jurisdictions</b> 25:24			
<b>k</b>			
<b>k</b> 41:3			

[level - manner]

Page 16

73:2,6 74:9 83:7 93:3 <b>levels</b> 56:12 59:18,19 86:23 87:23 <b>liberties</b> 46:12 <b>liberty</b> 68:12 68:13,23 <b>life</b> 51:24 <b>lights</b> 15:13 <b>likely</b> 81:18 87:3 <b>line</b> 53:5 68:8 68:17,23 72:10 72:11,20 80:7 81:8,9,14 82:5 84:25 94:8 95:15,16,17,18 <b>linear</b> 82:10 <b>lining</b> 74:14,15 <b>link</b> 66:9,10,14 66:14 75:3,7 <b>linking</b> 27:11 <b>list</b> 28:17,19 43:10,16 76:12 79:8,15 <b>listed</b> 16:11 26:21 29:15,15 34:11 51:3 53:15 77:8 <b>listing</b> 76:16 77:1 <b>lists</b> 30:19 <b>litigants</b> 46:13	<b>litigation</b> 18:18 18:19 37:12 38:8,12 42:9 52:3 96:20 <b>little</b> 8:16 19:14 23:1 33:10,12 33:18 34:21 40:9 49:12 54:3 69:5 72:14 81:7,22 81:24 87:8 <b>live</b> 72:2 <b>llc</b> 36:7 <b>llp</b> 2:10,15 96:11 <b>local</b> 17:20 46:9 <b>locality</b> 58:16 58:19 <b>lois</b> 1:3 95:2 <b>long</b> 7:13 36:4 37:4 41:12 48:23 92:13 <b>longer</b> 66:6 67:8 75:1 <b>look</b> 9:14 12:17 13:17,17,20 15:7,8 29:21 30:7 31:4 32:2 32:10,11,11,15 38:23 49:12 55:3 57:3 58:20 66:14 67:13 68:1 69:16,24 70:3	70:9,11 72:8 73:22,25 74:19 76:19,23 79:20 81:2 86:3 87:3 <b>looked</b> 15:9,9 25:12 30:9 37:13 38:10,24 43:23 56:10 57:24 61:1,7 64:3,5 66:16 70:25 74:21 88:1 <b>looking</b> 23:23 31:20,21 58:6 58:13 69:9 70:15 75:9 78:7 80:17,23 81:4 83:4,5 85:7,20 87:9 93:2 <b>looks</b> 15:12 68:7 72:10 80:1 <b>loren</b> 1:19 3:15 3:17,19,23,25 4:2,8,20,25 5:16 42:13,17 95:9,11,25 96:2 <b>lot</b> 29:5,9,10 34:23 35:23 38:16,18 40:18 45:7 54:21 59:11 61:5 72:4 78:8	84:15 88:15 <b>lots</b> 51:20 <b>louis</b> 14:23 15:5,9 17:6 <b>lower</b> 17:13,19 56:12 74:16 83:15 86:6,23 87:23 <b>lulac</b> 14:16 15:19 45:20,22 <b>m</b> <b>m</b> 3:2 <b>made</b> 68:24 74:11 84:23 96:17 <b>main</b> 15:23 20:1,5 27:12 47:18 50:12 <b>maintain</b> 21:19 <b>majority</b> 75:14 78:23 <b>make</b> 9:23 24:10 25:5 26:15 52:20 67:13 70:18 73:19 83:20 87:7 89:10 95:13 96:5 <b>makes</b> 72:6 <b>making</b> 20:4 28:10 <b>managing</b> 20:15 <b>manner</b> 47:20
--	--	--	---

[map - neighborhood]

Page 17

<b>map</b> 15:5 <b>mapping</b> 37:6 <b>maps</b> 16:15 33:6,22 52:7 87:22,22 93:12 <b>maptitude</b> 33:9 <b>march</b> 10:8,18 11:5 96:21 97:15 <b>mark</b> 10:7 42:20 <b>marked</b> 3:7 10:9 11:11 12:14,23 18:24 21:16 24:19 25:7 33:3 34:8 43:1 <b>massachusetts</b> 2:5 <b>master's</b> 19:10 <b>math</b> 91:16 <b>matter</b> 32:14 97:14 <b>mean</b> 21:21 23:12 25:12 26:3 28:8,21 29:19 30:11 32:1 35:11 39:19 41:14 45:4 48:3 52:15 53:3 57:25 66:15 69:21,23 70:4 71:23 72:8,23 73:10 74:6	83:21 86:13,15 86:20 91:16 92:22 <b>means</b> 13:20 54:7 60:11 81:15 <b>measure</b> 65:20 87:1,5 <b>measured</b> 58:17,18 <b>measures</b> 57:22 <b>median</b> 58:4,5 58:17,18 <b>medication</b> 7:23 <b>member</b> 38:2,6 <b>members</b> 34:5 <b>mention</b> 93:8 <b>mentioned</b> 14:18,22 <b>met</b> 8:10 <b>metaphor</b> 70:21 <b>methodology</b> 29:17,22,24 30:1 51:19 <b>methods</b> 23:9 34:19 <b>metrics</b> 83:24 <b>metro</b> 76:9,13 <b>mexico</b> 3:16 5:17 21:12 22:3,16,22 46:25	<b>michael</b> 14:21 <b>middle</b> 43:11 55:12 <b>mike</b> 2:4 <b>miller</b> 2:14 <b>mind</b> 6:12 <b>minimize</b> 75:24 <b>minor</b> 19:7 52:25 <b>minority</b> 28:10 <b>minute</b> 26:17 41:17 47:4 <b>minutes</b> 87:15 <b>mittell</b> 2:15 94:7,7,11,12 <b>mixed</b> 16:9 <b>mjones</b> 2:7 <b>mobilization</b> 19:22 <b>mobilized</b> 20:3 <b>mobilizing</b> 28:14 <b>model</b> 28:5,8 <b>modes</b> 88:6 <b>modules</b> 88:16 <b>moment</b> 47:13 <b>monte</b> 5:16 <b>moring</b> 2:19 <b>morning</b> 5:19 <b>motivation</b> 64:11,15,15,19 71:21 <b>move</b> 15:14 16:21 74:16	<b>moved</b> 22:21 41:12 66:18 <b>moving</b> 73:13 <b>multivariate</b> 89:9
			<b>n</b>
			<b>n</b> 3:1,1,2,2 4:1 <b>naacp</b> 14:23 <b>name</b> 4:15 5:14 5:18 10:13 11:24 33:19 36:13 45:21 50:8,9,13 <b>named</b> 46:19 <b>names</b> 38:21 <b>narrative</b> 27:12 <b>narrowest</b> 64:4 <b>nationally</b> 72:5 <b>native</b> 18:1,16 <b>nature</b> 13:9,10 15:1,19 <b>nearly</b> 64:22 78:1 <b>necessarily</b> 61:22 <b>necessary</b> 95:11 <b>need</b> 17:2 56:19 58:1 61:16 76:19 94:25 <b>needed</b> 45:5 <b>needs</b> 56:20 <b>negative</b> 81:14 <b>neighborhood</b> 58:17



[neither - page]

Page 18

<p><b>neither</b> 97:11</p> <p><b>new</b> 2:17,17 3:16 5:17 13:12 21:12 22:3,16,21 26:16 37:22 46:11,12,13,25 52:19 53:5,5 54:4,4 60:16 66:13,14 72:4 73:4,8 74:3 85:11</p> <p><b>news</b> 72:2</p> <p><b>niclu</b> 46:11</p> <p><b>nine</b> 50:18</p> <p><b>non</b> 63:16</p> <p><b>normally</b> 59:22</p> <p><b>north</b> 18:6,16</p> <p><b>northeast</b> 5:17</p> <p><b>northern</b> 1:1 95:7</p> <p><b>northwest</b> 2:5</p> <p><b>nos</b> 43:1</p> <p><b>note</b> 68:2,3,24 70:4,18</p> <p><b>notice</b> 5:2 79:8 90:17</p> <p><b>noticed</b> 52:25</p> <p><b>nowadays</b> 33:20</p> <p><b>number</b> 29:14 39:3 41:11 48:23 63:5,6 78:3</p>	<p><b>numbers</b> 84:21</p> <p><b>nvra</b> 32:4</p> <p><b>o</b></p> <p><b>o</b> 3:1,2 4:1</p> <p><b>o'brien</b> 39:10</p> <p><b>o'clock</b> 5:22</p> <p><b>o.c.g.a.</b> 96:9,14</p> <p><b>oath</b> 4:22 5:25</p> <p><b>obama</b> 64:8</p> <p><b>objection</b> 53:20</p> <p><b>objections</b> 5:6 6:19</p> <p><b>observational</b> 82:22</p> <p><b>observed</b> 52:22 53:6</p> <p><b>obviously</b> 38:19 40:11,20</p> <p><b>office</b> 15:13</p> <p><b>offices</b> 96:11</p> <p><b>official</b> 1:7 36:17 90:10</p> <p><b>officials</b> 24:8 56:1 61:21,22 61:23</p> <p><b>oh</b> 9:25 13:21 15:15 68:11 69:25 81:10</p> <p><b>okay</b> 5:14,24 6:5,10,10 7:7 8:11 9:16 10:5 10:6,17,22 11:22 12:7,13 15:7 17:1 19:18 21:15,25</p>	<p>22:5 24:14 25:19 30:10 32:15 35:16 36:21 38:14 40:7 41:1 47:7 47:25 48:6 52:9 53:11 55:12 57:9,12 57:16 60:10 62:9 65:10 68:7,19 69:6 71:6,20 73:2 74:6 76:25 77:2 78:1 79:1 79:20 80:3 81:19 82:4,12 82:16 83:21 89:22 91:12</p> <p><b>old</b> 37:1</p> <p><b>older</b> 13:22 39:6</p> <p><b>once</b> 74:16</p> <p><b>one's</b> 17:13</p> <p><b>ones</b> 29:2 57:25 72:15</p> <p><b>open</b> 50:20</p> <p><b>opinion</b> 61:9,13 62:10,13 64:11 70:19 82:17 87:21 89:19 92:7</p> <p><b>opinions</b> 12:11 43:12 55:13</p> <p><b>opposed</b> 63:10</p>	<p><b>opposition</b> 39:13</p> <p><b>order</b> 89:9</p> <p><b>ordering</b> 39:4 94:15,22</p> <p><b>ordinary</b> 42:8</p> <p><b>original</b> 47:25 48:5 66:8</p> <p><b>origination</b> 50:16</p> <p><b>outcome</b> 38:3</p> <p><b>outcomes</b> 32:23 56:12</p> <p><b>outlier</b> 75:21</p> <p><b>outliers</b> 75:10</p> <p><b>outlined</b> 32:24</p> <p><b>overall</b> 58:13 69:17,19 70:1 90:3,8</p> <p><b>overturned</b> 53:25</p> <p><b>own</b> 48:10,12</p> <p><b>owning</b> 55:8</p> <p><b>owns</b> 36:10</p> <p><b>p</b></p> <p><b>p</b> 2:9 4:1 89:24</p> <p><b>p.m.</b> 80:13,13 94:4,6</p> <p><b>package</b> 33:19 35:1 50:20 51:3</p> <p><b>packages</b> 51:11 52:4</p> <p><b>page</b> 3:3,7 14:12,13 22:8</p>
---	---	---	---

23:7 26:18 28:17 29:14 37:3,5 43:10 43:12,12 51:1 53:11 54:1 55:10,12,18,23 55:24 57:6,9 58:24 63:3 66:22 69:1 73:3,4 74:24 75:8,8 76:2,8 76:25,25 77:4 77:8,17 78:11 78:12 79:7,15 80:19 81:6 85:10 88:2 89:22 92:17 95:15,16,17,18 <b>pages</b> 29:16 57:6 <b>paper</b> 29:24 38:17 39:1 59:24 60:1 <b>papers</b> 30:8 38:22,24 <b>paragraph</b> 37:4 53:16 59:8 60:11,16 60:19 68:10 70:25 73:4,8 73:12 89:2 <b>park</b> 2:19 <b>parkwood</b> 2:10 <b>part</b> 13:25 14:6 19:11 28:5	30:4 34:3 40:7 49:23 57:2 58:24 60:20 69:16 93:14 <b>participation</b> 12:9 58:25 59:2,20 60:9 86:24 87:24 88:3,6 90:14 92:24 93:1 <b>particular</b> 21:8 22:11 38:21,24 62:3 64:12 86:10 <b>particularized</b> 56:19 <b>particularly</b> 71:24 <b>parties</b> 96:19 97:13 <b>partisan</b> 31:24 32:8 <b>partisanship</b> 32:16 <b>parts</b> 58:12 <b>party</b> 32:13 96:16,20 <b>pasted</b> 65:16 <b>pate</b> 45:20 <b>pattern</b> 32:5 <b>patterns</b> 32:17 38:15,24 74:17 <b>paulding</b> 96:2 97:3	<b>pdf</b> 9:4,7,19,20 9:23 10:3 42:16 <b>peer</b> 30:5 <b>pendergrass</b> 1:12 3:11,14 3:19,25 4:13 4:16 10:24 11:5,8 12:18 12:19 24:24 25:1,5 26:8 29:18 33:23 42:17,21,23 43:9 46:20 53:9 80:18 95:5 <b>pending</b> 7:14 16:16,17 <b>people</b> 21:2,2 23:13,19 24:4 32:2 33:20 34:16 35:23 36:2,25,25 41:5 48:13,21 50:18 56:11 59:17,18 62:6 62:8 63:5 83:14,16 84:15 87:7 88:18 89:13,13,17 90:10 93:4 <b>percent</b> 16:23 55:6 69:19 77:11 81:11 85:2,6 90:9,19	90:24 91:2,6,8 91:11,15,16,17 91:20,22 <b>percentage</b> 79:21 83:5,7 84:4,5 91:4,8 91:10 <b>percentages</b> 64:23 83:15 <b>perfect</b> 94:15 <b>person</b> 50:8 <b>personally</b> 31:14 33:6 <b>pertain</b> 56:7 <b>ph.d.</b> 1:19 4:2 4:20 19:8,12 19:15 22:15,17 95:9,11,25 96:2 <b>phone</b> 2:6,12 2:21 40:5 <b>pick</b> 43:9 <b>picked</b> 19:19 <b>pickering</b> 46:4 <b>pinging</b> 34:25 <b>place</b> 82:9 <b>places</b> 35:25 50:19 54:21 58:3 88:15 <b>plaintiff</b> 16:14 18:8 38:1 45:16,25 <b>plaintiffs</b> 1:4 1:13 2:2 3:9,10 3:12,13 4:17
---	--	---	---



[plaintiffs - printout]

Page 20

5:5 10:14,18 10:23 16:12 18:18 39:25 40:14 44:20 45:11 46:20 <b>plan</b> 17:20 18:6 36:17 <b>planning</b> 93:14 <b>plans</b> 33:25 <b>plausible</b> 64:14 <b>plaza</b> 2:19 <b>please</b> 4:9,19 5:15 7:20 8:17 47:13 94:17 95:13 <b>plots</b> 70:7 <b>plugged</b> 82:14 <b>plus</b> 50:12 55:6 88:12 <b>point</b> 41:5 54:3 54:22 67:9 85:1,7 91:4,10 <b>pointing</b> 74:23 <b>points</b> 91:8 <b>polarized</b> 13:14 15:3 27:17,25 28:6,12 29:23 29:25 30:23 31:5,6,16,20,21 31:22,23,23 32:6,10 <b>poli</b> 19:7 <b>policing</b> 56:23 <b>political</b> 12:9 17:19 19:9,10	19:13,15 20:9 23:9,12,16,21 24:2 31:8 32:8 44:15 45:9 51:19 54:7,15 58:24 59:2,19 60:8,11 61:10 61:16 62:13,20 87:19 88:15,18 88:19 90:14,21 91:6,20 92:24 93:3 <b>politically</b> 61:11 <b>politics</b> 22:6,10 22:10,11 23:4 23:5,8,9,14,20 26:25 29:5 31:15,24 39:2 54:20 88:19 <b>polling</b> 20:9 35:20,24 <b>population</b> 43:19,22 54:17 67:20,21,22 69:10 70:9,15 78:19 79:21 81:16 89:10 <b>populations</b> 55:7 <b>portion</b> 36:12 <b>position</b> 18:4 56:21 <b>possibility</b> 64:25	<b>possible</b> 16:10 41:21 54:19 63:11 73:21 74:15 93:18 <b>possibly</b> 44:22 75:14 <b>post</b> 72:5 <b>potentially</b> 51:10 87:4 89:8 <b>poverty</b> 54:12 83:7 <b>powerpoints</b> 20:20 <b>practice</b> 75:22 <b>precinct</b> 43:24 44:23 63:20 73:2,6,11,23 74:1,9,21 75:20 78:9 <b>precincts</b> 75:9 75:10,14,25 78:7 79:19 <b>prediction</b> 15:25 <b>preference</b> 32:8 32:13 <b>preliminary</b> 18:9 <b>preparation</b> 15:21 <b>prepare</b> 8:6 47:16 48:15,24 <b>prepared</b> 8:7 12:10	<b>preparing</b> 49:9 52:9,14 <b>presence</b> 92:19 <b>present</b> 2:14 31:7 93:7 <b>presented</b> 48:4 89:3 <b>presidency</b> 23:17 <b>president</b> 64:8 <b>pressure</b> 19:21 <b>pretty</b> 22:25 23:1 29:19,20 29:20 31:25 32:3,3 38:13 50:8 64:14 72:1,3 74:18 74:22 81:3 83:20,24 88:24 89:18 92:2,5 92:22 93:1 <b>prevent</b> 7:24 <b>preventing</b> 86:7,10,16 <b>previous</b> 66:1 69:21 81:25 <b>previously</b> 13:7 35:20 45:18 47:21 53:6 66:5,7 86:20 <b>primary</b> 86:14 <b>printed</b> 39:6 <b>printout</b> 21:11 30:18
---	---	---	--

[prior - randomization]

Page 21

<b>prior</b> 13:8 14:6 54:6 87:22 <b>priori</b> 84:20 <b>probability</b> 86:5 <b>probably</b> 6:6 6:12 7:10 9:15 36:9 39:9,16 40:5 41:3,15 44:13 49:4 57:23 58:9,10 58:21 66:16 67:14 <b>problem</b> 9:8 10:6 <b>problems</b> 7:23 <b>procedure</b> 5:4 89:19 90:11 <b>proceedings</b> 97:6,10 <b>process</b> 45:2 59:14 65:14 90:11 <b>processes</b> 35:5 <b>product</b> 43:18 <b>professor</b> 4:25 5:18 9:11 10:12 12:21 19:4 22:2,18 22:20 31:14 93:24 <b>professors</b> 44:12 51:21 <b>program</b> 19:12 50:11 51:17	59:9,13,15 <b>programming</b> 29:6,11 34:24 50:4 <b>prohibited</b> 96:14 <b>project</b> 35:2 <b>projects</b> 36:2 51:7 <b>proportion</b> 54:16 <b>propose</b> 5:5 <b>proprietor</b> 36:9 <b>protest</b> 91:6,21 <b>prove</b> 40:15 <b>provide</b> 92:18 96:12,16 <b>provided</b> 44:24 90:4 <b>provides</b> 43:19 63:19 <b>providing</b> 46:23 78:25 <b>provisions</b> 96:9 <b>psychology</b> 19:7 <b>public</b> 39:13 89:19 <b>publicly</b> 34:18 45:7 <b>published</b> 29:16 30:4 88:20 93:15 <b>pull</b> 57:18	<b>pulled</b> 65:3,12 <b>pulling</b> 35:1 <b>pulls</b> 93:19 <b>purposes</b> 5:3 7:5 15:8 31:15 38:11 45:12 57:16 <b>pursuant</b> 96:4 <b>pursuit</b> 19:20 <b>put</b> 8:23 10:22 12:18 13:24 21:10 24:14,24 26:10 30:18 34:3 41:11,16 42:11 50:22 65:22 94:12 <b>putting</b> 82:8	91:9 <b>quote</b> 24:11
			<b>r</b> <b>r</b> 4:1 50:3,3,8 50:17,17 51:3 51:6,12,14 52:4 95:1,1 97:1 <b>race</b> 15:25 22:10 23:5,9 29:4,8,9 31:14 31:22,23 32:9 59:6 86:1,18 <b>racial</b> 12:8,9 19:21 20:4 32:12 56:23 83:11 <b>racially</b> 13:14 15:3 27:1,17 27:20,25 28:6 28:12 29:22,25 30:23 31:4,6 31:20 32:5 39:20 <b>racism</b> 86:22 87:1 <b>raffensperger</b> 1:6,15 4:13,14 95:2,5 <b>raise</b> 60:23 <b>ramapo</b> 37:19 46:11 <b>ran</b> 64:8 <b>randomization</b> 59:14

[range - report]

Page 22

<b>range</b> 85:3,6 <b>rate</b> 42:8 49:9 <b>rates</b> 69:17 76:9 82:25 83:1,9 89:14 96:19 <b>rather</b> 6:21 23:24 32:8 78:19 <b>reached</b> 40:3 <b>read</b> 7:19 9:8 9:15 60:15 68:6 72:2 74:6 74:9 95:10,13 <b>readily</b> 66:17 <b>reading</b> 54:4 <b>really</b> 31:17 46:16 51:23 54:19 58:1 62:19 73:20 75:20 87:11 <b>realm</b> 56:13 <b>reason</b> 25:19 47:18 67:6 74:2 95:13 <b>reasons</b> 33:12 87:4 <b>recall</b> 11:7 30:8 38:21 53:1 63:22 70:7 <b>received</b> 19:4 <b>recent</b> 13:25 87:21 <b>recess</b> 47:11 80:13	<b>recollection</b> 10:17 37:18 41:24 60:17 <b>reconvene</b> 47:7 <b>record</b> 4:5,10 5:15 7:6 47:10 47:14 80:9,12 80:15 94:5 97:9 <b>rectangle</b> 67:7 <b>redistricting</b> 13:13,15,16 15:5 16:4,7 17:20 18:6,18 18:19 27:14,21 27:23 28:24 29:8 30:24 32:20 33:6,11 33:16,22 36:17 36:24 37:6 87:22,22 93:12 <b>redo</b> 41:13 <b>reduce</b> 75:9 <b>reduced</b> 97:6 <b>reduces</b> 82:22 92:25 <b>reelection</b> 64:9 <b>refer</b> 17:2 <b>reference</b> 59:9 75:7 <b>referral</b> 96:17 <b>referring</b> 74:25 <b>refers</b> 54:22 <b>refuge</b> 26:25	<b>regard</b> 31:12 <b>regarding</b> 16:7 <b>regardless</b> 59:6 <b>region</b> 54:23 55:1 <b>regions</b> 55:8 <b>registered</b> 63:6 63:21,24 84:10 84:16 <b>registrants</b> 66:23,24 72:19 <b>registration</b> 43:25 68:21 69:14,17,19,20 70:1,13 78:19 <b>regression</b> 81:10 82:4,11 82:20,21 89:8 89:9 <b>regulations</b> 96:5 <b>relate</b> 51:3 <b>related</b> 8:12,19 14:16 15:5,21 15:22 23:4 40:11 60:5,8 61:8 62:17 92:24 <b>relationship</b> 32:12 80:23 81:11,16 85:16 96:9 <b>relative</b> 62:7 67:20 74:21 97:12	<b>relevant</b> 59:10 <b>relied</b> 43:11 48:12 <b>rely</b> 44:22 <b>relying</b> 55:14 <b>remember</b> 8:13 16:22 17:2 26:11 46:10 73:25 <b>remove</b> 79:14 <b>repeat</b> 8:16 <b>rephrase</b> 6:25 7:2 31:18 <b>replicated</b> 77:21 <b>report</b> 3:18,19 3:24,25 13:25 15:20 16:15 24:16,24,25 25:1,6 39:7 40:4,13 42:4 42:13,17,20,23 42:24 43:6 47:17 48:1,1 48:16 49:14,17 52:21,22 53:2 53:4,8,9 54:4 55:4,10,16,25 60:6,15,16 61:1,4 62:25 66:10 68:1,3 73:3,5,9,16,22 74:10 75:1,2 80:18 82:24 83:22 85:24
---	---	---	--

[report - sandy]

Page 23

88:1 92:18 93:11,15,21 <b>reported</b> 73:7 <b>reporter</b> 4:18 6:17 8:15 94:10,14,18,21 94:24 96:7,17 <b>reporting</b> 96:5 96:12,16,17 <b>reports</b> 8:7 20:20 25:10 30:2,3 34:12 41:17,19,19,25 42:11 43:8 48:2,16,25 49:9,13,16,21 49:24 50:2 52:9,14,19 74:14 85:12 <b>represent</b> 4:10 4:12,16 <b>representation</b> 32:22 61:18,19 61:24 <b>representations</b> 67:2 <b>representative</b> 96:7 <b>request</b> 94:8 <b>requisite</b> 51:12 <b>reread</b> 68:6 <b>research</b> 3:20 3:22 22:5,9 23:2,8,13 24:2 30:16,19,25	31:2 34:4 35:7 35:15,17 36:4 36:10,15 38:16 45:10 46:24 47:1,25 48:5 50:15 88:18 89:20 <b>research's</b> 32:20 <b>reserved</b> 5:8 <b>respective</b> 63:6 <b>respond</b> 6:20 24:12 54:8,15 54:19 60:12 <b>respondents</b> 24:11 88:12 89:25 90:22,23 91:3 <b>responds</b> 54:9 <b>responses</b> 92:2 <b>responsive</b> 56:1 62:13 <b>responsiveness</b> 5:7 <b>rest</b> 9:22 39:17 <b>result</b> 78:13,15 82:15 <b>results</b> 71:5 75:22 84:19 <b>retained</b> 39:25 <b>returns</b> 44:23 <b>review</b> 52:10 <b>reviewed</b> 8:12 8:18 30:5 33:25	<b>revising</b> 48:21 <b>rewrite</b> 66:9 <b>right</b> 5:21 6:15 7:3,16 8:20 10:2,21 15:18 16:6 17:4 18:21 19:14 21:25 25:18 28:21,23 30:16 30:17 33:21 34:6 37:9 39:12 41:22,23 42:7,12 43:4 44:1,2,4,7 48:13 52:9 55:16,17,21 57:4,7 60:18 62:3,4,5,23,23 64:5 65:14 66:19 67:18 68:25 69:2,11 69:12,15 71:6 71:9 72:11,22 75:4,12,13,17 76:14,22 77:2 78:5,9,21 79:25 81:22 83:2 86:8 87:13 90:13,24 91:7,17,24 94:24 <b>rights</b> 13:12 18:1 29:3 31:10 32:24 37:13 57:1	<b>rivera</b> 14:15,20 17:8 53:16 <b>riverside</b> 22:19 22:24 <b>robert</b> 50:7 <b>robustness</b> 75:17 <b>rockdale</b> 78:18 78:23 <b>role</b> 32:16 34:15 82:7 <b>rolling</b> 52:1 <b>room</b> 8:2 <b>rosner</b> 20:10 <b>round</b> 36:24 <b>rpv</b> 31:6,8,12 <b>rule</b> 67:12 <b>ruled</b> 18:7 <b>rules</b> 5:3 96:5 <b>run</b> 44:11 <b>running</b> 43:21 71:18 92:13 <b>s</b> <b>s</b> 3:1,6 4:1 33:15 50:12,12 95:1 <b>sample</b> 88:24 89:24 <b>san</b> 16:18 <b>sanctuary</b> 26:24,25 27:2 39:1,13 <b>sandy</b> 76:13 78:7
--	--	---	---

[sarah - setup]

Page 24

<b>sarah</b> 36:14 <b>saw</b> 74:17 <b>saying</b> 9:25 10:1 26:9 65:11 69:25 71:7 73:5,14 74:3,12 85:21 85:23 91:3,12 91:13 <b>says</b> 11:19 12:7 22:5,8 23:8 26:18 30:23 31:5 32:21 34:4 43:12 51:2 55:13 66:4 69:3 80:22 88:7 <b>sb1</b> 45:21 <b>scheme</b> 17:21 <b>school</b> 13:12 37:11,25 38:2 81:12,17 83:4 84:1,6 85:7 <b>schwab</b> 14:21 14:21 46:14 53:16 <b>sci</b> 19:7 <b>science</b> 19:9,11 19:13,16 29:6 84:17 87:18,19 87:19 88:19 <b>sciences</b> 29:7 <b>scientific</b> 27:6 <b>scientist</b> 82:13 87:3,15,16	<b>scientists</b> 45:10 88:16 <b>scj</b> 1:6,14 95:3 95:6 <b>scott</b> 14:20 <b>screen</b> 8:22,23 9:4,5,20,24 10:25 11:14 12:19 13:24 18:22 21:11 24:15 26:19 30:18 41:16 42:12,12 50:23 53:8 80:19 <b>screenshots</b> 3:16,21,22 <b>scroll</b> 9:2 11:2 11:22 14:5 18:23 24:22 28:17 43:10 81:20 <b>scrolling</b> 23:6 <b>searches</b> 77:10 <b>second</b> 3:12,13 11:15,19,23 12:19 22:8 27:19 47:17 48:2,16 49:2,5 49:17 52:18,21 53:8,11 60:16 73:4,5,9 75:2 76:18 78:13 80:10 <b>secretary</b> 1:7 36:16 44:1,4,7	45:1,6 65:5,9 65:13,21 66:5 77:22 <b>section</b> 13:12 51:1 59:1 60:22 66:1 67:2 80:22 81:1 85:13 88:2,4 <b>sections</b> 85:19 <b>see</b> 8:25 9:11 9:25 10:1,1,15 10:25 11:17 12:5,21 13:11 14:2,12 21:13 24:10,12,17 25:3 26:18,20 27:3 28:9,13 30:21 32:5 36:20 37:7 39:4,8,10 40:19 42:12,18 43:14 50:24 54:20,24 58:7 59:22 60:13 65:24 69:25 70:16 72:7,9 77:5 80:20 81:13 91:12 92:8,15 <b>seeing</b> 78:2 87:4 <b>seeking</b> 18:5,8 38:1 40:14	<b>seem</b> 37:8,10 <b>seemed</b> 77:13 <b>seems</b> 61:7 <b>seen</b> 24:2 40:17 45:3,9 83:11 92:23 <b>senate</b> 37:13,21 38:10,11 40:4 40:7,21 55:19 55:24 61:3 92:19 93:6,8 <b>send</b> 41:4 <b>sense</b> 52:21 72:6 84:23 <b>sensible</b> 84:21 <b>sentence</b> 58:25 59:3,5 74:7 78:12,13 88:4 89:1 <b>separate</b> 30:15 31:22 63:23 <b>separated</b> 31:15 <b>september</b> 6:14 <b>services</b> 30:20 31:12 96:12,16 <b>set</b> 30:9 48:24 67:15 71:5 84:18,18 88:9 89:24 <b>sets</b> 15:23 81:5 <b>setting</b> 20:15 <b>settled</b> 77:12 <b>setup</b> 38:6
---	---	--	---

[seven - specifically]

Page 25

<b>seven</b> 22:19 72:11	60:4 76:16 82:25 83:8 92:3	<b>smashed</b> 65:16 <b>social</b> 29:7 82:13 84:17 87:2,14,16,18 87:19	75:21 77:11,14 93:17
<b>several</b> 8:7 51:2 66:20 90:17	<b>simply</b> 82:6	<b>socioeconomic</b> 12:8 56:20 57:3 59:1 60:7 62:1,10 80:24 85:17 92:9,25	<b>sought</b> 18:4 <b>sound</b> 16:2 47:5
<b>shaded</b> 81:8	<b>single</b> 38:2,6 50:3	<b>socioeconom...</b> 54:6	<b>sounds</b> 7:17 10:21 14:16 30:14 33:18 47:6 53:10 60:18 69:15,15
<b>shading</b> 84:24	<b>sit</b> 56:5 80:5	<b>socioeconom...</b> 81:3	<b>source</b> 50:20 65:3 77:7,13 77:18,20
<b>share</b> 8:23 9:4 9:5,20,24 30:18 66:22,23 80:19 81:16	<b>situation</b> 28:11 28:13 79:18	<b>software</b> 33:7,9 33:19 34:18 35:4 36:1 50:1 51:2,6,13,15 52:5 82:6	<b>south</b> 38:19,25 39:22,23
<b>shared</b> 52:15	<b>situations</b> 35:6	<b>sole</b> 36:8	<b>southern</b> 86:19
<b>shift</b> 70:19 93:2	<b>six</b> 6:6 14:17 22:19 72:10 79:23 81:20	<b>solutions</b> 96:8 96:11,13,15,18	<b>sp1</b> 14:16 15:22
<b>show</b> 24:23 62:10 67:20 85:9 91:24,25	<b>sizable</b> 88:24	<b>somebody</b> 21:20 74:8 86:10	<b>space</b> 33:15
<b>showed</b> 60:7 83:22	<b>size</b> 67:19,20 79:18 88:25 89:24	<b>sort</b> 9:21 20:10 21:6 24:10 25:21 36:8 40:10 49:12 51:5,18 55:4 65:20 67:11	<b>speak</b> 87:25
<b>showing</b> 79:22 82:17 84:3,25	<b>sizes</b> 75:21		<b>specific</b> 18:6 29:22 30:12 34:21 37:17,18 39:23 55:25 56:15,24 61:10 70:3 71:24 77:23 83:16 86:18,18 87:1
<b>shown</b> 55:14 67:6	<b>skills</b> 51:12,14		<b>specifically</b> 8:6 8:8 19:24 27:14 29:4,24 32:11 34:14 38:18 51:7 52:3 56:9 87:6
<b>shows</b> 30:20 34:5 69:4 85:1	<b>skip</b> 77:3		
<b>sic</b> 50:13 89:24	<b>slave</b> 55:8		
<b>side</b> 9:21 23:23 23:24 25:22 51:18	<b>slicing</b> 70:21		
<b>sign</b> 7:19	<b>slightly</b> 25:13 39:5 78:16 85:4		
<b>signature</b> 26:6 96:23 97:19	<b>slope</b> 81:10,14 81:25 82:3,5 82:11		
<b>signed</b> 26:16	<b>slowly</b> 24:22		
<b>significant</b> 81:15	<b>small</b> 9:5,13,15 36:12 52:24 75:20,24 79:18		
<b>similar</b> 47:20 53:3 56:20	<b>smaller</b> 51:9 78:3		



[specifically - systems]

Page 26

92:14 <b>specifics</b> 93:21 <b>speed</b> 47:23 <b>spell</b> 33:14 <b>spots</b> 58:7 <b>spreadsheet</b> 67:3 72:24 <b>spreadsheets</b> 67:3 <b>springs</b> 76:13 78:8 <b>square</b> 67:7 <b>st</b> 14:23 15:5,9 17:6 <b>stacey</b> 71:17 <b>standard</b> 44:14 82:10 85:8 <b>standards</b> 32:23 <b>standby</b> 47:13 <b>start</b> 36:6 42:21 48:9 53:7 67:1 73:5 <b>started</b> 20:14 22:4 33:10 40:13 51:23 77:16 <b>starting</b> 73:12 <b>state</b> 1:7 5:14 13:13 14:24 15:6 17:19,20 17:24 19:5,6 32:24 36:16 44:1,4,7 45:2,6 45:9 53:24	58:12 62:11 63:19 65:5,9 65:13,21 66:5 77:23 88:23 92:19 93:7 95:13 96:2 97:2 <b>stated</b> 97:5 <b>statement</b> 73:19 74:11 89:11 <b>states</b> 1:1 21:4 86:19 88:12 95:7 <b>statewide</b> 13:15 15:8 16:7 36:16 37:7 43:24 44:3 46:9 64:1 65:7 65:20 83:22 <b>statistical</b> 29:6 29:11 34:18 36:1 50:4 85:9 93:18 <b>statistically</b> 81:15 92:4,6 <b>statistics</b> 27:7 48:4 51:19,21 51:22 <b>status</b> 60:8 <b>stay</b> 47:23 <b>steeper</b> 82:3 <b>stipulation</b> 5:4 <b>story</b> 58:1	<b>strategy</b> 19:21 21:7 <b>stratum</b> 62:3 <b>street</b> 2:16 <b>strike</b> 90:19,19 <b>strong</b> 92:18 <b>strongly</b> 83:20 <b>studied</b> 38:15 <b>studies</b> 60:5 <b>study</b> 24:4 44:9 44:10,15 59:13 60:3,7 82:25 88:8 <b>stuff</b> 14:9 20:4 20:21 21:8 36:8 39:22 52:7 <b>sub</b> 64:1 77:16 <b>subject</b> 19:25 <b>submitted</b> 16:15 <b>subsection</b> 60:10 63:2 66:20 80:20 82:16 83:1 85:10,11 <b>subset</b> 77:14,23 88:23 <b>substance</b> 73:7 73:16 <b>substantive</b> 53:2 <b>sufficiently</b> 61:1	<b>suite</b> 2:5,11 <b>summary</b> 54:2 <b>supported</b> 61:21,23 <b>supposed</b> 67:19 79:1 <b>supreme</b> 53:25 <b>sure</b> 9:6,23 17:7 26:1,3,15 31:17 37:2 40:23 49:3 65:18 68:2 77:12 <b>survey</b> 24:11 30:25 35:11,20 43:16,22 44:11 44:13,15 47:22 57:4 88:10 89:3,4,8,11,14 89:18,20 90:13 <b>surveys</b> 20:16 20:21 <b>swear</b> 4:19 <b>sweet</b> 50:8 <b>sworn</b> 4:21 <b>system</b> 23:16 23:19 54:8,15 54:19 60:12 61:10,16,17 62:13 <b>systematically</b> 73:21 <b>systems</b> 24:5 62:20
---	--	---	--

[t - tierra]

Page 27

<b>t</b>	<b>talking</b> 43:5,7 51:4 57:2 63:2 71:11 79:7	<b>testifying</b> 8:3 38:12	27:16,18,22,23 27:24 28:21
<b>t</b> 3:1,1,2,6 95:1 95:1 97:1,1	<b>talks</b> 32:19 59:25	<b>testimony</b> 12:4 13:7,9,10 14:7 15:2 16:24 17:6,9,10,15 30:24 52:11	29:4 30:12 36:19 37:16,19 38:17 39:2 40:2,5,9,16,16 41:18 43:5 44:11,23 45:1 45:13,20,21,22 46:5,12,15 47:21 50:6,13 50:15 52:12 53:3,24 55:9 55:16 56:4 58:6,22 63:1 63:11,21 65:6 65:10,19 66:15 67:4,10,23 68:3,5,9,10,24 68:25 69:2,18 69:22 76:21 77:10 83:13,19 88:14 93:5,23
<b>table</b> 26:6 57:9 57:9 64:6 65:1 65:1,2,11,13,17 65:23 90:18,21 91:1,5 92:1,5	<b>task</b> 15:23	<b>texas</b> 13:16 14:14,16 15:19 16:8,19 39:1 39:14 45:21	
<b>tables</b> 25:14 48:4 57:7,13 57:16 62:2 66:20 83:21 92:8	<b>taught</b> 28:17 28:20,23	<b>text</b> 25:17	
<b>tabulation</b> 89:6	<b>taylor</b> 2:10 96:11	<b>thank</b> 8:20 93:24 94:1,24	
<b>tabulations</b> 89:2	<b>taylorenenglish...</b> 2:12	<b>theme</b> 60:20	
<b>tafoya</b> 39:11	<b>teaching</b> 23:3 28:18	<b>themes</b> 27:12	
<b>taguiar</b> 2:21	<b>team</b> 50:17,17	<b>thing</b> 11:2 13:1 16:1 22:25 24:5,23 26:2 29:20 36:24 40:6 52:24 56:22 71:3 74:19 89:21 91:5	
<b>take</b> 7:10,13 9:14 43:8 47:4 65:22 66:25 73:1 89:14	<b>tech</b> 33:20		
<b>taken</b> 4:25 5:2 5:25 6:3,19 9:6 47:11 65:8 80:13 87:6 95:9 97:5	<b>tell</b> 4:22 6:1 13:7,23 15:18 17:1 19:2 22:14 25:15 36:21 38:23 45:11 50:1 58:1 59:8 70:25 73:14 80:5,25		
<b>takes</b> 61:5	<b>ten</b> 26:13	<b>things</b> 15:16 32:2 35:13 56:10 58:14 61:7 62:19 65:25 89:16	<b>third</b> 53:16 54:3,7
<b>talk</b> 27:2 30:13 54:5 55:19,23 71:1 81:19 93:24	<b>tend</b> 23:14 67:10 84:20	<b>think</b> 5:21 6:13 13:22 14:12 16:13,18,19 17:8,11 18:10 18:13,20 25:11 25:18 26:12	<b>thomas</b> 79:8,9 <b>thought</b> 21:3 51:25 61:7 74:8
<b>talked</b> 46:19 55:20	<b>term</b> 87:14		<b>thousand</b> 84:10 84:13
	<b>terms</b> 41:10		<b>three</b> 20:11 78:17 88:17
	<b>testified</b> 4:23 13:6 17:18,22 18:17 44:19		<b>tierra</b> 5:16
	<b>testify</b> 8:6 12:10 18:12		



[tiffany - undergraduate]

Page 28

<b>tiffany</b> 2:18 <b>time</b> 4:7 5:8 7:13 17:12 19:8 27:9 35:21 44:14 47:9,14 57:11 61:6 74:2,22 80:11,14 93:24 94:4 <b>times</b> 6:5 40:18 47:24 72:4 85:5,5 87:15 <b>title</b> 28:18 <b>today</b> 6:11 7:25 8:3,6 56:5 80:5 86:17 94:16,22 <b>together</b> 15:24 <b>told</b> 40:14 <b>took</b> 19:7 48:24 51:20 <b>top</b> 17:9 18:23 37:5 55:5,24 58:22 63:3,22 69:3 70:8 75:8 77:13 78:24 88:17 <b>topic</b> 13:3 27:23 <b>topics</b> 12:4 13:14 31:1 <b>total</b> 41:1 63:5 63:6,24 69:24 <b>totality</b> 37:20 <b>tough</b> 32:3	<b>towards</b> 81:22 <b>trade</b> 2:16 <b>training</b> 51:16 <b>transcript</b> 94:9 94:16,22 95:10 95:13 97:5,8 <b>transcripts</b> 52:11 <b>transparency</b> 45:2 <b>transparent</b> 66:11 <b>trend</b> 65:24 81:8,14 <b>trends</b> 70:17 <b>trial</b> 16:24 17:6 17:11,12 18:10 18:12 41:12 52:10 53:24 <b>tribe</b> 18:16 <b>trick</b> 79:2 <b>true</b> 35:13 41:25 42:2 59:5,5 84:7 97:9 <b>truth</b> 4:22 6:1 <b>try</b> 7:6 23:20 54:2 60:20 67:10 75:24 84:18,20 85:9 <b>trying</b> 27:22 58:6 60:4 67:13 73:16 80:25 89:10,25	<b>tuesday</b> 1:20 4:3 95:9 <b>tufts</b> 44:12 <b>turn</b> 34:17 64:22 73:2 <b>turning</b> 22:8 86:5 88:2 <b>turnout</b> 43:25 44:3,6 54:13 54:14 58:8 59:20 61:19 63:3,4,17 64:3 64:3,13,16,19 65:20 66:2 68:19 69:9 70:12 71:22 73:6 74:9 76:9 78:14,14,16,17 79:21,23,24 80:23 81:3,13 82:25 83:1,4,6 83:7,9,10 84:6 85:15,18 87:2 <b>two</b> 4:12 5:1,21 8:10 16:9 17:9 20:19 24:13 25:10,19 26:21 28:22 29:18 30:2,2,3 32:16 33:22 34:12 38:14 39:25 40:11,15 41:2 41:10,17,20 42:1,5,6 43:6 44:13,19 45:12	46:20 47:17 48:25 49:9,11 49:13,16 52:14 57:6,16 67:23 68:7,10,15 69:10,21 70:11 70:12,19 74:14 77:24 80:1 88:17 91:4,8 <b>type</b> 35:3 36:24 37:1 85:4 89:20 <b>types</b> 35:5 71:24 84:22 93:3 <b>typewriting</b> 97:6 <b>typically</b> 32:1 32:10 <b>typo</b> 76:3
<b>u</b>			
<b>u.s.</b> 31:9 50:18 93:19 <b>uh</b> 11:21 14:10 <b>unable</b> 85:21 <b>uncertainty</b> 85:9 <b>under</b> 4:22 5:3 22:8 55:18 66:2 77:24 87:6 90:18,23 96:9,14 97:6 <b>undergraduate</b> 19:5 35:21			

## [underlying - voters]

Page 29

<b>underlying</b> 28:5 34:17	<b>updates</b> 43:20	<b>varies</b> 81:3	<b>vitae</b> 3:15
<b>understand</b> 5:25 6:23 7:1 10:6 21:25 25:25 26:4 40:23 48:10 49:15 62:9	<b>updating</b> 74:2	<b>variety</b> 23:4 33:12 35:13,19 36:1 50:19 62:19 63:20 77:10 81:4	<b>vote</b> 20:3 31:7 32:13 81:18 85:21 86:5,8 86:15
<b>understanding</b> 18:11 79:2	<b>uphold</b> 18:5	<b>various</b> 27:7 35:1,11 46:8 51:7 75:17	<b>voted</b> 63:6 66:23,24
<b>undertake</b> 56:16,24	<b>use</b> 29:11,17,20 33:9,10 35:8 50:3 51:11,12 51:14 63:15,16 84:12 89:20	<b>vehicle</b> 35:8	<b>voter</b> 15:22,24 23:23 44:3,6 54:13,14 59:20 61:19 63:3,4,7 64:15 65:20 66:2 67:20 68:20 69:13,17 70:1,12 71:21 71:22 76:9 81:2 85:18 86:8,17 87:2 88:3,6 92:25
<b>union</b> 46:12	<b>used</b> 5:9 29:17 30:2 33:13 35:2,25 50:1 51:22 63:17,25 75:6,10 77:10 77:21 84:22 86:13,14 87:14 87:14 88:7,20 93:20	<b>veritext</b> 96:7,11 96:13,15,18	<b>voters</b> 20:3 24:11 28:10,14 31:6 56:6,7,11 56:19,20,21 59:6 61:11,12 61:23,25 62:2 62:4,6,7,11,12 62:14,14 63:9 63:15,16,21,24 64:12,16,17,22 64:23 75:14,16 83:11,22 84:3 84:5,7,11,17 85:21 86:24,25 88:10,10 92:10
<b>unique</b> 56:6 59:20,22	<b>user</b> 33:12 51:8	<b>version</b> 13:22 29:7 39:6 46:13	
<b>united</b> 1:1 21:3 88:12 95:7	<b>uses</b> 59:13	<b>versus</b> 14:20,23 16:12 31:23 45:20,22 70:2 83:4,6,11 86:4	
<b>units</b> 43:20 74:19,20	<b>using</b> 52:4 78:18 83:17	<b>victory</b> 19:20	
<b>university</b> 3:16 19:6,9 20:7 21:12 22:3,15 22:16,18,21,23 46:25 51:17	<b>usual</b> 96:19	<b>videoconfere...</b> 1:22	
<b>unknown</b> 63:10	<b>usually</b> 23:14 32:14 34:18 44:13 88:11 89:11	<b>videographer</b> 2:14 4:5,18 47:9,13 80:11 80:14 94:3	
<b>unquestionably</b> 59:2	<b>unquestionably</b> 59:2	<b>videotaped</b> 1:18 4:7 94:4	
<b>unresponsive</b> 61:11	<b>v</b> 4:13,13 33:15 53:16 95:2,5	<b>view</b> 8:8	
<b>update</b> 21:23	<b>vap</b> 70:15	<b>violation</b> 53:19	
<b>updated</b> 13:25 41:17,25 42:11 43:8 47:21 53:5 57:11	<b>variability</b> 54:17	<b>violations</b> 31:9	
	<b>variables</b> 57:20 57:24 85:17 87:5,9	<b>visit</b> 49:23	
		<b>visual</b> 67:2	
		<b>visualization</b> 67:12	

[voting - written]

Page 30

<b>voting</b> 13:12,15 15:3 23:15,18 27:17,25 28:6 28:12 29:3,21 29:23,25 30:24 31:5,6,10,16,20 31:21,22,23,23 32:6,11,16,24 37:13 38:15,19 38:24 43:24 54:15 57:1 69:10 70:9,15 78:18 79:21 83:15 86:1,10 86:17,23 <b>vs</b> 1:5,14	74:6 <b>ways</b> 70:11,12 70:19 <b>we've</b> 39:1,16 43:5 47:3 53:12 83:14 <b>weakening</b> 74:10 <b>webpage</b> 21:12 21:19 22:1 23:6 30:19 32:19 34:12 <b>website</b> 3:21,22 21:22 34:4 65:16 75:5,7 77:23 <b>weight</b> 89:12 90:3,4,4 <b>weighting</b> 89:23 90:6,11 <b>weights</b> 89:3,4 89:11,20 <b>went</b> 19:8 25:12 51:16,16 66:9,12 <b>western</b> 16:19 <b>white</b> 20:2 28:10,14 54:9 56:7,20 58:5 58:12,18 61:12 61:20,21,22,23 62:7,7,7,12,14 63:4,5,10 64:3 64:17,23 66:23 68:20 70:2,16	72:19 75:16 76:9 78:14,17 79:24 82:25 83:9,15,23 84:7 86:4,14 86:15,25 90:22 91:2 92:9,23 <b>whites</b> 70:14 75:11 85:15 88:5 91:19 92:2 <b>wide</b> 20:22 <b>widely</b> 88:20 88:20 <b>widen</b> 67:10 <b>wife</b> 36:11 <b>wilmer</b> 46:3 <b>wilmerhale</b> 2:15 <b>wilmerhale.c...</b> 2:17 <b>wisconsin</b> 17:5 <b>wish</b> 9:18 95:13 <b>witness</b> 4:19 6:8,10,17 7:18 8:18 10:4,13 10:19 15:15 47:6 94:1 <b>wonder</b> 80:24 <b>words</b> 6:21,21 31:19 67:8 <b>work</b> 15:18 16:2,7 20:13 20:17,25 22:23 24:1 27:7,10	32:20 34:20 35:9,11,14,16 35:17,18,19,22 35:25,25 36:15 36:24 37:1,3 37:12,14 38:14 40:24 41:14 42:6 44:22 45:12 46:16,24 49:9,23 51:10 52:2,3 69:16 91:1 93:15 <b>worked</b> 16:10 20:9,11,19 35:21 45:15,17 46:1,3,6,8,15 90:1,2 <b>working</b> 16:14 18:15 21:5 23:2,3 34:25 <b>works</b> 54:20 65:19 <b>world</b> 2:16 <b>worries</b> 71:12 <b>worse</b> 56:12,12 <b>wrapped</b> 63:12 <b>write</b> 29:23 35:4,25 40:4 59:12 67:11 71:24 93:19 <b>writeups</b> 27:8 <b>writing</b> 23:2 <b>written</b> 17:7 26:22 38:17
<b>w</b>			
<b>walen</b> 17:14,22 <b>walks</b> 71:4 <b>want</b> 7:10,13 47:4 87:9 <b>wanted</b> 26:14 47:19,23 57:22 66:10 73:18 75:9 85:16 <b>washington</b> 2:6 19:9 20:8 22:15 45:8 51:17 72:5 <b>way</b> 9:7,23 19:10 28:3 31:21 32:1,7 38:7 53:3 54:9 59:21 65:19 67:4,13,14			

**[wrong - zoomed]**

Page 31

<b>wrong</b> 16:19	67:23 68:5,9,9
<b>wrote</b> 39:17,18	68:9,14 69:5
<b>x</b>	69:12,18,22,23
<b>x</b> 3:2,6 67:8	71:8,10 72:7
82:18	72:13,16,17,23
<b>y</b>	75:3 76:5,15
<b>y</b> 67:8 82:18	76:20,23,25
<b>y'all</b> 33:1	77:6,6 78:6
<b>yeah</b> 9:1 10:4,5	79:1,4,6 80:1,4
10:5,21 11:10	82:3 83:13
13:18 14:3,8	84:2,2 86:2,20
14:11,14,14	87:17 90:16
15:15,16 16:9	91:12,14,14,14
16:13,23,25,25	91:18,25
18:13,20 19:17	<b>year</b> 6:14 20:19
19:17,23 20:1	22:20 41:20
20:1,25,25	42:1 43:20,21
23:1 24:8	64:8 65:19
25:16,25 26:1	<b>years</b> 19:11
26:3,3,7 28:2	20:12 22:19
28:21 29:1,19	36:9 44:13
31:19 33:2,8	60:2 64:2,5
33:20 35:10,12	73:24 81:5
37:11 38:5,6	<b>yep</b> 12:6 33:21
39:18,21,21	43:15 94:12
45:7,17 48:6,8	<b>yields</b> 88:24
48:17,18 49:4	<b>york</b> 2:17,17
50:25 52:6	13:12 37:22
53:2 54:25	46:11,12,13
55:11 57:11,20	72:4
58:20 60:1,14	<b>z</b>
61:13 62:23	<b>zoom</b> 1:22 5:20
64:7,20 65:14	<b>zoomed</b> 61:3
66:8 67:4,5,18	

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.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at [www.veritext.com](http://www.veritext.com).



E R R A T A S H E E T

In Re: Annie Lois Grant, et. al. v. Brad  
Raffensperger, et al.

Civil Action File No. 1:22-CV-00122-SCJ

AND

Coakley Pendergrass, et. al. v. Brad  
Raffensperger, et al.

Civil Action File No. 1:21-CV-05339-SCJ

In the United States District Court for the  
Northern District of Georgia - Atlanta Division

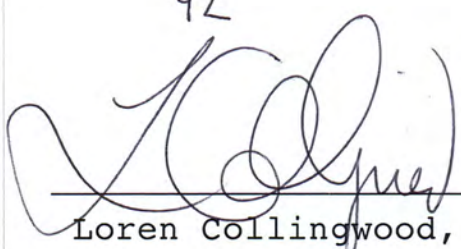
Deposition of Loren Collingwood, Ph.D., taken on  
Tuesday, February 28th, 2023.

I have read the transcript of my deposition and find  
that no changes are necessary \_\_\_\_\_.  
Loren Collingwood, Ph.D.

or

Having read the transcript of my deposition, I wish to  
make the following changes: (Please state reason.)

			<u>From</u>	<u>To</u>	<u>Reason</u>
Page	<u>14</u>	Line	<u>16</u>	:	SPI SBI Typo
Page	<u>15</u>	Line	<u>22</u>	:	SPI SBI "
Page	<u>32</u>	Line	<u>4</u>	:	NVRA VRA "
Page	<u>34</u>	Line	<u>17</u>	:	Co-development code development "
	<u>35</u>		<u>1</u>	:	Arc R "
	<u>46</u>		<u>11</u>	:	NYCLU NYCLU "
	<u>92</u>		<u>23</u>	:	Seen Single "

  
Loren Collingwood, Ph.D.

3/27/23

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

ANNIE LOIS GRANT; QUENTIN T.  
HOWELL; ELROY TOLBERT; THERON  
BROWN; TRIANA ARNOLD JAMES;  
EUNICE SYKES; ELBERT SOLOMON;  
and DEXTER WIMBISH,

Plaintiffs,

v.

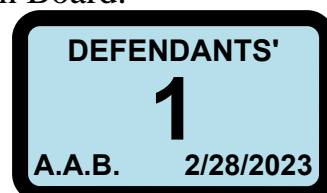
BRAD RAFFENSPERGER, in his official  
capacity as the Georgia Secretary of State;  
SARA TINDALL GHAZAL, in her  
official capacity as a member of the State  
Election Board; JANICE JOHNSTON, in  
her official capacity as a member of the  
State Election Board; EDWARD  
LINDSEY, in his official capacity as a  
member of the State Election Board; and  
MATTHEW MASHBURN, in his official  
capacity as a member of the State Election  
Board,

Defendants.\*

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

**PLAINTIFFS' INITIAL DISCLOSURES**

\* Pursuant to Federal Rule of Civil Procedure 25(d), the parties have automatically substituted Janice Johnston, in her official capacity, for Anh Le, in her official capacity, based on recent changes to the composition of the State Election Board.





Plaintiffs ANNIE LOIS GRANT, QUENTIN T. HOWELL, ELROY TOLBERT, THERON BROWN, TRIANA ARNOLD JAMES, EUNICE SYKES, ELBERT SOLOMON, and DEXTER WIMBISH, through their undersigned attorneys, hereby submit the following initial disclosures pursuant to Federal Rule of Civil Procedure 26(a) and LR 26.1, NDGa.

(1) *State precisely the classification of the cause of action being filed, a brief factual outline of the case including plaintiff's contentions as to what defendant did or failed to do, and a succinct statement of the legal issues in the case.*

**(a) Cause of Action**

This is an action to enjoin Defendants from proceeding with new maps for the Georgie State Senate and Georgia House of Representatives that violate the voting rights of Black Georgians. Plaintiffs allege that Defendants' implementation of the current districting plans for the State Senate ("SB 1EX") and House ("HB 1EX") unlawfully dilute Black voting strength in violation of Section 2 of the Voting Rights Act of 1965, as amended, 52 U.S.C. § 10301.

**(b) Brief Factual Outline**

Since 2000, Georgia's Black population has increased by over 1.1 million people, now representing one-third of the state's total population. In the Atlanta metropolitan area in particular, the Black population has increased by over 900,000 people in the last 20 years, while the Black population in the state's historic Black

Belt has also grown. However, despite these striking demographic changes, the numbers of majority-Black State Senate and House districts have barely changed. There is also a substantial gap between the number of Black Georgians living in majority-Black legislative districts and the number of white Georgians living in majority-white districts—a further indicator that the number of majority-Black legislative districts is disproportionately low and that Black voting strength is being unlawfully diluted.

The new State Senate and House plans enacted by the Georgia General Assembly last year constitute textbook violations of the Voting Rights Act. The method of vote dilution is a familiar one: Black voters have been packed into some districts and cracked among other rural-reaching, predominantly white districts. This phenomenon is clearly illustrated in the new State Senate and House maps, which pack and crack Black voters and fail to reflect the Black population growth in the Atlanta metropolitan area and Black Belt. In these areas, the Black populations are sufficiently large and geographically compact such that the General Assembly could have drawn, consistent with traditional redistricting principles, at least three additional majority-Black State Senate districts and at least five majority-Black House districts—but did not do so.

Voting is also highly racially polarized in these areas and statewide, and Black and white voters are politically cohesive. In both statewide and localized contests, the white majority usually votes as a bloc to defeat the candidates preferred by Black voters unless districts are drawn to provide Black voters with opportunities to elect candidates of their choice. Consequently, Black-preferred candidates typically lose to white preferred candidates except in majority-Black congressional and legislative districts.

In light of Georgia's legacy of racial discrimination against its Black population, the subordination of their political power, and the ongoing, cumulative effects of that legacy, the state's new State Senate and House maps will prevent Black Georgians from participating equally in the political process. Therefore, SB 1EX and HB 1EX dilute dilutes the political strength of Black voters in violation of Section 2 of the Voting Rights Act.

**(c) Statement of Legal Issues**

This action concerns whether SB 1EX and HB 1EX violate Section 2 of the Voting Rights Act by diluting the voting strength of Black Georgians.

- (2) *Describe in detail all statutes, codes, regulations, legal principles, standards and customs or usages, and illustrative case law which plaintiff contends are applicable to this action.*

Plaintiffs allege that Georgia’s State Senate and House maps violate Section 2 of the Voting Rights Act. Section 2 prohibits any “standard, practice, or procedure” that “results in a denial or abridgement of the right of any citizen of the United States to vote on account of race or color.” 52 U.S.C. § 10301(a). This includes the

manipulation of district lines [to] dilute the voting strength of politically cohesive minority group members, whether by fragmenting the minority voters among several districts where a bloc-voting majority can routinely outvote them, or by packing them into one or a small number of districts to minimize their influence in the districts next door.

*Johnson v. De Grandy*, 512 U.S. 997, 1007 (1994).

To prevail on their Section 2 claim, Plaintiffs must show that (1) the minority group is “sufficiently large and geographically compact to constitute a majority in a single-member district”; (2) the minority group “is politically cohesive”; and (3) “the white majority votes sufficiently as a bloc to enable it . . . usually to defeat the minority’s preferred candidate.” *Thornburg v. Gingles*, 478 U.S. 30, 50–51 (1986). Once Plaintiffs have made this threshold showing, the Court must then examine “the totality of circumstances”—including the nine factors identified in the Senate report that accompanied the 1982 amendments to the Voting Rights Act—to determine whether “the political processes leading to nomination or election in the

State or political subdivision are not equally open to participation” by members of the minority group. 52 U.S.C. § 10301(b); *see also Gingles*, 478 U.S. at 43–44.

- (3) *Provide the name and, if known, the address and telephone number of each individual likely to have discoverable information that you may use to support your claims or defenses, unless solely for impeachment, identifying the subjects of the information.*

Plaintiffs’ current fact witness list is included as Attachment A. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.

- (4) *Provide the name of any person who may be used at trial to present evidence under Rules 702, 703, or 705 of the Federal Rules of Evidence. For all experts described in Fed.R.Civ.P. 26(a)(2)(B), provide a separate written report satisfying the provisions of that rule.*

Plaintiffs’ current expert witness list is included as Attachment B. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.

- (5) *Provide a copy of, or a description by category and location of, all documents, data compilations or other electronically stored information, and tangible things in your possession, custody, or control that you may use to support your claims or defenses unless solely for impeachment, identifying the subjects of the information.*

Plaintiffs’ current document list and descriptions are included as Attachment C. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.

- (6) *In the space provided below, provide a computation of any category of damages claimed by you. In addition, include a copy of, or describe by category and location of, the documents or other evidentiary material, not privileged or protected from disclosure, on which such computation is based, including materials bearing on the nature and extent of injuries suffered, making such documents or evidentiary material available for inspection and copying as under Fed.R.Civ.P. 34.*

Not applicable.

- (7) *Attach for inspection and copying as under Fed.R.Civ.P. 34 any insurance agreement under which any person carrying on an insurance business may be liable to satisfy part or all of a judgment which may be entered in this action or to indemnify or reimburse for payments made to satisfy the judgment.*

Not applicable.

- (8) *Disclose the full name, address, and telephone number of all persons or legal entities who have a subrogation interest in the cause of action set forth in plaintiffs cause of action and state the basis and extent of such interest.*

Not applicable.

Dated: March 28, 2022

By: **Adam M. Sparks**

Joyce Gist Lewis  
Georgia Bar No. 296261  
Adam M. Sparks  
Georgia Bar No. 341578  
**KREVOLIN & HORST, LLC**  
One Atlantic Center  
1201 West Peachtree Street, NW,  
Suite 3250  
Atlanta, Georgia 30309  
Telephone: (404) 888-9700  
Facsimile: (404) 888-9577  
Email: JLewis@khlawfirm.com  
Email: Sparks@khlawfirm.com

Kevin J. Hamilton\*  
**PERKINS COIE LLP**  
1201 Third Avenue, Suite 4900  
Seattle, Washington 98101  
Phone: (206) 359-8000  
Facsimile: (206) 359-9000  
Email: KHamilton@perkinscoie.com

Respectfully submitted,

Abha Khanna\*  
Jonathan P. Hawley\*  
**ELIAS LAW GROUP LLP**  
1700 Seventh Avenue, Suite 2100  
Seattle, Washington 98101  
Phone: (206) 656-0177  
Facsimile: (206) 656-0180  
Email: AKhanna@elias.law  
Email: JHawley@elias.law

Daniel C. Osher\*  
Christina A. Ford\*  
Graham W. White\*  
Michael B. Jones  
Georgia Bar No. 721264  
**ELIAS LAW GROUP LLP**  
10 G Street NE, Suite 600  
Washington, D.C. 20002  
Phone: (202) 968-4490  
Facsimile: (202) 968-4498  
Email: DOsher@elias.law  
Email: CFord@elias.law  
Email: GWhite@elias.law  
Email: MJones@elias.law

*Counsel for Plaintiffs*

\*Admitted *pro hac vice*

**Attachment A: Plaintiffs' Fact Witness List**

1. **Plaintiffs Annie Lois Grant, Quentin T. Howell, Elroy Tolbert, Theron Brown, Triana Arnold James, Eunice Sykes, Elbert Solomon, and Dexter Wimbish** might have discoverable information about the allegations and claims set forth in their complaint, including but not limited to information about the impacts of SB 1EX and HB 1EX on Black Georgians. All Plaintiffs should be contacted only through counsel.

2. **Current and Former State Legislators**, including former Senator Jason Carter, might have discoverable information about the impacts of SB 1EX and HB 1EX on Black Georgians.



**Attachment B: Plaintiffs' Expert Witness List**

Plaintiffs intend to rely on the following experts while reserving the right to supplement this list as needed throughout this litigation:

<b>Witness</b>	<b>Previously Filed Report(s)/Declaration(s)</b>
Blakeman B. Esselstyn	ECF Nos. 20-1, 20-47, 36-1
Dr. Maxwell Palmer	ECF No. 20-2
Dr. Orville Vernon Burton	ECF Nos. 20-3, 36-2
Dr. Loren Collingwood	ECF No. 20-4

**Attachment C: Plaintiffs' Document List**

Plaintiffs submit the following document list and descriptions:

Description	Docket Location
Georgia Public Broadcasting article entitled "Senate's Redistricting Map Advances; Georgia Assembly Honors Max Cleland" dated November 9, 2021 ( <i>publicly available at: <a href="https://www.gpb.org/news/2021/11/09/senates-redistricting-map-advances-georgia-assembly-honors-max-cleland">https://www.gpb.org/news/2021/11/09/senates-redistricting-map-advances-georgia-assembly-honors-max-cleland</a></i> )	ECF No. 20-13
<i>Athens Banner-Herald</i> article entitled "Georgia House Wraps up Legislative Redistricting with Passage of GOP State Senate Map" dated November 15, 2021 ( <i>publicly available at: <a href="https://www.onlineathens.com/story/news/2021/11/15/georgia-house-approves-new-map-state-senate-districts/8626264002">https://www.onlineathens.com/story/news/2021/11/15/georgia-house-approves-new-map-state-senate-districts/8626264002</a></i> )	ECF No. 20-14
Georgia Public Broadcasting article entitled "Georgia House, Senate Approve Their Redistricting Maps. What's Next?" dated November 10, 2021 ( <i>publicly available at: <a href="https://www.gpb.org/news/2021/11/10/georgia-house-senate-approve-their-redistricting-maps-whats-next">https://www.gpb.org/news/2021/11/10/georgia-house-senate-approve-their-redistricting-maps-whats-next</a></i> )	ECF No. 20-15
Georgia Public Broadcasting article entitled "Georgia House Legislative Redistricting Map Heads to Governor" dated November 12, 2021 ( <i>publicly available at: <a href="https://www.gpb.org/news/2021/11/12/georgia-house-legislative-redistricting-map-heads-governor">https://www.gpb.org/news/2021/11/12/georgia-house-legislative-redistricting-map-heads-governor</a></i> )	ECF No. 20-16

Description	Docket Location
<i>The Albany Herald</i> article entitled “Public to State Lawmakers: Slow Redistricting Process Down” dated November 9, 2021 ( <i>publicly available at: <a href="https://www.albanyherald.com/news/public-to-state-lawmakers-slow-redistricting-process-down/article_75e30286-4158-11ec-9cbb-cf2518e93cb2.html">https://www.albanyherald.com/news/public-to-state-lawmakers-slow-redistricting-process-down/article_75e30286-4158-11ec-9cbb-cf2518e93cb2.html</a></i> )	ECF No. 20-17
<i>U.S. News &amp; World Report</i> article entitled “Georgia Senate GOP Passes Map to Retain Republican Majority” dated November 9, 2021 ( <i>publicly available at: <a href="https://www.usnews.com/news/best-states/georgia/articles/2021-11-09/georgia-senate-gop-passes-map-to-retain-republican-majority">https://www.usnews.com/news/best-states/georgia/articles/2021-11-09/georgia-senate-gop-passes-map-to-retain-republican-majority</a></i> )	ECF No. 20-18
<i>The Albany Herald</i> article entitled “Georgia Lawmakers Pass Republican-Backed House Redistricting Map” dated November 11, 2021 ( <i>publicly available at: <a href="https://www.albanyherald.com/news/georgia-lawmakers-pass-republican-backed-house-redistricting-map/article_f5fe6ff6-431e-11ec-aa63-439c16f8deb6.html">https://www.albanyherald.com/news/georgia-lawmakers-pass-republican-backed-house-redistricting-map/article_f5fe6ff6-431e-11ec-aa63-439c16f8deb6.html</a></i> )	ECF No. 20-19
<i>The Atlanta Journal-Constitution</i> article entitled “Georgia Redistricting Signed into Law and Lawsuits Quickly Follow” dated December 30, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/georgia-redistricting-signed-into-law-as-lawsuits-loom/KDMPMUEXTZGDHIRUOYQAJSIUR4">https://www.ajc.com/politics/georgia-redistricting-signed-into-law-as-lawsuits-loom/KDMPMUEXTZGDHIRUOYQAJSIUR4</a></i> )	ECF No. 20-20
Georgia General Assembly document entitled “2021 Committee Guidelines” printed on January 12, 2022 ( <i>publicly available at: <a href="https://www.legis.ga.gov/api/document/docs/default-source/reapportionment-document-library/2021-senate-redistricting-committee-guidelines.pdf?sfvrsn=a9bbb991_2">https://www.legis.ga.gov/api/document/docs/default-source/reapportionment-document-library/2021-senate-redistricting-committee-guidelines.pdf?sfvrsn=a9bbb991_2</a></i> )	ECF No. 20-21

Description	Docket Location
Georgia House of Representatives document entitled “2021-2022 Guidelines for the House Legislative and Congressional Reapportionment Committee” printed on December 29, 2021 ( <i>publicly available at: <a href="https://www.house.ga.gov/Documents/CommitteeDocuments/2021/Legislative_and_Congressional_Reapportionment/2021-2022%20House%20Reapportionment%20Committee%20Guidelines.pdf">https://www.house.ga.gov/Documents/CommitteeDocuments/2021/Legislative_and_Congressional_Reapportionment/2021-2022%20House%20Reapportionment%20Committee%20Guidelines.pdf</a></i> )	ECF No. 20-22
U.S. Department of Justice letter from Assistant Attorney General John R. Dunne to Senior Assistant Attorney General Mark H. Cohen dated March 20, 1992 ( <i>publicly available at: <a href="https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-2360.pdf">https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-2360.pdf</a></i> )	ECF No. 20-23
U.S. Department of Justice letter from Assistant Attorney General William Bradford Reynolds to Attorney General Michael Bowers dated February 11, 1982 ( <i>publicly available at: <a href="https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-1870.pdf">https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-1870.pdf</a></i> )	ECF No. 20-24
<i>The Atlanta Journal-Constitution</i> article entitled “Douglas Leader’s Racial Comments Spark Calls That He Resign” dated September 30, 2016 ( <i>publicly available at: <a href="https://www.ajc.com/news/local/douglas-leader-racial-comments-spark-calls-that-resign/AVjoe8BDCXLsut6OBPjIHI">https://www.ajc.com/news/local/douglas-leader-racial-comments-spark-calls-that-resign/AVjoe8BDCXLsut6OBPjIHI</a></i> )	ECF No. 20-25
CNN article entitled “GOP Candidate’s Husband Shares Image Urging Voters to ‘Free the Black Slaves from the Democratic Plantation’” dated May 2, 2017 ( <i>publicly available at: <a href="https://www.cnn.com/2017/05/02/politics/kfile-karen-handel-husband-tweet/index.html">https://www.cnn.com/2017/05/02/politics/kfile-karen-handel-husband-tweet/index.html</a></i> )	ECF No. 20-26

Description	Docket Location
Appen Media Group article entitled “Roswell’s Wood Says ‘Ossoff’ Has Off-Puttingly Muslim Ring” dated March 15, 2017 ( <i>publicly available at: <a href="https://www.appenmedia.com/opinion/columnists/roswell-s-wood-says-ossoff-has-off-puttingly-muslim-ring/article_729681a0-e082-5a2c-a639-9f15369a730a.html">https://www.appenmedia.com/opinion/columnists/roswell-s-wood-says-ossoff-has-off-puttingly-muslim-ring/article_729681a0-e082-5a2c-a639-9f15369a730a.html</a></i> )	ECF No. 20-27
<i>The Atlanta Journal-Constitution</i> article entitled “Warring Republicans Try to Unite Against Ossoff in Georgia’s Sixth” dated April 15, 2017 ( <i>publicly available at: <a href="https://www.ajc.com/blog/politics/warring-republicans-try-unite-against-ossoff-georgia-sixth/CJca8W1Alqeob6jvA8gB5H">https://www.ajc.com/blog/politics/warring-republicans-try-unite-against-ossoff-georgia-sixth/CJca8W1Alqeob6jvA8gB5H</a></i> )	ECF No. 20-28
<i>The Atlanta Journal-Constitution</i> article entitled “Gwinnett Commissioner Calls John Lewis ‘a Racist Pig,’ Faces Backlash” dated January 16, 2017 ( <i>publicly available at: <a href="https://www.ajc.com/news/gwinnett-commissioner-calls-john-lewis-racist-pig-faces-backlash/K2uAUZFikv57szlncpZilO">https://www.ajc.com/news/gwinnett-commissioner-calls-john-lewis-racist-pig-faces-backlash/K2uAUZFikv57szlncpZilO</a></i> )	ECF No. 20-29
<i>The Washington Post</i> article entitled “Racist ‘Magical Negro’ Robo-Call from ‘Oprah’ Targets Stacey Abrams in Georgia Governor’s Race” dated November 5, 2018 ( <i>publicly available at: <a href="https://www.washingtonpost.com/politics/2018/11/04/racist-magical-negro-robo-call-oprah-targets-stacey-abrams-georgia-governors-race">https://www.washingtonpost.com/politics/2018/11/04/racist-magical-negro-robo-call-oprah-targets-stacey-abrams-georgia-governors-race</a></i> )	ECF No. 20-30
Slate article entitled “It Was Too Easy for Brian Kemp’s Last-Minute Dog Whistle About Stacey Abrams to Go Viral” dated November 6, 2018 ( <i>publicly available at: <a href="https://slate.com/technology/2018/11/brian-kemp-stacey-abrams-dog-whistle-black-panthers-facebook.html">https://slate.com/technology/2018/11/brian-kemp-stacey-abrams-dog-whistle-black-panthers-facebook.html</a></i> )	ECF No. 20-31

Description	Docket Location
<p><i>USA Today</i> article entitled “Georgia Gubernatorial Candidate Brian Kemp Suggests Truck Is for Rounding up ‘Illegals’” dated May 10, 2018  (publicly available at: <a href="https://www.usatoday.com/story/news/nation/2018/05/10/brian-kemp-illegals-ad/600212002">https://www.usatoday.com/story/news/nation/2018/05/10/brian-kemp-illegals-ad/600212002</a>)</p>	ECF No. 20-32
<p>Salon article entitled “Kelly Loeffler’s New Facebook Ad Darkens Skin of Raphael Warnock, Her Black Opponent” dated January 4, 2021  (publicly available at: <a href="https://www.salon.com/2021/01/04/kelly-loefflers-new-facebook-ad-darkens-skin-of-raphael-warnock-her-black-opponent">https://www.salon.com/2021/01/04/kelly-loefflers-new-facebook-ad-darkens-skin-of-raphael-warnock-her-black-opponent</a>)</p>	ECF No. 20-33
<p>ABC News article entitled “Perdue’s Campaign Deletes Ad That Enlarges Jewish Opponent’s Nose, Insists It Was Accident” dated July 28, 2020  (publicly available at: <a href="https://abcnews.go.com/Politics/perdues-campaign-deletes-ad-enlarges-jewish-opponents-nose/story?id=72039950">https://abcnews.go.com/Politics/perdues-campaign-deletes-ad-enlarges-jewish-opponents-nose/story?id=72039950</a>)</p>	ECF No. 20-34
<p>CNN article entitled “Georgia Republican Senator Willfully Mispronounces Kamala Harris’ Name at Trump Rally” dated October 17, 2020 (publicly available at: <a href="https://www.cnn.com/2020/10/16/politics/david-perdue-kamala-harris/index.html">https://www.cnn.com/2020/10/16/politics/david-perdue-kamala-harris/index.html</a>)</p>	ECF No. 20-35
<p><i>The Atlanta Journal-Constitution</i> article entitled “Crime Fears Emerge in Johns Creek, Sandy Springs Municipal Elections” dated October 26, 2021  (publicly available at: <a href="https://www.ajc.com/neighborhoods/north-fulton/crime-fears-emerge-in-johns-creek-sandy-springs-municipal-elections/HAMJ4MEMVVA3BCYC36ZOGR3OKM">https://www.ajc.com/neighborhoods/north-fulton/crime-fears-emerge-in-johns-creek-sandy-springs-municipal-elections/HAMJ4MEMVVA3BCYC36ZOGR3OKM</a>)</p>	ECF No. 20-36

Description	Docket Location
Georgia Legislative Black Caucus website page entitled “2021-2022 GLBC Members” printed on January 3, 2022 ( <i>publicly available at: <a href="https://gablackcaucus.org/members">https://gablackcaucus.org/members</a></i> )	ECF No. 20-37
<i>Governing</i> article entitled “Blacks in State Legislatures: A State-by-State Map” dated January 13, 2021 ( <i>publicly available at: <a href="https://www.governing.com/now/blacks-in-state-legislatures-a-state-by-state-map.html">https://www.governing.com/now/blacks-in-state-legislatures-a-state-by-state-map.html</a></i> )	ECF No. 20-38
National Conference of State Legislatures article entitled “State Legislator Demographics” dated December 1, 2020 ( <i>publicly available at: <a href="https://www.ncsl.org/research/about-state-legislatures/state-legislator-demographics.aspx">https://www.ncsl.org/research/about-state-legislatures/state-legislator-demographics.aspx</a></i> )	ECF No. 20-39
National Governors Association website page entitled “Former Georgia Governors” printed on December 31, 2021 ( <i>publicly available at: <a href="https://www.nga.org/former-governors/Georgia">https://www.nga.org/former-governors/Georgia</a></i> )	ECF No. 20-40
<i>The Atlanta Journal-Constitution</i> article entitled “Stacey Abrams Is Running for Georgia Governor in 2022” dated December 1, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/politics-blog/breaking-stacey-abrams-is-running-for-georgia-governor-in-2022/">https://www.ajc.com/politics/politics-blog/breaking-stacey-abrams-is-running-for-georgia-governor-in-2022/</a></i> VRUXXJSQWBBAXAZQZV72FLP4LM)	ECF No. 20-41
U.S. Senate website page entitled “States in the Senate   Georgia Senators” printed on December 31, 2021 ( <i>publicly available at: <a href="https://www.senate.gov/states/GA/senators.htm">https://www.senate.gov/states/GA/senators.htm</a></i> )	ECF No. 20-42

Description	Docket Location
WUGA article entitled “Report Shows Black Georgians Were More Likely to Be Denied Unemployment Benefits” dated November 19, 2021 ( <i>publicly available at: <a href="https://www.wuga.org/post/report-shows-black-georgians-were-more-likely-be-denied-unemployment-benefits">https://www.wuga.org/post/report-shows-black-georgians-were-more-likely-be-denied-unemployment-benefits</a></i> )	ECF No. 20-43
Georgia House of Representatives final report of the House of Representatives Study Committee on Maternal Mortality dated 2019 ( <i>publicly available at: <a href="https://www.house.ga.gov/Documents/CommitteeDocuments/2019/MaternalMortality/HR_589_Final_Report.pdf">https://www.house.ga.gov/Documents/CommitteeDocuments/2019/MaternalMortality/HR_589_Final_Report.pdf</a></i> )	ECF No. 20-44
<i>The Atlanta Journal-Constitution</i> article entitled “Bill in Congress Could Bring Relief to Uninsured Georgians” dated December 1, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/life/health/bill-in-congress-could-bring-relief-to-uninsured-georgians/BQOWOU7O35FADAXG4LAL57YELQ">https://www.ajc.com/life/health/bill-in-congress-could-bring-relief-to-uninsured-georgians/BQOWOU7O35FADAXG4LAL57YELQ</a></i> )	ECF No. 20-45
Georgia Secretary of State document entitled “2022 State Elections & Voter Registration Calendar” printed on December 31, 2021 ( <i>publicly available at: <a href="https://sos.ga.gov/admin/uploads/2022_State_Short_Calendar9.pdf">https://sos.ga.gov/admin/uploads/2022_State_Short_Calendar9.pdf</a></i> )	ECF No. 20-46

Plaintiffs note that other documents might be relevant and discoverable in this case. Plaintiffs expect these additional documents to come to light during the discovery period, and Plaintiffs reserve the right to alter, supplement, or amend this list of documents, either by amendment to these or other disclosures, or through the identification of said documents in depositions or discovery responses.



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

COAKLEY PENDERGRASS; TRIANA  
ARNOLD JAMES; ELLIOTT  
HENNINGTON; ROBERT RICHARDS;  
JENS RUECKERT; and OJUAN GLAZE,

Plaintiffs,

v.

BRAD RAFFENSPERGER, in his official  
capacity as the Georgia Secretary of State;  
SARA TINDALL GHAZAL, in her  
official capacity as a member of the State  
Election Board; JANICE JOHNSTON, in  
her official capacity as a member of the  
State Election Board; EDWARD  
LINDSEY, in his official capacity as a  
member of the State Election Board; and  
MATTHEW MASHBURN, in his official  
capacity as a member of the State Election  
Board,

Defendants.\*

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

**PLAINTIFFS' INITIAL DISCLOSURES**

---

\* Pursuant to Federal Rule of Civil Procedure 25(d), the parties have automatically substituted Janice Johnston, in her official capacity, for Anh Le, in her official capacity, based on recent changes to the composition of the State Election Board.

DEFENDANTS'

2

A.A.B.

2/28/2023

Plaintiffs COAKLEY PENDERGRASS, TRIANA ARNOLD JAMES, ELLIOTT HENNINGTON, ROBERT RICHARDS, JENS RUECKERT, and OJUAN GLAZE, through their undersigned attorneys, hereby submit the following initial disclosures pursuant to Federal Rule of Civil Procedure 26(a) and LR 26.1, NDGa.

(1) *State precisely the classification of the cause of action being filed, a brief factual outline of the case including plaintiff's contentions as to what defendant did or failed to do, and a succinct statement of the legal issues in the case.*

**(a) Cause of Action**

This is an action to enjoin Defendants from proceeding with a congressional district map that violates the voting rights of Black Georgians. Plaintiffs allege that Defendants' implementation of the current redistricting plan for Georgia's congressional districts ("SB 2EX") unlawfully dilutes Black voting strength in violation of Section 2 of the Voting Rights Act of 1965, as amended, 52 U.S.C. § 10301.

**(b) Brief Factual Outline**

Since 2000, Georgia's Black population has increased by over 1.1 million people, now representing one-third of the state's total population. In the Atlanta metropolitan area in particular, the Black population has increased by over 900,000 people in the last 20 years. However, despite these striking demographic changes, the number of majority-Black congressional districts has not changed. There is also

a substantial gap between the number of Black Georgians living in majority-Black districts and the number of white Georgians living in majority-white districts—a further indicator that the number of majority-Black districts is disproportionately low and that Black voting strength is being unlawfully diluted.

The new congressional plan enacted by the Georgia General Assembly last year constitutes a textbook violation of the Voting Rights Act. The method of vote dilution is a familiar one: Black voters have been packed into some districts and cracked among other rural-reaching, predominantly white districts. This phenomenon is clearly illustrated in the western Atlanta metropolitan area, where Black voters have been packed in the supermajority-Black Thirteenth Congressional District and cracked into other districts that stretch into the western and northern reaches of the state. In this area, the Black population is sufficiently large and geographically compact such that the General Assembly could have drawn, consistent with traditional redistricting principles, at least one additional majority-Black congressional district—but did not do so.

Voting is also highly racially polarized in these areas and statewide, and Black and white voters are politically cohesive. In both statewide and localized contests, the white majority usually votes as a bloc to defeat the candidates preferred by Black voters unless districts are drawn to provide Black voters with opportunities to elect

candidates of their choice. Consequently, Black-preferred candidates typically lose to white preferred candidates except in majority-Black congressional and legislative districts.

In light of Georgia's legacy of racial discrimination against its Black population, the subordination of their political power, and the ongoing, cumulative effects of that legacy, the state's new congressional map will prevent Black Georgians from participating equally in the political process. Therefore, SB 2EX dilutes the political strength of Black voters in violation of Section 2 of the Voting Rights Act.

**(c) Statement of Legal Issues**

This action concerns whether SB 2EX violates Section 2 of the Voting Rights Act by diluting the voting strength of Black Georgians.

(2) *Describe in detail all statutes, codes, regulations, legal principles, standards and customs or usages, and illustrative case law which plaintiff contends are applicable to this action.*

Plaintiffs allege that Georgia's congressional district map violates Section 2 of the Voting Rights Act. Section 2 prohibits any "standard, practice, or procedure" that "results in a denial or abridgement of the right of any citizen of the United States to vote on account of race or color." 52 U.S.C. § 10301(a). This includes the

manipulation of district lines [to] dilute the voting strength of politically cohesive minority group members, whether by fragmenting the

minority voters among several districts where a bloc-voting majority can routinely outvote them, or by packing them into one or a small number of districts to minimize their influence in the districts next door.

*Johnson v. De Grandy*, 512 U.S. 997, 1007 (1994).

To prevail on their Section 2 claim, Plaintiffs must show that (1) the minority group is “sufficiently large and geographically compact to constitute a majority in a single-member district”; (2) the minority group “is politically cohesive”; and (3) “the white majority votes sufficiently as a bloc to enable it . . . usually to defeat the minority’s preferred candidate.” *Thornburg v. Gingles*, 478 U.S. 30, 50–51 (1986). Once Plaintiffs have made this threshold showing, the Court must then examine “the totality of circumstances”—including the nine factors identified in the Senate report that accompanied the 1982 amendments to the Voting Rights Act—to determine whether “the political processes leading to nomination or election in the State or political subdivision are not equally open to participation” by members of the minority group. 52 U.S.C. § 10301(b); *see also Gingles*, 478 U.S. at 43–44.

- (3) *Provide the name and, if known, the address and telephone number of each individual likely to have discoverable information that you may use to support your claims or defenses, unless solely for impeachment, identifying the subjects of the information.*

Plaintiffs’ current fact witness list is included as Attachment A. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.

- (4) *Provide the name of any person who may be used at trial to present evidence under Rules 702, 703, or 705 of the Federal Rules of Evidence. For all experts described in Fed.R.Civ.P. 26(a)(2)(B), provide a separate written report satisfying the provisions of that rule.*

Plaintiffs' current expert witness list is included as Attachment B. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.

- (5) *Provide a copy of, or a description by category and location of, all documents, data compilations or other electronically stored information, and tangible things in your possession, custody, or control that you may use to support your claims or defenses unless solely for impeachment, identifying the subjects of the information.*

Plaintiffs' current document list and descriptions are included as Attachment C. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.

- (6) *In the space provided below, provide a computation of any category of damages claimed by you. In addition, include a copy of, or describe by category and location of, the documents or other evidentiary material, not privileged or protected from disclosure, on which such computation is based, including materials bearing on the nature and extent of injuries suffered, making such documents or evidentiary material available for inspection and copying as under Fed.R.Civ.P. 34.*

Not applicable.

- (7) *Attach for inspection and copying as under Fed.R.Civ.P. 34 any insurance agreement under which any person carrying on an insurance business may be liable to satisfy part or all of a judgment which may be entered in this action or to indemnify or reimburse for payments made to satisfy the judgment.*

Not applicable.

- (8) *Disclose the full name, address, and telephone number of all persons or legal entities who have a subrogation interest in the cause of action set forth in plaintiffs cause of action and state the basis and extent of such interest.*

Not applicable.

Dated: March 28, 2022

By: **Adam M. Sparks**

Joyce Gist Lewis  
Georgia Bar No. 296261  
Adam M. Sparks  
Georgia Bar No. 341578  
**KREVOLIN & HORST, LLC**  
One Atlantic Center  
1201 West Peachtree Street, NW,  
Suite 3250  
Atlanta, Georgia 30309  
Telephone: (404) 888-9700  
Facsimile: (404) 888-9577  
Email: JLewis@khlawfirm.com  
Email: Sparks@khlawfirm.com

Kevin J. Hamilton\*  
**PERKINS COIE LLP**  
1201 Third Avenue, Suite 4900  
Seattle, Washington 98101  
Phone: (206) 359-8000  
Facsimile: (206) 359-9000  
Email: KHamilton@perkinscoie.com

Respectfully submitted,

Abha Khanna\*  
Jonathan P. Hawley\*  
**ELIAS LAW GROUP LLP**  
1700 Seventh Avenue, Suite 2100  
Seattle, Washington 98101  
Phone: (206) 656-0177  
Facsimile: (206) 656-0180  
Email: AKhanna@elias.law  
Email: JHawley@elias.law

Daniel C. Osher\*  
Christina A. Ford\*  
Graham W. White\*  
Michael B. Jones  
Georgia Bar No. 721264  
**ELIAS LAW GROUP LLP**  
10 G Street NE, Suite 600  
Washington, D.C. 20002  
Phone: (202) 968-4490  
Facsimile: (202) 968-4498  
Email: DOsher@elias.law  
Email: CFord@elias.law  
Email: GWhite@elias.law  
Email: MJones@elias.law

*Counsel for Plaintiffs*

\*Admitted *pro hac vice*



**Attachment A: Plaintiffs' Fact Witness List**

1. **Plaintiffs Coakley Pendergrass, Triana Arnold James, Elliott Hennington, Robert Richards, Jens Rueckert, and Ojuan Glaze** might have discoverable information about the allegations and claims set forth in their complaint, including but not limited to information about the impact of SB 2EX on Black Georgians. All Plaintiffs should be contacted only through counsel.

2. **Current and Former State Legislators**, including former Senator Jason Carter, might have discoverable information about the impact of SB 2EX on Black Georgians.

**Attachment B: Plaintiffs' Expert Witness List**

Plaintiffs intend to rely on the following experts while reserving the right to supplement this list as needed throughout this litigation:

<b>Witness</b>	<b>Previously Filed Report(s)/Declaration(s)</b>
William S. Cooper	ECF Nos. 34-1, 46-1
Dr. Maxwell Palmer	ECF No. 34-2
Dr. Orville Vernon Burton	ECF Nos. 34-3, 46-2
Dr. Loren Collingwood	ECF No. 34-4

**Attachment C: Plaintiffs' Document List**

Plaintiffs submit the following document list and descriptions:

Description	Docket No.
<i>U.S. News &amp; World Report</i> article entitled “Georgia Senate Advances Congressional Map with GOP Advantage” dated November 19, 2021 ( <i>publicly available at: <a href="https://www.usnews.com/news/best-states/georgia/articles/2021-11-19/georgia-senate-advances-congressional-map-with-gop-advantage">https://www.usnews.com/news/best-states/georgia/articles/2021-11-19/georgia-senate-advances-congressional-map-with-gop-advantage</a></i> )	ECF No. 34-11
<i>The Atlanta Journal-Constitution</i> article entitled “Georgia Passes Map That Aims to Gain Republicans a Seat in Congress” dated November 22, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/georgia-passes-map-that-aims-to-gain-republicans-a-seat-in-congress/Z4BGWXEWMRFENFZFPQKXGOXJCE">https://www.ajc.com/politics/georgia-passes-map-that-aims-to-gain-republicans-a-seat-in-congress/Z4BGWXEWMRFENFZFPQKXGOXJCE</a></i> )	ECF No. 34-12
<i>The Albany Herald</i> article entitled “Public to State Lawmakers: Slow Redistricting Process Down” dated November 9, 2021 ( <i>publicly available at: <a href="https://www.albanyherald.com/news/public-to-state-lawmakers-slow-redistricting-process-down/article_75e30286-4158-11ec-9cbb-cf2518e93cb2.html">https://www.albanyherald.com/news/public-to-state-lawmakers-slow-redistricting-process-down/article_75e30286-4158-11ec-9cbb-cf2518e93cb2.html</a></i> )	ECF No. 34-13
Georgia Public Broadcasting article entitled “Georgia House OKs Congressional Map That Adds to Republican Advantage” dated November 22, 2021 ( <i>publicly available at: <a href="https://www.gpb.org/news/2021/11/22/georgia-house-oks-congressional-map-adds-republican-advantage">https://www.gpb.org/news/2021/11/22/georgia-house-oks-congressional-map-adds-republican-advantage</a></i> )	ECF No. 34-14
<i>The Atlanta Journal-Constitution</i> article entitled “Georgia Redistricting Signed into Law and Lawsuits Quickly Follow” dated December 30, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/georgia-redistricting-signed-into-law-as-lawsuits-loom/KDMPMUEXTZGDHIRUOYQAJSIUR4">https://www.ajc.com/politics/georgia-redistricting-signed-into-law-as-lawsuits-loom/KDMPMUEXTZGDHIRUOYQAJSIUR4</a></i> )	ECF No. 34-15

Description	Docket No.
Georgia Secretary State website page entitled “Qualifying Information” printed on December 29, 2021 ( <i>publicly available at: <a href="https://sos.ga.gov/index.php/elections/qualifying_information">https://sos.ga.gov/index.php/elections/qualifying_information</a></i> )	ECF No. 34-16
Georgia House of Representatives document entitled “2021-2022 Guidelines for the House Legislative and Congressional Reapportionment Committee” printed on December 29, 2021 ( <i>publicly available at: <a href="https://www.house.ga.gov/Documents/CommitteeDocuments/2021/Legislative_and_Congressional_Reapportionment/2021-2022%20House%20Reapportionment%20Committee%20Guidelines.pdf">https://www.house.ga.gov/Documents/CommitteeDocuments/2021/Legislative_and_Congressional_Reapportionment/2021-2022%20House%20Reapportionment%20Committee%20Guidelines.pdf</a></i> )	ECF No. 34-17
U.S. Department of Justice letter from Assistant Attorney General John R. Dunne to Senior Assistant Attorney General Mark H. Cohen dated March 20, 1992 ( <i>publicly available at: <a href="https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-2360.pdf">https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-2360.pdf</a></i> )	ECF No. 34-18
U.S. Department of Justice letter from Assistant Attorney General William Bradford Reynolds to Attorney General Michael Bowers dated February 11, 1982 ( <i>publicly available at: <a href="https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-1870.pdf">https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-1870.pdf</a></i> )	ECF No. 34-19
<i>The Atlanta Journal-Constitution</i> article entitled “Douglas Leader’s Racial Comments Spark Calls That He Resign” dated September 30, 2016 ( <i>publicly available at: <a href="https://www.ajc.com/news/local/douglas-leader-racial-comments-spark-calls-that-resign/AVjoe8BDCXLsut6OBPjIHI">https://www.ajc.com/news/local/douglas-leader-racial-comments-spark-calls-that-resign/AVjoe8BDCXLsut6OBPjIHI</a></i> )	ECF No. 34-20

Description	Docket No.
CNN article entitled “GOP Candidate’s Husband Shares Image Urging Voters to ‘Free the Black Slaves from the Democratic Plantation’” dated May 2, 2017 ( <i>publicly available at: <a href="https://www.cnn.com/2017/05/02/politics/kfile-karen-handel-husband-tweet/index.html">https://www.cnn.com/2017/05/02/politics/kfile-karen-handel-husband-tweet/index.html</a></i> )	ECF No. 34-21
Appen Media Group article entitled “Roswell’s Wood Says ‘Ossoff’ Has Off-Puttingly Muslim Ring” dated March 15, 2017 ( <i>publicly available at: <a href="https://www.appenmedia.com/opinion/columnists/roswell-s-wood-says-ossoff-has-off-puttingly-muslim-ring/article_729681a0-e082-5a2c-a639-9f15369a730a.html">https://www.appenmedia.com/opinion/columnists/roswell-s-wood-says-ossoff-has-off-puttingly-muslim-ring/article_729681a0-e082-5a2c-a639-9f15369a730a.html</a></i> )	ECF No. 34-22
<i>The Atlanta Journal-Constitution</i> article entitled “Warring Republicans Try to Unite Against Ossoff in Georgia’s Sixth” dated April 15, 2017 ( <i>publicly available at: <a href="https://www.ajc.com/blog/politics/warring-republicans-try-unite-against-ossoff-georgia-sixth/CJca8W1Alqeob6jvA8gB5H">https://www.ajc.com/blog/politics/warring-republicans-try-unite-against-ossoff-georgia-sixth/CJca8W1Alqeob6jvA8gB5H</a></i> )	ECF No. 34-23
<i>The Atlanta Journal-Constitution</i> article entitled “Gwinnett Commissioner Calls John Lewis ‘a Racist Pig,’ Faces Backlash” dated January 16, 2017 ( <i>publicly available at: <a href="https://www.ajc.com/news/gwinnett-commissioner-calls-john-lewis-racist-pig-faces-backlash/K2uAUZFikv57szlncpZilO">https://www.ajc.com/news/gwinnett-commissioner-calls-john-lewis-racist-pig-faces-backlash/K2uAUZFikv57szlncpZilO</a></i> )	ECF No. 34-24
<i>The Washington Post</i> article entitled “Racist ‘Magical Negro’ Robo-Call from ‘Oprah’ Targets Stacey Abrams in Georgia Governor’s Race” dated November 5, 2018 ( <i>publicly available at: <a href="https://www.washingtonpost.com/politics/2018/11/04/racist-magical-negro-robo-call-oprah-targets-stacey-abrams-georgia-governors-race">https://www.washingtonpost.com/politics/2018/11/04/racist-magical-negro-robo-call-oprah-targets-stacey-abrams-georgia-governors-race</a></i> )	ECF No. 34-25

Description	Docket No.
Slate article entitled “It Was Too Easy for Brian Kemp’s Last-Minute Dog Whistle About Stacey Abrams to Go Viral” dated November 6, 2018 ( <i>publicly available at: <a href="https://slate.com/technology/2018/11/brian-kemp-stacey-abrams-dog-whistle-black-panthers-facebook.html">https://slate.com/technology/2018/11/brian-kemp-stacey-abrams-dog-whistle-black-panthers-facebook.html</a></i> )	ECF No. 34-26
USA Today article entitled “Georgia Gubernatorial Candidate Brian Kemp Suggests Truck Is for Rounding up ‘Illegals’” dated May 10, 2018 ( <i>publicly available at: <a href="https://www.usatoday.com/story/news/nation/2018/05/10/brian-kemp-illegals-ad/600212002">https://www.usatoday.com/story/news/nation/2018/05/10/brian-kemp-illegals-ad/600212002</a></i> )	ECF No. 34-27
Salon article entitled “Kelly Loeffler’s New Facebook Ad Darkens Skin of Raphael Warnock, Her Black Opponent” dated January 4, 2021 ( <i>publicly available at: <a href="https://www.salon.com/2021/01/04/kelly-loefflers-new-facebook-ad-darkens-skin-of-raphael-warnock-her-black-opponent">https://www.salon.com/2021/01/04/kelly-loefflers-new-facebook-ad-darkens-skin-of-raphael-warnock-her-black-opponent</a></i> )	ECF No. 34-28
ABC News article entitled “Perdue’s Campaign Deletes Ad That Enlarges Jewish Opponent’s Nose, Insists It Was Accident” dated July 28, 2020 ( <i>publicly available at: <a href="https://abcnews.go.com/Politics/perdues-campaign-deletes-ad-enlarges-jewish-opponents-nose/story?id=72039950">https://abcnews.go.com/Politics/perdues-campaign-deletes-ad-enlarges-jewish-opponents-nose/story?id=72039950</a></i> )	ECF No. 34-29
CNN article entitled “Georgia Republican Senator Willfully Mispronounces Kamala Harris’ Name at Trump Rally” dated October 17, 2020 ( <i>publicly available at: <a href="https://www.cnn.com/2020/10/16/politics/david-perdue-kamala-harris/index.html">https://www.cnn.com/2020/10/16/politics/david-perdue-kamala-harris/index.html</a></i> )	ECF No. 34-30

Description	Docket No.
<i>The Atlanta Journal-Constitution</i> article entitled “Crime Fears Emerge in Johns Creek, Sandy Springs Municipal Elections” dated October 26, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/neighborhoods/north-fulton/crime-fears-emerge-in-johns-creek-sandy-springs-municipal-elections/HAMJ4MEMVVA3BCYC36ZOGR3OKM">https://www.ajc.com/neighborhoods/north-fulton/crime-fears-emerge-in-johns-creek-sandy-springs-municipal-elections/HAMJ4MEMVVA3BCYC36ZOGR3OKM</a></i> )	ECF No. 34-31
Georgia Legislative Black Caucus website page entitled “2021-2022 GLBC Members” printed on January 3, 2022 ( <i>publicly available at: <a href="https://gablackcaucus.org/members">https://gablackcaucus.org/members</a></i> )	ECF No. 34-32
<i>Governing</i> article entitled “Blacks in State Legislatures: A State-by-State Map” dated January 13, 2021 ( <i>publicly available at: <a href="https://www.governing.com/now/blacks-in-state-legislatures-a-state-by-state-map.html">https://www.governing.com/now/blacks-in-state-legislatures-a-state-by-state-map.html</a></i> )	ECF No. 34-33
National Conference of State Legislatures article entitled “State Legislator Demographics” dated December 1, 2020 ( <i>publicly available at: <a href="https://www.ncsl.org/research/about-state-legislatures/state-legislator-demographics.aspx">https://www.ncsl.org/research/about-state-legislatures/state-legislator-demographics.aspx</a></i> )	ECF No. 34-34
National Governors Association website page entitled “Former Georgia Governors” printed on December 31, 2021 ( <i>publicly available at: <a href="https://www.nga.org/former-governors/Georgia">https://www.nga.org/former-governors/Georgia</a></i> )	ECF No. 34-35
<i>The Atlanta Journal-Constitution</i> article entitled “Stacey Abrams Is Running for Georgia Governor in 2022” dated December 1, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/politics-blog/breaking-stacey-abrams-is-running-for-georgia-governor-in-2022/VRUXXJSQWBBAXAZQZV72FLP4LM">https://www.ajc.com/politics/politics-blog/breaking-stacey-abrams-is-running-for-georgia-governor-in-2022/VRUXXJSQWBBAXAZQZV72FLP4LM</a></i> )	ECF No. 34-36
U.S. Senate website page entitled “States in the Senate   Georgia Senators” printed on December 31, 2021 ( <i>publicly available at: <a href="https://www.senate.gov/states/GA/senators.htm">https://www.senate.gov/states/GA/senators.htm</a></i> )	ECF No. 34-37

Description	Docket No.
WUGA article entitled “Report Shows Black Georgians Were More Likely to Be Denied Unemployment Benefits” dated November 19, 2021 ( <i>publicly available at: <a href="https://www.wuga.org/post/report-shows-black-georgians-were-more-likely-be-denied-unemployment-benefits">https://www.wuga.org/post/report-shows-black-georgians-were-more-likely-be-denied-unemployment-benefits</a></i> )	ECF No. 34-38
Georgia House of Representatives final report of the House of Representatives Study Committee on Maternal Mortality dated 2019 ( <i>publicly available at: <a href="https://www.house.ga.gov/Documents/CommitteeDocuments/2019/MaternalMortality/HR_589_Final_Report.pdf">https://www.house.ga.gov/Documents/CommitteeDocuments/2019/MaternalMortality/HR_589_Final_Report.pdf</a></i> )	ECF No. 34-39
<i>The Atlanta Journal-Constitution</i> article entitled “Bill in Congress Could Bring Relief to Uninsured Georgians” dated December 1, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/life/health/bill-in-congress-could-bring-relief-to-uninsured-georgians/BQOWOU7O35FADAXG4LAL57YELQ">https://www.ajc.com/life/health/bill-in-congress-could-bring-relief-to-uninsured-georgians/BQOWOU7O35FADAXG4LAL57YELQ</a></i> )	ECF No. 34-40
<i>The Atlanta Journal-Constitution</i> article entitled “Lawsuits Will Challenge Georgia’s New Maps That Favor Republicans” dated December 6, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/lawsuits-will-challenge-georgias-new-maps-that-favor-republicans/6GLRYA6XBFFWDLITQ2GPYI4KYQ">https://www.ajc.com/politics/lawsuits-will-challenge-georgias-new-maps-that-favor-republicans/6GLRYA6XBFFWDLITQ2GPYI4KYQ</a></i> )	ECF No. 34-41
Associated Press article entitled “Georgia Congressional Map Favoring GOP Moves Toward Passage” dated November 20, 2021 ( <i>publicly available at: <a href="https://apnews.com/article/georgia-atlanta-redistricting-congress-b23411e132fd310c93956a915e7abd2c">https://apnews.com/article/georgia-atlanta-redistricting-congress-b23411e132fd310c93956a915e7abd2c</a></i> )	ECF No. 34-42



Description	Docket No.
Georgia Secretary of State document entitled “2022 State Elections & Voter Registration Calendar” printed on December 31, 2021 ( <i>publicly available at: <a href="https://sos.ga.gov/admin/uploads/2022_State_Short_Calendar9.pdf">https://sos.ga.gov/admin/uploads/2022_State_Short_Calendar9.pdf</a></i> )	ECF No. 34-43

Plaintiffs note that other documents might be relevant and discoverable in this case. Plaintiffs expect these additional documents to come to light during the discovery period, and Plaintiffs reserve the right to alter, supplement, or amend this list of documents, either by amendment to these or other disclosures, or through the identification of said documents in depositions or discovery responses.

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

ANNIE LOIS GRANT; QUENTIN T.  
HOWELL; ELROY TOLBERT; THERON  
BROWN; TRIANA ARNOLD JAMES;  
EUNICE SYKES; ELBERT SOLOMON;  
DEXTER WIMBISH; GARRETT  
REYNOLDS; JACQUELINE FAYE  
ARBUTHNOT; JACQUELYN BUSH; and  
MARY NELL CONNER,

Plaintiffs,

v.

BRAD RAFFENSPERGER, in his official  
capacity as the Georgia Secretary of State;  
WILLIAM S. DUFFEY, JR., in his official  
capacity as chair of the State Election  
Board; MATTHEW MASHBURN, in his  
official capacity as a member of the State  
Election Board; SARA TINDALL  
GHAZAL, in her official capacity as a  
member of the State Election Board;  
EDWARD LINDSEY, in his official  
capacity as a member of the State Election  
Board; and JANICE W. JOHNSTON, in  
her official capacity as a member of the  
State Election Board,

Defendants.

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

**PLAINTIFFS' SECOND AMENDED INITIAL DISCLOSURES**

DEFENDANTS'

3

A.A.B.

2/28/2023

Plaintiffs ANNIE LOIS GRANT, QUENTIN T. HOWELL, ELROY TOLBERT, THERON BROWN, TRIANA ARNOLD JAMES, EUNICE SYKES, ELBERT SOLOMON, DEXTER WIMBISH, GARRETT REYNOLDS, JACQUELINE FAYE ARBUTHNOT, JACQUELYN BUSH, and MARY NELL CONNER, through their undersigned attorneys, hereby submit the following second amended initial disclosures pursuant to Federal Rule of Civil Procedure 26(a) and LR 26.1, NDGa.

(1) *State precisely the classification of the cause of action being filed, a brief factual outline of the case including plaintiff's contentions as to what defendant did or failed to do, and a succinct statement of the legal issues in the case.*

**(a) Cause of Action**

This is an action to enjoin Defendants from proceeding with new maps for the Georgie State Senate and Georgia House of Representatives that violate the voting rights of Black Georgians. Plaintiffs allege that Defendants' implementation of the current districting plans for the State Senate ("SB 1EX") and House ("HB 1EX") unlawfully dilute Black voting strength in violation of Section 2 of the Voting Rights Act of 1965, as amended, 52 U.S.C. § 10301.

**(b) Brief Factual Outline**

Since 2000, Georgia's Black population has increased by over 1.1 million people, now representing one-third of the state's total population. In the Atlanta

metropolitan area in particular, the Black population has increased by over 900,000 people in the last 20 years, while the Black population in the state's historic Black Belt has also grown. However, despite these striking demographic changes, the numbers of majority-Black State Senate and House districts have barely changed. There is also a substantial gap between the number of Black Georgians living in majority-Black legislative districts and the number of white Georgians living in majority-white districts—a further indicator that the number of majority-Black legislative districts is disproportionately low and that Black voting strength is being unlawfully diluted.

The new State Senate and House plans enacted by the Georgia General Assembly last year constitute textbook violations of the Voting Rights Act. The method of vote dilution is a familiar one: Black voters have been packed into some districts and cracked among other rural-reaching, predominantly white districts. This phenomenon is clearly illustrated in the new State Senate and House maps, which pack and crack Black voters and fail to reflect the Black population growth in the Atlanta metropolitan area and Black Belt. In these areas, the Black populations are sufficiently large and geographically compact such that the General Assembly could have drawn, consistent with traditional redistricting principles, at least three

additional majority-Black State Senate districts and at least five majority-Black House districts—but did not do so.

Voting is also highly racially polarized in these areas and statewide, and Black and white voters are politically cohesive. In both statewide and localized contests, the white majority usually votes as a bloc to defeat the candidates preferred by Black voters unless districts are drawn to provide Black voters with opportunities to elect candidates of their choice. Consequently, Black-preferred candidates typically lose to white preferred candidates except in majority-Black congressional and legislative districts.

In light of Georgia’s legacy of racial discrimination against its Black population, the subordination of their political power, and the ongoing, cumulative effects of that legacy, the state’s new State Senate and House maps will prevent Black Georgians from participating equally in the political process. Therefore, SB 1EX and HB 1EX dilute dilutes the political strength of Black voters in violation of Section 2 of the Voting Rights Act.

**(c) Statement of Legal Issues**

This action concerns whether SB 1EX and HB 1EX violate Section 2 of the Voting Rights Act by diluting the voting strength of Black Georgians.

- (2) *Describe in detail all statutes, codes, regulations, legal principles, standards and customs or usages, and illustrative case law which plaintiff contends are applicable to this action.*

Plaintiffs allege that Georgia’s State Senate and House maps violate Section 2 of the Voting Rights Act. Section 2 prohibits any “standard, practice, or procedure” that “results in a denial or abridgement of the right of any citizen of the United States to vote on account of race or color.” 52 U.S.C. § 10301(a). This includes the

manipulation of district lines [to] dilute the voting strength of politically cohesive minority group members, whether by fragmenting the minority voters among several districts where a bloc-voting majority can routinely outvote them, or by packing them into one or a small number of districts to minimize their influence in the districts next door.

*Johnson v. De Grandy*, 512 U.S. 997, 1007 (1994).

To prevail on their Section 2 claim, Plaintiffs must show that (1) the minority group is “sufficiently large and geographically compact to constitute a majority in a single-member district”; (2) the minority group “is politically cohesive”; and (3) “the white majority votes sufficiently as a bloc to enable it . . . usually to defeat the minority’s preferred candidate.” *Thornburg v. Gingles*, 478 U.S. 30, 50–51 (1986). Once Plaintiffs have made this threshold showing, the Court must then examine “the totality of circumstances”—including the nine factors identified in the Senate report that accompanied the 1982 amendments to the Voting Rights Act—to determine whether “the political processes leading to nomination or election in the

State or political subdivision are not equally open to participation” by members of the minority group. 52 U.S.C. § 10301(b); *see also Gingles*, 478 U.S. at 43–44.

- (3) *Provide the name and, if known, the address and telephone number of each individual likely to have discoverable information that you may use to support your claims or defenses, unless solely for impeachment, identifying the subjects of the information.*

Plaintiffs’ current fact witness list is included as Attachment A. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.

- (4) *Provide the name of any person who may be used at trial to present evidence under Rules 702, 703, or 705 of the Federal Rules of Evidence. For all experts described in Fed.R.Civ.P. 26(a)(2)(B), provide a separate written report satisfying the provisions of that rule.*

Plaintiffs’ current expert witness list is included as Attachment B. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.

- (5) *Provide a copy of, or a description by category and location of, all documents, data compilations or other electronically stored information, and tangible things in your possession, custody, or control that you may use to support your claims or defenses unless solely for impeachment, identifying the subjects of the information.*

Plaintiffs’ current document list and descriptions are included as Attachment C. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.

- (6) *In the space provided below, provide a computation of any category of damages claimed by you. In addition, include a copy of, or describe by category and location of, the documents or other evidentiary material, not privileged or protected from disclosure, on which such computation is based, including materials bearing on the nature and extent of injuries suffered, making such documents or evidentiary material available for inspection and copying as under Fed.R.Civ.P. 34.*

Not applicable.

- (7) *Attach for inspection and copying as under Fed.R.Civ.P. 34 any insurance agreement under which any person carrying on an insurance business may be liable to satisfy part or all of a judgment which may be entered in this action or to indemnify or reimburse for payments made to satisfy the judgment.*

Not applicable.

- (8) *Disclose the full name, address, and telephone number of all persons or legal entities who have a subrogation interest in the cause of action set forth in plaintiffs cause of action and state the basis and extent of such interest.*

Not applicable.



Dated: February 3, 2023

By: **Makeba Rutahindurwa**

Joyce Gist Lewis

Georgia Bar No. 296261

Adam M. Sparks

Georgia Bar No. 341578

**KREVOLIN & HORST, LLC**

One Atlantic Center

1201 West Peachtree Street, NW,  
Suite 3250

Atlanta, Georgia 30309

Telephone: (404) 888-9700

Facsimile: (404) 888-9577

Email: JLewis@khlawfirm.com

Email: Sparks@khlawfirm.com

Respectfully submitted,

Abha Khanna\*

Jonathan P. Hawley\*

Makeba A.K. Rutahindurwa\*

**ELIAS LAW GROUP LLP**

1700 Seventh Avenue, Suite 2100

Seattle, Washington 98101

Phone: (206) 656-0177

Facsimile: (206) 656-0180

Email: AKhanna@elias.law

Email: JHawley@elias.law

Email: MRutahindurwa@elias.law

Michael B. Jones

Georgia Bar No. 721264

**ELIAS LAW GROUP LLP**

250 Massachusetts Ave. NW

Suite 400

Washington, D.C. 20001

Phone: (202) 968-4490

Facsimile: (202) 968-4498

Email: MJones@elias.law

*Counsel for Plaintiffs*

\*Admitted *pro hac vice*

**Attachment A: Plaintiffs' Fact Witness List**

1. **Plaintiffs Annie Lois Grant, Quentin T. Howell, Elroy Tolbert, Theron Brown, Triana Arnold James, Eunice Sykes, Elbert Solomon, and Dexter Wimbish** might have discoverable information about the allegations and claims set forth in their complaint, including but not limited to information about the impacts of SB 1EX and HB 1EX on Black Georgians. All Plaintiffs should be contacted only through counsel.

2. **Current and Former State Legislators**, including former **Senator Jason Carter**, might have discoverable information about the impacts of SB 1EX and HB 1EX on Black Georgians. He may be contacted through Plaintiffs' counsel.

3. **State Representative Derrick Jackson** and **former State Representative Erick Allen** might have discoverable information about the impacts of SB 1EX and HB 1EX on Black Georgians. They may be contacted through Plaintiffs' counsel.

4. Former member of the Georgia State Election Board, **David Worley**, might have discoverable information about the impacts of SB 1EX and HB 1EX on Black Georgians. He may be contacted through Plaintiffs' counsel.

5. Community leaders, including **Fenika Miller, Marion Warren, and Dr. Diane Evans**, might have discoverable information about the impacts of SB

1EX and HB 1EX on Black Georgians. They may be contacted through Plaintiffs' counsel.

**Attachment B: Plaintiffs' Expert Disclosures**

Pursuant to Federal Rule of Civil Procedure 26(a)(2), Plaintiffs disclose the following witnesses they may use at trial to present evidence under Federal Rule of Evidence 702, 703, or 705. Plaintiffs reserve the right to supplement this list as needed throughout this litigation.

Additional disclosures required under Federal Rule of Civil Procedure 26(a)(2)(B) are included in each expert's written report. Consistent with the agreement of counsel, Mr. Esselstyn's and Dr. Burton's reports will be served concurrently with these amended initial disclosures. Dr. Palmer's and Dr. Collingwood's reports will be served no later than December 12, 2022.

<b>Witness</b>	<b>Topic(s) of Testimony</b>
Blakeman B. Esselstyn	Redistricting, mapping, and demographic analysis
Dr. Maxwell Palmer	Redistricting, data analysis, and racially polarized voting
Dr. Orville Vernon Burton	History of race discrimination, voting, and racial appeals in political campaigns
Dr. Loren Collingwood	Demographic analysis, socioeconomic disparities across racial groups, and political participation across racial groups

**Attachment C: Plaintiffs' Document List**

Plaintiffs submit the following document list and descriptions:

Description	Docket Location
Georgia Public Broadcasting article entitled "Senate's Redistricting Map Advances; Georgia Assembly Honors Max Cleland" dated November 9, 2021 ( <i>publicly available at: <a href="https://www.gpb.org/news/2021/11/09/senates-redistricting-map-advances-georgia-assembly-honors-max-cleland">https://www.gpb.org/news/2021/11/09/senates-redistricting-map-advances-georgia-assembly-honors-max-cleland</a></i> )	ECF No. 20-13
<i>Athens Banner-Herald</i> article entitled "Georgia House Wraps up Legislative Redistricting with Passage of GOP State Senate Map" dated November 15, 2021 ( <i>publicly available at: <a href="https://www.onlineathens.com/story/news/2021/11/15/georgia-house-approves-new-map-state-senate-districts/8626264002">https://www.onlineathens.com/story/news/2021/11/15/georgia-house-approves-new-map-state-senate-districts/8626264002</a></i> )	ECF No. 20-14
Georgia Public Broadcasting article entitled "Georgia House, Senate Approve Their Redistricting Maps. What's Next?" dated November 10, 2021 ( <i>publicly available at: <a href="https://www.gpb.org/news/2021/11/10/georgia-house-senate-approve-their-redistricting-maps-whats-next">https://www.gpb.org/news/2021/11/10/georgia-house-senate-approve-their-redistricting-maps-whats-next</a></i> )	ECF No. 20-15
Georgia Public Broadcasting article entitled "Georgia House Legislative Redistricting Map Heads to Governor" dated November 12, 2021 ( <i>publicly available at: <a href="https://www.gpb.org/news/2021/11/12/georgia-house-legislative-redistricting-map-heads-governor">https://www.gpb.org/news/2021/11/12/georgia-house-legislative-redistricting-map-heads-governor</a></i> )	ECF No. 20-16

Description	Docket Location
<i>The Albany Herald</i> article entitled “Public to State Lawmakers: Slow Redistricting Process Down” dated November 9, 2021 ( <i>publicly available at: <a href="https://www.albanyherald.com/news/public-to-state-lawmakers-slow-redistricting-process-down/article_75e30286-4158-11ec-9cbb-cf2518e93cb2.html">https://www.albanyherald.com/news/public-to-state-lawmakers-slow-redistricting-process-down/article_75e30286-4158-11ec-9cbb-cf2518e93cb2.html</a></i> )	ECF No. 20-17
<i>U.S. News &amp; World Report</i> article entitled “Georgia Senate GOP Passes Map to Retain Republican Majority” dated November 9, 2021 ( <i>publicly available at: <a href="https://www.usnews.com/news/best-states/georgia/articles/2021-11-09/georgia-senate-gop-passes-map-to-retain-republican-majority">https://www.usnews.com/news/best-states/georgia/articles/2021-11-09/georgia-senate-gop-passes-map-to-retain-republican-majority</a></i> )	ECF No. 20-18
<i>The Albany Herald</i> article entitled “Georgia Lawmakers Pass Republican-Backed House Redistricting Map” dated November 11, 2021 ( <i>publicly available at: <a href="https://www.albanyherald.com/news/georgia-lawmakers-pass-republican-backed-house-redistricting-map/article_f5fe6ff6-431e-11ec-aa63-439c16f8deb6.html">https://www.albanyherald.com/news/georgia-lawmakers-pass-republican-backed-house-redistricting-map/article_f5fe6ff6-431e-11ec-aa63-439c16f8deb6.html</a></i> )	ECF No. 20-19
<i>The Atlanta Journal-Constitution</i> article entitled “Georgia Redistricting Signed into Law and Lawsuits Quickly Follow” dated December 30, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/georgia-redistricting-signed-into-law-as-lawsuits-loom/KDMPMUEXTZGDHIRUOYQAJSIUR4">https://www.ajc.com/politics/georgia-redistricting-signed-into-law-as-lawsuits-loom/KDMPMUEXTZGDHIRUOYQAJSIUR4</a></i> )	ECF No. 20-20
Georgia General Assembly document entitled “2021 Committee Guidelines” printed on January 12, 2022 ( <i>publicly available at: <a href="https://www.legis.ga.gov/api/document/docs/default-source/reapportionment-document-library/2021-senate-redistricting-committee-guidelines.pdf?sfvrsn=a9bbb991_2">https://www.legis.ga.gov/api/document/docs/default-source/reapportionment-document-library/2021-senate-redistricting-committee-guidelines.pdf?sfvrsn=a9bbb991_2</a></i> )	ECF No. 20-21

Description	Docket Location
Georgia House of Representatives document entitled “2021-2022 Guidelines for the House Legislative and Congressional Reapportionment Committee” printed on December 29, 2021 ( <i>publicly available at: <a href="https://www.house.ga.gov/Documents/CommitteeDocuments/2021/Legislative_and_Congressional_Reapportionment/2021-2022%20House%20Reapportionment%20Committee%20Guidelines.pdf">https://www.house.ga.gov/Documents/CommitteeDocuments/2021/Legislative_and_Congressional_Reapportionment/2021-2022%20House%20Reapportionment%20Committee%20Guidelines.pdf</a></i> )	ECF No. 20-22
U.S. Department of Justice letter from Assistant Attorney General John R. Dunne to Senior Assistant Attorney General Mark H. Cohen dated March 20, 1992 ( <i>publicly available at: <a href="https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-2360.pdf">https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-2360.pdf</a></i> )	ECF No. 20-23
U.S. Department of Justice letter from Assistant Attorney General William Bradford Reynolds to Attorney General Michael Bowers dated February 11, 1982 ( <i>publicly available at: <a href="https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-1870.pdf">https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-1870.pdf</a></i> )	ECF No. 20-24
<i>The Atlanta Journal-Constitution</i> article entitled “Douglas Leader’s Racial Comments Spark Calls That He Resign” dated September 30, 2016 ( <i>publicly available at: <a href="https://www.ajc.com/news/local/douglas-leader-racial-comments-spark-calls-that-resign/AVjoe8BDCXLsut6OBPjIHI">https://www.ajc.com/news/local/douglas-leader-racial-comments-spark-calls-that-resign/AVjoe8BDCXLsut6OBPjIHI</a></i> )	ECF No. 20-25
CNN article entitled “GOP Candidate’s Husband Shares Image Urging Voters to ‘Free the Black Slaves from the Democratic Plantation’” dated May 2, 2017 ( <i>publicly available at: <a href="https://www.cnn.com/2017/05/02/politics/kfile-karen-handel-husband-tweet/index.html">https://www.cnn.com/2017/05/02/politics/kfile-karen-handel-husband-tweet/index.html</a></i> )	ECF No. 20-26

Description	Docket Location
Appen Media Group article entitled “Roswell’s Wood Says ‘Ossoff’ Has Off-Puttingly Muslim Ring” dated March 15, 2017 ( <i>publicly available at: <a href="https://www.appenmedia.com/opinion/columnists/roswell-s-wood-says-ossoff-has-off-puttingly-muslim-ring/article_729681a0-e082-5a2c-a639-9f15369a730a.html">https://www.appenmedia.com/opinion/columnists/roswell-s-wood-says-ossoff-has-off-puttingly-muslim-ring/article_729681a0-e082-5a2c-a639-9f15369a730a.html</a></i> )	ECF No. 20-27
<i>The Atlanta Journal-Constitution</i> article entitled “Warring Republicans Try to Unite Against Ossoff in Georgia’s Sixth” dated April 15, 2017 ( <i>publicly available at: <a href="https://www.ajc.com/blog/politics/warring-republicans-try-unite-against-ossoff-georgia-sixth/CJca8W1Alqeob6jvA8gB5H">https://www.ajc.com/blog/politics/warring-republicans-try-unite-against-ossoff-georgia-sixth/CJca8W1Alqeob6jvA8gB5H</a></i> )	ECF No. 20-28
<i>The Atlanta Journal-Constitution</i> article entitled “Gwinnett Commissioner Calls John Lewis ‘a Racist Pig,’ Faces Backlash” dated January 16, 2017 ( <i>publicly available at: <a href="https://www.ajc.com/news/gwinnett-commissioner-calls-john-lewis-racist-pig-faces-backlash/K2uAUZFikv57szlncpZilO">https://www.ajc.com/news/gwinnett-commissioner-calls-john-lewis-racist-pig-faces-backlash/K2uAUZFikv57szlncpZilO</a></i> )	ECF No. 20-29
<i>The Washington Post</i> article entitled “Racist ‘Magical Negro’ Robo-Call from ‘Oprah’ Targets Stacey Abrams in Georgia Governor’s Race” dated November 5, 2018 ( <i>publicly available at: <a href="https://www.washingtonpost.com/politics/2018/11/04/racist-magical-negro-robo-call-oprah-targets-stacey-abrams-georgia-governors-race">https://www.washingtonpost.com/politics/2018/11/04/racist-magical-negro-robo-call-oprah-targets-stacey-abrams-georgia-governors-race</a></i> )	ECF No. 20-30
Slate article entitled “It Was Too Easy for Brian Kemp’s Last-Minute Dog Whistle About Stacey Abrams to Go Viral” dated November 6, 2018 ( <i>publicly available at: <a href="https://slate.com/technology/2018/11/brian-kemp-stacey-abrams-dog-whistle-black-panthers-facebook.html">https://slate.com/technology/2018/11/brian-kemp-stacey-abrams-dog-whistle-black-panthers-facebook.html</a></i> )	ECF No. 20-31



Description	Docket Location
<p><i>USA Today</i> article entitled “Georgia Gubernatorial Candidate Brian Kemp Suggests Truck Is for Rounding up ‘Illegals’” dated May 10, 2018  (publicly available at: <a href="https://www.usatoday.com/story/news/nation/2018/05/10/brian-kemp-illegals-ad/600212002">https://www.usatoday.com/story/news/nation/2018/05/10/brian-kemp-illegals-ad/600212002</a>)</p>	ECF No. 20-32
<p>Salon article entitled “Kelly Loeffler’s New Facebook Ad Darkens Skin of Raphael Warnock, Her Black Opponent” dated January 4, 2021  (publicly available at: <a href="https://www.salon.com/2021/01/04/kelly-loefflers-new-facebook-ad-darkens-skin-of-raphael-warnock-her-black-opponent">https://www.salon.com/2021/01/04/kelly-loefflers-new-facebook-ad-darkens-skin-of-raphael-warnock-her-black-opponent</a>)</p>	ECF No. 20-33
<p>ABC News article entitled “Perdue’s Campaign Deletes Ad That Enlarges Jewish Opponent’s Nose, Insists It Was Accident” dated July 28, 2020  (publicly available at: <a href="https://abcnews.go.com/Politics/perdues-campaign-deletes-ad-enlarges-jewish-opponents-nose/story?id=72039950">https://abcnews.go.com/Politics/perdues-campaign-deletes-ad-enlarges-jewish-opponents-nose/story?id=72039950</a>)</p>	ECF No. 20-34
<p>CNN article entitled “Georgia Republican Senator Willfully Mispronounces Kamala Harris’ Name at Trump Rally” dated October 17, 2020 (publicly available at: <a href="https://www.cnn.com/2020/10/16/politics/david-perdue-kamala-harris/index.html">https://www.cnn.com/2020/10/16/politics/david-perdue-kamala-harris/index.html</a>)</p>	ECF No. 20-35
<p><i>The Atlanta Journal-Constitution</i> article entitled “Crime Fears Emerge in Johns Creek, Sandy Springs Municipal Elections” dated October 26, 2021  (publicly available at: <a href="https://www.ajc.com/neighborhoods/north-fulton/crime-fears-emerge-in-johns-creek-sandy-springs-municipal-elections/HAMJ4MEMVVA3BCYC36ZOGR3OKM">https://www.ajc.com/neighborhoods/north-fulton/crime-fears-emerge-in-johns-creek-sandy-springs-municipal-elections/HAMJ4MEMVVA3BCYC36ZOGR3OKM</a>)</p>	ECF No. 20-36

Description	Docket Location
Georgia Legislative Black Caucus website page entitled “2021-2022 GLBC Members” printed on January 3, 2022 ( <i>publicly available at: <a href="https://gablackcaucus.org/members">https://gablackcaucus.org/members</a></i> )	ECF No. 20-37
<i>Governing</i> article entitled “Blacks in State Legislatures: A State-by-State Map” dated January 13, 2021 ( <i>publicly available at: <a href="https://www.governing.com/now/blacks-in-state-legislatures-a-state-by-state-map.html">https://www.governing.com/now/blacks-in-state-legislatures-a-state-by-state-map.html</a></i> )	ECF No. 20-38
National Conference of State Legislatures article entitled “State Legislator Demographics” dated December 1, 2020 ( <i>publicly available at: <a href="https://www.ncsl.org/research/about-state-legislatures/state-legislator-demographics.aspx">https://www.ncsl.org/research/about-state-legislatures/state-legislator-demographics.aspx</a></i> )	ECF No. 20-39
National Governors Association website page entitled “Former Georgia Governors” printed on December 31, 2021 ( <i>publicly available at: <a href="https://www.nga.org/former-governors/Georgia">https://www.nga.org/former-governors/Georgia</a></i> )	ECF No. 20-40
<i>The Atlanta Journal-Constitution</i> article entitled “Stacey Abrams Is Running for Georgia Governor in 2022” dated December 1, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/politics-blog/breaking-stacey-abrams-is-running-for-georgia-governor-in-2022/">https://www.ajc.com/politics/politics-blog/breaking-stacey-abrams-is-running-for-georgia-governor-in-2022/</a></i> <i>VRUXXJSQWBBAXAZQZV72FLP4LM</i> )	ECF No. 20-41
U.S. Senate website page entitled “States in the Senate   Georgia Senators” printed on December 31, 2021 ( <i>publicly available at: <a href="https://www.senate.gov/states/GA/senators.htm">https://www.senate.gov/states/GA/senators.htm</a></i> )	ECF No. 20-42

Description	Docket Location
WUGA article entitled “Report Shows Black Georgians Were More Likely to Be Denied Unemployment Benefits” dated November 19, 2021 ( <i>publicly available at: <a href="https://www.wuga.org/post/report-shows-black-georgians-were-more-likely-be-denied-unemployment-benefits">https://www.wuga.org/post/report-shows-black-georgians-were-more-likely-be-denied-unemployment-benefits</a></i> )	ECF No. 20-43
Georgia House of Representatives final report of the House of Representatives Study Committee on Maternal Mortality dated 2019 ( <i>publicly available at: <a href="https://www.house.ga.gov/Documents/CommitteeDocuments/2019/MaternalMortality/HR_589_Final_Report.pdf">https://www.house.ga.gov/Documents/CommitteeDocuments/2019/MaternalMortality/HR_589_Final_Report.pdf</a></i> )	ECF No. 20-44
<i>The Atlanta Journal-Constitution</i> article entitled “Bill in Congress Could Bring Relief to Uninsured Georgians” dated December 1, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/life/health/bill-in-congress-could-bring-relief-to-uninsured-georgians/BQOWOU7O35FADAXG4LAL57YELQ">https://www.ajc.com/life/health/bill-in-congress-could-bring-relief-to-uninsured-georgians/BQOWOU7O35FADAXG4LAL57YELQ</a></i> )	ECF No. 20-45
Georgia Secretary of State document entitled “2022 State Elections & Voter Registration Calendar” printed on December 31, 2021 ( <i>publicly available at: <a href="https://sos.ga.gov/admin/uploads/2022_State_Short_Calendar9.pdf">https://sos.ga.gov/admin/uploads/2022_State_Short_Calendar9.pdf</a></i> )	ECF No. 20-46

Plaintiffs note that other documents might be relevant and discoverable in this case. Plaintiffs expect these additional documents to come to light during the discovery period, and Plaintiffs reserve the right to alter, supplement, or amend this list of documents, either by amendment to these or other disclosures, or through the identification of said documents in depositions or discovery responses.

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

COAKLEY PENDERGRASS; TRIANA  
ARNOLD JAMES; ELLIOTT  
HENNINGTON; ROBERT RICHARDS;  
JENS RUECKERT; and OJUAN GLAZE,

Plaintiffs,

v.

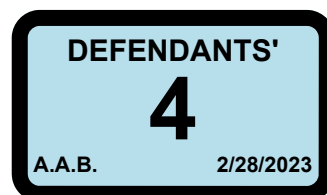
BRAD RAFFENSPERGER, in his official  
capacity as the Georgia Secretary of State;  
WILLIAM S. DUFFEY, JR., in his official  
capacity as chair of the State Election  
Board; MATTHEW MASHBURN, in his  
official capacity as a member of the State  
Election Board; SARA TINDALL  
GHAZAL, in her official capacity as a  
member of the State Election Board;  
EDWARD LINDSEY, in his official  
capacity as a member of the State Election  
Board; and JANICE W. JOHNSTON, in  
her official capacity as a member of the  
State Election Board,

Defendants.

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

**PLAINTIFFS' SECOND AMENDED INITIAL DISCLOSURES**

Plaintiffs COAKLEY PENDERGRASS, TRIANA ARNOLD JAMES,  
ELLIOTT HENNINGTON, ROBERT RICHARDS, JENS RUECKERT, and OJUAN  
GLAZE, through their undersigned attorneys, hereby submit the following second



amended initial disclosures pursuant to Federal Rule of Civil Procedure 26(a) and LR 26.1, NDGa.

(1) *State precisely the classification of the cause of action being filed, a brief factual outline of the case including plaintiff's contentions as to what defendant did or failed to do, and a succinct statement of the legal issues in the case.*

**(a) Cause of Action**

This is an action to enjoin Defendants from proceeding with a congressional district map that violates the voting rights of Black Georgians. Plaintiffs allege that Defendants' implementation of the current redistricting plan for Georgia's congressional districts ("SB 2EX") unlawfully dilutes Black voting strength in violation of Section 2 of the Voting Rights Act of 1965, as amended, 52 U.S.C. § 10301.

**(b) Brief Factual Outline**

Since 2000, Georgia's Black population has increased by over 1.1 million people, now representing one-third of the state's total population. In the Atlanta metropolitan area in particular, the Black population has increased by over 900,000 people in the last 20 years. However, despite these striking demographic changes, the number of majority-Black congressional districts has not changed. There is also a substantial gap between the number of Black Georgians living in majority-Black districts and the number of white Georgians living in majority-white districts—a

further indicator that the number of majority-Black districts is disproportionately low and that Black voting strength is being unlawfully diluted.

The new congressional plan enacted by the Georgia General Assembly last year constitutes a textbook violation of the Voting Rights Act. The method of vote dilution is a familiar one: Black voters have been packed into some districts and cracked among other rural-reaching, predominantly white districts. This phenomenon is clearly illustrated in the western Atlanta metropolitan area, where Black voters have been packed in the supermajority-Black Thirteenth Congressional District and cracked into other districts that stretch into the western and northern reaches of the state. In this area, the Black population is sufficiently large and geographically compact such that the General Assembly could have drawn, consistent with traditional redistricting principles, at least one additional majority-Black congressional district—but did not do so.

Voting is also highly racially polarized in these areas and statewide, and Black and white voters are politically cohesive. In both statewide and localized contests, the white majority usually votes as a bloc to defeat the candidates preferred by Black voters unless districts are drawn to provide Black voters with opportunities to elect candidates of their choice. Consequently, Black-preferred candidates typically lose

to white preferred candidates except in majority-Black congressional and legislative districts.

In light of Georgia's legacy of racial discrimination against its Black population, the subordination of their political power, and the ongoing, cumulative effects of that legacy, the state's new congressional map will prevent Black Georgians from participating equally in the political process. Therefore, SB 2EX dilutes the political strength of Black voters in violation of Section 2 of the Voting Rights Act.

**(c) Statement of Legal Issues**

This action concerns whether SB 2EX violates Section 2 of the Voting Rights Act by diluting the voting strength of Black Georgians.

(2) *Describe in detail all statutes, codes, regulations, legal principles, standards and customs or usages, and illustrative case law which plaintiff contends are applicable to this action.*

Plaintiffs allege that Georgia's congressional district map violates Section 2 of the Voting Rights Act. Section 2 prohibits any "standard, practice, or procedure" that "results in a denial or abridgement of the right of any citizen of the United States to vote on account of race or color." 52 U.S.C. § 10301(a). This includes the

manipulation of district lines [to] dilute the voting strength of politically cohesive minority group members, whether by fragmenting the minority voters among several districts where a bloc-voting majority

can routinely outvote them, or by packing them into one or a small number of districts to minimize their influence in the districts next door.

*Johnson v. De Grandy*, 512 U.S. 997, 1007 (1994).

To prevail on their Section 2 claim, Plaintiffs must show that (1) the minority group is “sufficiently large and geographically compact to constitute a majority in a single-member district”; (2) the minority group “is politically cohesive”; and (3) “the white majority votes sufficiently as a bloc to enable it . . . usually to defeat the minority’s preferred candidate.” *Thornburg v. Gingles*, 478 U.S. 30, 50–51 (1986). Once Plaintiffs have made this threshold showing, the Court must then examine “the totality of circumstances”—including the nine factors identified in the Senate report that accompanied the 1982 amendments to the Voting Rights Act—to determine whether “the political processes leading to nomination or election in the State or political subdivision are not equally open to participation” by members of the minority group. 52 U.S.C. § 10301(b); *see also Gingles*, 478 U.S. at 43–44.

- (3) *Provide the name and, if known, the address and telephone number of each individual likely to have discoverable information that you may use to support your claims or defenses, unless solely for impeachment, identifying the subjects of the information.*

Plaintiffs’ current fact witness list is included as Attachment A. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.



- (4) *Provide the name of any person who may be used at trial to present evidence under Rules 702, 703, or 705 of the Federal Rules of Evidence. For all experts described in Fed.R.Civ.P. 26(a)(2)(B), provide a separate written report satisfying the provisions of that rule.*

Plaintiffs' current expert witness list is included as Attachment B. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.

- (5) *Provide a copy of, or a description by category and location of, all documents, data compilations or other electronically stored information, and tangible things in your possession, custody, or control that you may use to support your claims or defenses unless solely for impeachment, identifying the subjects of the information.*

Plaintiffs' current document list and descriptions are included as Attachment C. Plaintiffs will supplement this initial disclosure as required by Federal Rule of Civil Procedure 26(e) and LR 26.1(C), NDGa.

- (6) *In the space provided below, provide a computation of any category of damages claimed by you. In addition, include a copy of, or describe by category and location of, the documents or other evidentiary material, not privileged or protected from disclosure, on which such computation is based, including materials bearing on the nature and extent of injuries suffered, making such documents or evidentiary material available for inspection and copying as under Fed.R.Civ.P. 34.*

Not applicable.

- (7) *Attach for inspection and copying as under Fed.R.Civ.P. 34 any insurance agreement under which any person carrying on an insurance business may be liable to satisfy part or all of a judgment which may be entered in this action or to indemnify or reimburse for payments made to satisfy the judgment.*

Not applicable.

- (8) *Disclose the full name, address, and telephone number of all persons or legal entities who have a subrogation interest in the cause of action set forth in plaintiffs cause of action and state the basis and extent of such interest.*

Not applicable.

Dated: February 3, 2023

By: **Makeba Rutahindurwa**

Joyce Gist Lewis

Georgia Bar No. 296261

Adam M. Sparks

Georgia Bar No. 341578

**KREVOLIN & HORST, LLC**

One Atlantic Center

1201 West Peachtree Street, NW,  
Suite 3250

Atlanta, Georgia 30309

Telephone: (404) 888-9700

Facsimile: (404) 888-9577

Email: [JLewis@khlawfirm.com](mailto:JLewis@khlawfirm.com)

Email: [Sparks@khlawfirm.com](mailto:Sparks@khlawfirm.com)

Respectfully submitted,

Abha Khanna\*

Jonathan P. Hawley\*

Makeba A.K. Rutahindurwa\*

**ELIAS LAW GROUP LLP**

1700 Seventh Avenue, Suite 2100

Seattle, Washington 98101

Phone: (206) 656-0177

Facsimile: (206) 656-0180

Email: [AKhanna@elias.law](mailto:AKhanna@elias.law)

Email: [JHawley@elias.law](mailto:JHawley@elias.law)

Email: [MRutahindurwa@elias.law](mailto:MRutahindurwa@elias.law)

Michael B. Jones

Georgia Bar No. 721264

**ELIAS LAW GROUP LLP**

250 Massachusetts Ave. NW

Suite 400

Washington, D.C. 20001

Phone: (202) 968-4490

Facsimile: (202) 968-4498

Email: [MJones@elias.law](mailto:MJones@elias.law)

*Counsel for Plaintiffs*

\*Admitted *pro hac vice*

**Attachment A: Plaintiffs' Fact Witness List**

1. **Plaintiffs Coakley Pendergrass, Triana Arnold James, Elliott Hennington, Robert Richards, Jens Rueckert, and Ojuan Glaze** might have discoverable information about the allegations and claims set forth in their complaint, including but not limited to information about the impact of SB 2EX on Black Georgians. All Plaintiffs should be contacted only through counsel.

2. **Current and Former State Legislators**, including former **Senator Jason Carter**, might have discoverable information about the impacts of SB 2EX on Black Georgians. He may be contacted through Plaintiffs' counsel.

3. **State Representative Derrick Jackson** and **former State Representative Erick Allen** might have discoverable information about the impacts of SB 2EX on Black Georgians. They may be contacted through Plaintiffs' counsel.

4. Former member of the Georgia State Election Board, **David Worley**, might have discoverable information about the impacts of SB 2EX on Black Georgians. He may be contacted through Plaintiffs' counsel.

**Attachment B: Plaintiffs' Expert Disclosures**

Pursuant to Federal Rule of Civil Procedure 26(a)(2), Plaintiffs disclose the following witnesses they may use at trial to present evidence under Federal Rule of Evidence 702, 703, or 705. Plaintiffs reserve the right to supplement this list as needed throughout this litigation.

Additional disclosures required under Federal Rule of Civil Procedure 26(a)(2)(B) are included in each expert's written report. Consistent with the agreement of counsel, Mr. Cooper's and Dr. Burton's reports will be served concurrently with these amended initial disclosures. Dr. Palmer's and Dr. Collingwood's reports will be served no later than December 12, 2022.

<b>Witness</b>	<b>Topic(s) of Testimony</b>
William S. Cooper	Redistricting, mapping, and demographic analysis
Dr. Maxwell Palmer	Redistricting, data analysis, and racially polarized voting
Dr. Orville Vernon Burton	History of race discrimination, voting, and racial appeals in political campaigns
Dr. Loren Collingwood	Demographic analysis, socioeconomic disparities across racial groups, and political participation across racial groups

**Attachment C: Plaintiffs' Document List**

Plaintiffs submit the following document list and descriptions:

Description	Docket No.
<i>U.S. News &amp; World Report</i> article entitled “Georgia Senate Advances Congressional Map with GOP Advantage” dated November 19, 2021 ( <i>publicly available at: <a href="https://www.usnews.com/news/best-states/georgia/articles/2021-11-19/georgia-senate-advances-congressional-map-with-gop-advantage">https://www.usnews.com/news/best-states/georgia/articles/2021-11-19/georgia-senate-advances-congressional-map-with-gop-advantage</a></i> )	ECF No. 34-11
<i>The Atlanta Journal-Constitution</i> article entitled “Georgia Passes Map That Aims to Gain Republicans a Seat in Congress” dated November 22, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/georgia-passes-map-that-aims-to-gain-republicans-a-seat-in-congress/Z4BGWXEWMRFENFZFPQKXGOXJCE">https://www.ajc.com/politics/georgia-passes-map-that-aims-to-gain-republicans-a-seat-in-congress/Z4BGWXEWMRFENFZFPQKXGOXJCE</a></i> )	ECF No. 34-12
<i>The Albany Herald</i> article entitled “Public to State Lawmakers: Slow Redistricting Process Down” dated November 9, 2021 ( <i>publicly available at: <a href="https://www.albanyherald.com/news/public-to-state-lawmakers-slow-redistricting-process-down/article_75e30286-4158-11ec-9cbb-cf2518e93cb2.html">https://www.albanyherald.com/news/public-to-state-lawmakers-slow-redistricting-process-down/article_75e30286-4158-11ec-9cbb-cf2518e93cb2.html</a></i> )	ECF No. 34-13
Georgia Public Broadcasting article entitled “Georgia House OKs Congressional Map That Adds to Republican Advantage” dated November 22, 2021 ( <i>publicly available at: <a href="https://www.gpb.org/news/2021/11/22/georgia-house-oks-congressional-map-adds-republican-advantage">https://www.gpb.org/news/2021/11/22/georgia-house-oks-congressional-map-adds-republican-advantage</a></i> )	ECF No. 34-14
<i>The Atlanta Journal-Constitution</i> article entitled “Georgia Redistricting Signed into Law and Lawsuits Quickly Follow” dated December 30, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/georgia-redistricting-signed-into-law-as-lawsuits-loom/KDMPMUEXTZGDHIRUOYQAJSIUR4">https://www.ajc.com/politics/georgia-redistricting-signed-into-law-as-lawsuits-loom/KDMPMUEXTZGDHIRUOYQAJSIUR4</a></i> )	ECF No. 34-15

Description	Docket No.
Georgia Secretary State website page entitled “Qualifying Information” printed on December 29, 2021 ( <i>publicly available at: <a href="https://sos.ga.gov/index.php/elections/qualifying_information">https://sos.ga.gov/index.php/elections/qualifying_information</a></i> )	ECF No. 34-16
Georgia House of Representatives document entitled “2021-2022 Guidelines for the House Legislative and Congressional Reapportionment Committee” printed on December 29, 2021 ( <i>publicly available at: <a href="https://www.house.ga.gov/Documents/CommitteeDocuments/2021/Legislative_and_Congressional_Reapportionment/2021-2022%20House%20Reapportionment%20Committee%20Guidelines.pdf">https://www.house.ga.gov/Documents/CommitteeDocuments/2021/Legislative_and_Congressional_Reapportionment/2021-2022%20House%20Reapportionment%20Committee%20Guidelines.pdf</a></i> )	ECF No. 34-17
U.S. Department of Justice letter from Assistant Attorney General John R. Dunne to Senior Assistant Attorney General Mark H. Cohen dated March 20, 1992 ( <i>publicly available at: <a href="https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-2360.pdf">https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-2360.pdf</a></i> )	ECF No. 34-18
U.S. Department of Justice letter from Assistant Attorney General William Bradford Reynolds to Attorney General Michael Bowers dated February 11, 1982 ( <i>publicly available at: <a href="https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-1870.pdf">https://www.justice.gov/sites/default/files/crt/legacy/2014/05/30/GA-1870.pdf</a></i> )	ECF No. 34-19
<i>The Atlanta Journal-Constitution</i> article entitled “Douglas Leader’s Racial Comments Spark Calls That He Resign” dated September 30, 2016 ( <i>publicly available at: <a href="https://www.ajc.com/news/local/douglas-leader-racial-comments-spark-calls-that-resign/AVjoe8BDCXLsut6OBPjIHI">https://www.ajc.com/news/local/douglas-leader-racial-comments-spark-calls-that-resign/AVjoe8BDCXLsut6OBPjIHI</a></i> )	ECF No. 34-20

Description	Docket No.
CNN article entitled “GOP Candidate’s Husband Shares Image Urging Voters to ‘Free the Black Slaves from the Democratic Plantation’” dated May 2, 2017 ( <i>publicly available at: <a href="https://www.cnn.com/2017/05/02/politics/kfile-karen-handel-husband-tweet/index.html">https://www.cnn.com/2017/05/02/politics/kfile-karen-handel-husband-tweet/index.html</a></i> )	ECF No. 34-21
Appen Media Group article entitled “Roswell’s Wood Says ‘Ossoff’ Has Off-Puttingly Muslim Ring” dated March 15, 2017 ( <i>publicly available at: <a href="https://www.appenmedia.com/opinion/columnists/roswell-s-wood-says-ossoff-has-off-puttingly-muslim-ring/article_729681a0-e082-5a2c-a639-9f15369a730a.html">https://www.appenmedia.com/opinion/columnists/roswell-s-wood-says-ossoff-has-off-puttingly-muslim-ring/article_729681a0-e082-5a2c-a639-9f15369a730a.html</a></i> )	ECF No. 34-22
<i>The Atlanta Journal-Constitution</i> article entitled “Warring Republicans Try to Unite Against Ossoff in Georgia’s Sixth” dated April 15, 2017 ( <i>publicly available at: <a href="https://www.ajc.com/blog/politics/warring-republicans-try-unite-against-ossoff-georgia-sixth/CJca8W1Alqeob6jvA8gB5H">https://www.ajc.com/blog/politics/warring-republicans-try-unite-against-ossoff-georgia-sixth/CJca8W1Alqeob6jvA8gB5H</a></i> )	ECF No. 34-23
<i>The Atlanta Journal-Constitution</i> article entitled “Gwinnett Commissioner Calls John Lewis ‘a Racist Pig,’ Faces Backlash” dated January 16, 2017 ( <i>publicly available at: <a href="https://www.ajc.com/news/gwinnett-commissioner-calls-john-lewis-racist-pig-faces-backlash/K2uAUZFikv57szlncpZilO">https://www.ajc.com/news/gwinnett-commissioner-calls-john-lewis-racist-pig-faces-backlash/K2uAUZFikv57szlncpZilO</a></i> )	ECF No. 34-24
<i>The Washington Post</i> article entitled “Racist ‘Magical Negro’ Robo-Call from ‘Oprah’ Targets Stacey Abrams in Georgia Governor’s Race” dated November 5, 2018 ( <i>publicly available at: <a href="https://www.washingtonpost.com/politics/2018/11/04/racist-magical-negro-robo-call-oprah-targets-stacey-abrams-georgia-governors-race">https://www.washingtonpost.com/politics/2018/11/04/racist-magical-negro-robo-call-oprah-targets-stacey-abrams-georgia-governors-race</a></i> )	ECF No. 34-25



Description	Docket No.
Slate article entitled “It Was Too Easy for Brian Kemp’s Last-Minute Dog Whistle About Stacey Abrams to Go Viral” dated November 6, 2018 ( <i>publicly available at: <a href="https://slate.com/technology/2018/11/brian-kemp-stacey-abrams-dog-whistle-black-panthers-facebook.html">https://slate.com/technology/2018/11/brian-kemp-stacey-abrams-dog-whistle-black-panthers-facebook.html</a></i> )	ECF No. 34-26
USA Today article entitled “Georgia Gubernatorial Candidate Brian Kemp Suggests Truck Is for Rounding up ‘Illegals’” dated May 10, 2018 ( <i>publicly available at: <a href="https://www.usatoday.com/story/news/nation/2018/05/10/brian-kemp-illegals-ad/600212002">https://www.usatoday.com/story/news/nation/2018/05/10/brian-kemp-illegals-ad/600212002</a></i> )	ECF No. 34-27
Salon article entitled “Kelly Loeffler’s New Facebook Ad Darkens Skin of Raphael Warnock, Her Black Opponent” dated January 4, 2021 ( <i>publicly available at: <a href="https://www.salon.com/2021/01/04/kelly-loefflers-new-facebook-ad-darkens-skin-of-raphael-warnock-her-black-opponent">https://www.salon.com/2021/01/04/kelly-loefflers-new-facebook-ad-darkens-skin-of-raphael-warnock-her-black-opponent</a></i> )	ECF No. 34-28
ABC News article entitled “Perdue’s Campaign Deletes Ad That Enlarges Jewish Opponent’s Nose, Insists It Was Accident” dated July 28, 2020 ( <i>publicly available at: <a href="https://abcnews.go.com/Politics/perdues-campaign-deletes-ad-enlarges-jewish-opponents-nose/story?id=72039950">https://abcnews.go.com/Politics/perdues-campaign-deletes-ad-enlarges-jewish-opponents-nose/story?id=72039950</a></i> )	ECF No. 34-29
CNN article entitled “Georgia Republican Senator Willfully Mispronounces Kamala Harris’ Name at Trump Rally” dated October 17, 2020 ( <i>publicly available at: <a href="https://www.cnn.com/2020/10/16/politics/david-perdue-kamala-harris/index.html">https://www.cnn.com/2020/10/16/politics/david-perdue-kamala-harris/index.html</a></i> )	ECF No. 34-30

Description	Docket No.
<i>The Atlanta Journal-Constitution</i> article entitled “Crime Fears Emerge in Johns Creek, Sandy Springs Municipal Elections” dated October 26, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/neighborhoods/north-fulton/crime-fears-emerge-in-johns-creek-sandy-springs-municipal-elections/HAMJ4MEMVVA3BCYC36ZOGR3OKM">https://www.ajc.com/neighborhoods/north-fulton/crime-fears-emerge-in-johns-creek-sandy-springs-municipal-elections/HAMJ4MEMVVA3BCYC36ZOGR3OKM</a></i> )	ECF No. 34-31
Georgia Legislative Black Caucus website page entitled “2021-2022 GLBC Members” printed on January 3, 2022 ( <i>publicly available at: <a href="https://gablackcaucus.org/members">https://gablackcaucus.org/members</a></i> )	ECF No. 34-32
<i>Governing</i> article entitled “Blacks in State Legislatures: A State-by-State Map” dated January 13, 2021 ( <i>publicly available at: <a href="https://www.governing.com/now/blacks-in-state-legislatures-a-state-by-state-map.html">https://www.governing.com/now/blacks-in-state-legislatures-a-state-by-state-map.html</a></i> )	ECF No. 34-33
National Conference of State Legislatures article entitled “State Legislator Demographics” dated December 1, 2020 ( <i>publicly available at: <a href="https://www.ncsl.org/research/about-state-legislatures/state-legislator-demographics.aspx">https://www.ncsl.org/research/about-state-legislatures/state-legislator-demographics.aspx</a></i> )	ECF No. 34-34
National Governors Association website page entitled “Former Georgia Governors” printed on December 31, 2021 ( <i>publicly available at: <a href="https://www.nga.org/former-governors/Georgia">https://www.nga.org/former-governors/Georgia</a></i> )	ECF No. 34-35
<i>The Atlanta Journal-Constitution</i> article entitled “Stacey Abrams Is Running for Georgia Governor in 2022” dated December 1, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/politics-blog/breaking-stacey-abrams-is-running-for-georgia-governor-in-2022/VRUXXJSQWBBAXAZQZV72FLP4LM">https://www.ajc.com/politics/politics-blog/breaking-stacey-abrams-is-running-for-georgia-governor-in-2022/VRUXXJSQWBBAXAZQZV72FLP4LM</a></i> )	ECF No. 34-36
U.S. Senate website page entitled “States in the Senate   Georgia Senators” printed on December 31, 2021 ( <i>publicly available at: <a href="https://www.senate.gov/states/GA/senators.htm">https://www.senate.gov/states/GA/senators.htm</a></i> )	ECF No. 34-37

Description	Docket No.
WUGA article entitled “Report Shows Black Georgians Were More Likely to Be Denied Unemployment Benefits” dated November 19, 2021 ( <i>publicly available at: <a href="https://www.wuga.org/post/report-shows-black-georgians-were-more-likely-be-denied-unemployment-benefits">https://www.wuga.org/post/report-shows-black-georgians-were-more-likely-be-denied-unemployment-benefits</a></i> )	ECF No. 34-38
Georgia House of Representatives final report of the House of Representatives Study Committee on Maternal Mortality dated 2019 ( <i>publicly available at: <a href="https://www.house.ga.gov/Documents/CommitteeDocuments/2019/MaternalMortality/HR_589_Final_Report.pdf">https://www.house.ga.gov/Documents/CommitteeDocuments/2019/MaternalMortality/HR_589_Final_Report.pdf</a></i> )	ECF No. 34-39
<i>The Atlanta Journal-Constitution</i> article entitled “Bill in Congress Could Bring Relief to Uninsured Georgians” dated December 1, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/life/health/bill-in-congress-could-bring-relief-to-uninsured-georgians/BQOWOU7O35FADAXG4LAL57YELQ">https://www.ajc.com/life/health/bill-in-congress-could-bring-relief-to-uninsured-georgians/BQOWOU7O35FADAXG4LAL57YELQ</a></i> )	ECF No. 34-40
<i>The Atlanta Journal-Constitution</i> article entitled “Lawsuits Will Challenge Georgia’s New Maps That Favor Republicans” dated December 6, 2021 ( <i>publicly available at: <a href="https://www.ajc.com/politics/lawsuits-will-challenge-georgias-new-maps-that-favor-republicans/6GLRYA6XBFFWDLITQ2GPYI4KYQ">https://www.ajc.com/politics/lawsuits-will-challenge-georgias-new-maps-that-favor-republicans/6GLRYA6XBFFWDLITQ2GPYI4KYQ</a></i> )	ECF No. 34-41
Associated Press article entitled “Georgia Congressional Map Favoring GOP Moves Toward Passage” dated November 20, 2021 ( <i>publicly available at: <a href="https://apnews.com/article/georgia-atlanta-redistricting-congress-b23411e132fd310c93956a915e7abd2c">https://apnews.com/article/georgia-atlanta-redistricting-congress-b23411e132fd310c93956a915e7abd2c</a></i> )	ECF No. 34-42

Description	Docket No.
Georgia Secretary of State document entitled “2022 State Elections & Voter Registration Calendar” printed on December 31, 2021 ( <i>publicly available at: <a href="https://sos.ga.gov/admin/uploads/2022_State_Short_Calendar9.pdf">https://sos.ga.gov/admin/uploads/2022_State_Short_Calendar9.pdf</a></i> )	ECF No. 34-43

Plaintiffs note that other documents might be relevant and discoverable in this case. Plaintiffs expect these additional documents to come to light during the discovery period, and Plaintiffs reserve the right to alter, supplement, or amend this list of documents, either by amendment to these or other disclosures, or through the identification of said documents in depositions or discovery responses.

# Loren Collingwood

University of New Mexico  
Department of Political Science  
1 University of New Mexico  
Albuquerque, NM 87131

Office: (951) 827-5590  
Email: [1collingwood@unm.edu](mailto:1collingwood@unm.edu)  
website: <http://www.collingwoodresearch.com>

---

## Employment

Associate Professor, University of New Mexico, 2020 - Present  
Associate Professor, University of California, Riverside 2019 - 2020  
Assistant Professor, University of California, Riverside 2012 - 2019  
Assistant Analyst, Greenberg Quinlan Rosner, Washington DC 2005-2007  
Field Associate, Greenberg Quinlan Rosner, Washington DC 2003-2005

---

## Education

Ph.D., Political Science, University of Washington 2007 - 2012  
Committee: Matt Barreto (chair), Chris Parker, Luis Fraga, Chris Adolph, Peter Hoff  
M.A., Political Science, University of Washington, 2009  
B.A., Psychology, California State University, Chico, 1998 - 2002  
Minor: Political Science  
Honors: *Cum Laude*, NCAA Scholar-Athlete in soccer

---

## Research Fields

American Politics, Political Behavior, Methods, Race and Ethnic Politics, Immigration

---

## Books

2. **Collingwood, Loren.** *Campaigning in a Racially Diversifying America: When and How Cross-Racial Electoral Mobilization Works.* 2020. Oxford University Press.  
  
Featured in *Veja*, Brazil
  1. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. *Sanctuary Cities: The Politics of Refuge.* 2019. Oxford University Press.  
  
Featured in *Teen Vogue*, *Seattle Times*, *Phoenix New Times*
- 

DEFENDANTS'

5

A.A.B.

2/28/2023

## Articles

40. Gonzalez O'Brien, Ben, **Loren Collingwood**, and Michael A. Paarlberg. "What Leads to Refuge? Sanctuary Policies and the Influence of Local Demographics and Partisanship." *Urban Affairs Review*. (Conditional Accept).
39. **Collingwood, Loren**, Gabriel Martinez, and Kassra Oskooii. "Undermining Sanctuary? When Local and National Partisan Cues Diverge." *Urban Affairs Review*. (Forthcoming).
38. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. "Is Distance to Drop Box an Appropriate Proxy for Drop Box Treatment? A Case Study of Washington State." *American Politics Research*. (Forthcoming)
37. Barreto, Matt, Michael Cohen, **Loren Collingwood**, Chad Dunn, and Sonni Waknin. "A Novel Method for Showing Racially Polarized Voting: The Promise of Bayesian Improved Surname Geocoding." *New York University Review of Law and Social Change*. 46(1). (Forthcoming)
36. Barreto, Matt, **Loren Collingwood**, Sergio Garcia-Rios, and Kassra Oskooii. "Estimating Candidate Support: Comparing Iterative EI & EI-RxC Methods." *Sociological Methods & Research*. (Forthcoming).
35. Morín, Jason L., Rachel Torres, and **Loren Collingwood**. 2021. "Cosponsoring and Cashing in: U.S. House Members' support for punitive immigration policy and financial payoffs from the private prison industry." *Business and Politics*. 23(4): 492-509.

Featured in KOAT-ABQ news

34. Newman, Benjamin; Merolla, Jennifer; Shah, Sono; Lemi, Danielle; **Collingwood, Loren**; Ramakrishnan, Karthick. 2021. "The Trump Effect: An Experimental Investigation of the Emboldening Effect of Racially Inflammatory Elite Communication." *British Journal of Political Science* 51(3): 1138-1159.

Featured in New York Times; Washington Post; The Times of India; Washington Post; NBC News; New York Times; Forbes; NBC News

33. **Collingwood, Loren** and Sean Long. 2021. "Can States Promote Minority Representation? Assessing the Effects of the California Voting Rights Act." *Urban Affairs Review*. 57(3): 731-762.

Featured in NPR; Modesto Bee, IVN News San Diego; Woodland Daily Democrat; Silicon Valley Voice; Spectrum 1; Washington Post; Politico

32. Oskooii, Kassra, Nazita Lajevardi, and **Loren Collingwood**. 2021. "Opinion Shift and Stability: Enduring Individual-Level Opposition to Trump's 'Muslim Ban'." *Political Behavior*. 43: 301-337.

Featured in Washington Post

31. Hickel, Flavio, Rudy Alamillo, Kassra Oskooii, and **Loren Collingwood**. 2020. "When American Identity Trumps Latinx Identity: Explaining Support for Restrictive Immigration Policies." *Public Opinion Quarterly*. 84(4), 860-891.

Featured in Academic Times

30. Walker, Hannah, **Loren Collingwood**, and Tehama Lopez Bunyasi. 2020. "White Response to Black Death: A Racialized Theory of White Attitudes About Gun Control." *DuBois Review: Social Science Research on Race*. 17(1): 165-188.
29. Filindra, Alexandra, **Loren Collingwood**, and Noah Kaplan. 2020. "Anxiety and Social Violence: The Emotional Underpinnings of Support for Gun Control." *Social Science Quarterly*. 101: 2101-2120.
28. McGuire, William, Benjamin Gonzalez O'Brien, Katherine Baird, Benjamin Corbett, and **Loren Collingwood**. 2020. "Does Distance Matter? Evaluating the Impact of Drop Boxes on Voter Turnout." *Social Science Quarterly*. 101: 1789-1809.
27. Reny, Tyler, Ali Valenzuela, and **Loren Collingwood**. 2020. "'No, You're Playing the Race Card': Testing the Effects of Anti-Black, Anti-Latino, and Anti-Immigrant Appeals in the Post-Obama Era." *Political Psychology*. 41(2): 283-302.  
  
Featured in VOX The Weeds Podcast
26. **Collingwood, Loren**, Benjamin Gonzalez O'Brien, and Joe Tafoya. 2020. "Partisan Learning or Racial Learning: Opinion Change on Sanctuary City Policy Preferences in California and Texas." *Journal of Race and Ethnic Politics*. 5(1): 92-129.
25. **Collingwood, Loren** and Benjamin Gonzalez. 2019. "Covert Cross-Racial Mobilization, Black Activism, and Political Participation Pre-Voting Rights Act." *Florida Historical Quarterly* 97(4) Spring.
24. Gonzalez O'Brien, Ben, Elizabeth Hurst, Justin Reedy, and **Loren Collingwood**. 2019. "Framing Refuge: Media, Framing, and Sanctuary Cities." *Mass Communication and Society*. 22(6), 756-778.
23. DeMora, Stephanie, **Loren Collingwood**, and Adriana Ninci. 2019. "The Role of Super Interest Groups in Public Policy Diffusion." *Policy and Politics*. 47(4): 513-541.
22. **Collingwood, Loren**, Stephen Omar El-Khatib, Ben Gonzalez O'Brien. 2019. "Sustained Organizational Influence: American Legislative Exchange Council and the Diffusion of Anti-Sanctuary Policy." *Policy Studies Journal*. 47(3): 735-773.
21. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. 2019. "Public Opposition to Sanctuary Cities in Texas: Criminal Threat or Immigration Threat?" *Social Science Quarterly*. 100(4): 1182-1196.
20. Reny, Tyler, **Loren Collingwood**, and Ali Valenzuela. 2019. "Vote Switching in the 2016 Election: Racial and Immigration Attitudes, Not Economics, Explains Shifts in White Voting." *Public Opinion Quarterly*. 83(1): 91-113.  
  
Featured in VOX; The Week; The Economist; New York Times; The Economist
19. Gonzalez-O'Brien, Benjamin, **Loren Collingwood**, and Stephen Omar El-Khatib. 2019. "The Politics of Refuge: Sanctuary Cities, Crime, and Undocumented Immigration." *Urban Affairs Review*. 55(1): 3-40.  
  
Featured in WaPo Monkey Cage I; and Monkey Cage II; WaPo Fact Check; InsideHigherEd; PolitiFact; The Hill; Christian Science Monitor; Pacific Standard; NBC News; Huffington Post; Seattle Times; The Denver Post; San Jose Mercury News; Chicago Tribune; San Diego Union Tribune; VOX



18. Oskooii, Kassra, Sarah Dreier, and **Loren Collingwood**. 2018. "Partisan Attitudes Toward Sanctuary Cities: The Asymmetrical Effects of Political Knowledge." *Politics and Policy* 46(6): 951-984.
17. **Collingwood, Loren**, Jason Morín, and Stephen Omar El-Khatib. 2018. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." *Race and Social Problems*. 10(4): 275-292.  
  
Featured in CityLab; The Guardian; Mother Jones; NPR
16. **Collingwood, Loren**, Benjamin Gonzalez O'Brien, and Sarah K. Dreier. 2018. "Evaluating Public Support for Legalized Marijuana: The Case of Washington." *International Journal of Drug Policy*. 56: 6-20.
15. **Collingwood, Loren**, McGuire, Will, Gonzalez O'Brien, Ben, Baird, Katie, and Hampson, Sarah. 2018. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." *Election Law Journal*. 17:1.  
  
Featured in Seattle Times; CBS News
14. **Collingwood, Loren**, Nazita Lajevardi, and Kassra Oskooii. 2018. "A Change of Heart? How Demonstrations Shifted Individual-Level Public Opinion on Trump's Muslim Ban." *Political Behavior*. 40(4): 1035-1072.  
  
Featured in VOX; ThinkProgress; LSE Blog; Al Jazeera; San Francisco Chronicle; NPR; Business Insider; Washington Post
13. **Collingwood, Loren**, Ashley Jochim, and Kassra Oskooii. 2018. "The Politics of Choice Reconsidered: Partisanship and Minority Politics in Washington's Charter School Initiative." *State Politics & Policy Quarterly* 18(1): 61-92.
12. Newman, Ben, Sono Shah, and **Loren Collingwood**. 2018. "Race, Place, and Building a Base: Ethnic Change, Perceived Threat, and the Nascent Trump Campaign for President." *Public Opinion Quarterly*. 82(1): 122-134.  
  
Featured in Pacific Standard; LSE Blog; Newsweek
11. Skulley, Carrie, Andrea Silva, Marcus J. Long, **Loren Collingwood**, and Ben Bishin, "Majority Rule vs. Minority Rights: Immigrant Representation Despite Public Opposition on the 1986 Immigration Reform and Control Act." 2018. *Politics of Groups and Identities*. 6(4): 593-611.
10. Alamillo, Rudy and **Loren Collingwood**. 2017. "Chameleon Politics: Social Identity and Racial Cross-Over Appeals." *Politics of Groups and Identities*. 5(4): 533-650.  
  
Featured in WaPo's Monkey Cage; NBC News; Los Angeles Times
9. **Collingwood, Loren**, Kassra Oskooii, Sergio Garcia-Rios, and Matt Barreto. 2016. "eiCompare: Comparing ecological inference estimates across EI and EI:RxC." *The R Journal*. 8(2): 92-101.  
  
Featured in Investigate West
8. Barreto, Matt, **Loren Collingwood**, Christopher Parker, and Francisco Pedraza. 2015. "Racial Attitudes and Race of Interviewer Item Non-Response." *Survey Practice*. 8:5.



7. Barreto, Matt and **Loren Collingwood**. 2015. "Group-based Appeals and the Latino Vote in 2012: How Immigration Became a Mobilizing Issue." *Electoral Studies*. 40:490-499.

Featured in Latino Decisions blog

6. **Collingwood, Loren**, Matt Barreto, and Sergio Garcia-Rios. 2014. "Revisiting Latino Voting: Cross-Racial Mobilization in the 2012 Election." *Political Research Quarterly*. 67(3): 632-645.

Featured in LSE Blog

5. Jurka, Tim, **Loren Collingwood**, Amber Boydston, Emiliano Grossman, and Wouter van Atteveldt. 2013. "RTextTools: A Supervised Learning Package for Text Classification in R" *The R Journal*. 5(1).
4. **Collingwood, Loren**. 2012. "Education Levels and Support for Direct Democracy." *American Politics Research*, 40(4): 571-602.
3. **Collingwood, Loren** and John Wilkerson. 2012. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods." *Journal of Information Technology and Politics*, 9(3).
2. **Collingwood, Loren**, Matt Barreto and Todd Donovan. 2012. "Early Primaries, Viability, and Changing Preferences for Presidential Candidates." *Presidential Studies Quarterly*, 42(2).
1. Barreto, Matt, **Loren Collingwood**, and Sylvia Manzano. 2010. "A New Measure of Group Influence in Presidential Elections: Assessing Latino Influence in 2008." *Political Research Quarterly*. 63(4).

Featured in Latino Decisions blog

## Book Chapters

11. **Collingwood, Loren**, Stephanie DeMora , and Sean Long. "Demographic Change, White Decline, and the Changing Nature of Racial Politics in Election Campaigns." In *Cambridge Handbook in Political Psychology*. Edited by Danny Osborne and Chris Sibley. [Forthcoming].
10. Morín, Jason L. and **Loren Collingwood**. "Contractor Politics: How Political Events Influence Private Prison Company Stock Shares in the Pre and Post Trump Era." In *Anti-immigrant Rhetoric, Actions, and Policies during the Trump Era (2017-2019)*. [Forthcoming]
9. Parker, Christopher S., Christopher C. Towler, **Loren Collingwood**, and Kassra Oskooii. 2020. "Race and Racism in Campaigns." In *Oxford Encyclopedia of Persuasion in Political Campaigns*. Edited by Elizabeth Suhay, Bernard Grofman, and Alexander H. Trechsel. DOI: 10.1093/oxfordhb/9780190860806.013.38
8. **Collingwood, Loren**, and DeMora, Stephanie. 2019. "Latinos and Obama." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.
7. DeMora, Stephanie, and **Collingwood, Loren**. 2019. "George P. Bush." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.

6. El-Khatib, Stephen Omar, and **Collingwood, Loren**. 2019. "Ted Cruz." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.
5. **Collingwood, Loren**, Sylvia Manzano and Ali Valenzuela. 2014. "November 2008: The Latino vote in Obama's general election landslide." In *Latino America: How America's Most Dynamic Population Is Poised to Transform the Politics of the Nation*. By Matt Barreto and Gary Segura. New York: Public Affairs Press. (co-authored chapter with Matt Barreto and Gary Segura)
4. **Collingwood, Loren**, Justin Gross and Francisco Pedraza. 2014. "A 'decisive voting bloc' in 2012." In *Latino America: How America's Most Dynamic Population Is Poised to Transform the Politics of the Nation*. By Matt Barreto and Gary Segura. New York: Public Affairs Press. (co-authored chapter with Matt Barreto and Gary Segura)
3. Barreto, Matt, **Loren Collingwood**, Ben Gonzalez, and Chris Parker. 2011. "Tea Party Politics in a Blue State: Dino Rossi and the 2010 Washington Senate Election." In William Miller and Jeremy Walling (eds.) *Stuck in the Middle to Lose: Tea Party Effects on 2010 U.S. Senate Elections*. Rowan and Littlefield Publishing Group.
2. **Collingwood, Loren** and Justin Reedy. "Criticisms of Deliberative Democracy." In Nabatchi, Tina, Michael Weiksner, John Gastil, and Matt Leighninger, eds., *Democracy in motion: Evaluating the practice and impact of deliberative civic engagement*. New York: Oxford University Press, 2010.
1. **Collingwood, Loren**. "Initiatives." In Haider-Markel, Donald P., and Michael A. Card. *Political Encyclopedia of U.S. States and Regions*. Washington, DC: CQ Press, 2009.

## Software

R package: **RTextTools**. This package uses supervised learning methods to automate text classification. Coauthors include Jurka, Boydston, Grossman, and van Atteveldt. Available on CRAN.

R package: **eiCompare**. This package compares outcomes between ecological inference (EI) estimates and EI:Rows by Columns (RxC) estimates. Primary purpose is employed in racially polarized voting analysis. Development Version available here: [eiCompare](#) or on CRAN. Coauthors include Barreto, Oskooii, Garcia-Rios, Burke, Decter-Frain, Murayama, Sachdeva, Henderson, Wood, and Gross.

R package: **Rvoterdistance**. Calculates distance between voters and multiple polling locations and/or ballot drop boxes. Ports C++ code for high speed efficiency. Available on CRAN.

R package: **Rweights**. Creates survey weights via iterative variable raking. Survey design object and weights vector are produced for use with R, Stata, and other programs. Currently in alpha form with unix tarball available here: [Rweights](#).

R package: **Rmturkcheck**. Functions for cleaning and analyzing two-wave MTurk (or other) panel studies. Available: [Rmturkcheck](#)

R package: **RCopyFind**. Functions for extracting data frames then plotting results from WCopyFind plagiarism text program. Co-authored with and Maintained by Steph DeMora. Available: [RCopyFind](#)

## Under Review / Working Papers

Barreto, Matt, Michael Cohen, **Loren Collingwood**, Chad Dunn, and Sonni Waknin. "Using Bayesian Improved Surname Geocoding (BISG) to Assess Racially Polarized Voting in Voting Rights Act Challenges." [Revise & Resubmit]

Decter-Frain, Ari, Pratik Sachdeva, **Loren Collingwood**, Juandalyn Burke, Hikari Murayama, Matt Barreto, Scott Henderson, Spencer Wood, and Joshua Zingher. "Comparing BISG to CVAP Estimates in Racially Polarized Voting Analyses." [Revise & Resubmit]

Hickel Jr., Flavio R., Kassra A.R. Oskooii, and **Loren Collingwood**. "Social Mobility Through Immigrant Resentment: Explaining Latinx Support for Restrictive Immigration Policies and Anti-Immigrant Candidates." [Revise & Resubmit]

**Collingwood, Loren**, Jason Morín, and Edward Vargas. "Protesting Detention: How Protests Activated Group Empathy and Party ID to Shift Attitudes on Child Detention." [Working Paper]

Paarlberg, Michael A. and **Loren Collingwood**. "Fact or Fiction: Testing the link between local immigration policy and the MS-13 'Threat'." [Working Paper]

## Awards, Grants, and Fellowships

Matt Barreto and Loren Collingwood. Detection of Vote Dilution: New tools and methods for protecting voting rights. Data Science for Social Good project selection, University of Washington. 2020

Loren Collingwood. Measuring Cross-Racial Voter Preferences. UCR Faculty Senate. \$3,500. 2019.

Francisco Pedraza and Loren Collingwood. Evaluating AltaMed's 2018 GOTV Efforts in Los Angeles. \$12,000. 2018-2019.

Allan Colbern, Loren Collingwood, Marcel Roman. A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement. Center for American Progress. \$7,100. 2018.

Karthick Ramakrishnan, Mindy Romero, Loren Collingwood, Francisco Pedraza, Evaluating California's Voter's Choice Act. Irvine Foundation. \$150,000, 2018-2019.

William McGuire, Loren Collingwood, Ben Gonzalez O'Brien, and Katie Baird, "Evaluating the Impact of Drop Boxes and Get-Out-The-Vote Advertising on Voter Turnout in Pierce County, WA." MIT Election Data and Science Lab, \$16,365, 2017

Justin Freebourn and Loren Collingwood, Blum Initiative \$4,000, 2017

Hellman Fellowship Grant, UC Riverside, \$30,000, 2014-2015

Best Dissertation Award, 2013 Western Political Science Association

UC Riverside Harrison & Ethel Silver Fund, \$2,000, 2013

Best Graduate Student Paper Award State Politics section, 2012 American Political Science Association

Texas A&M Experimental Methods Winter Institute, \$800, January, 2011

UseR! 2011 Conference travel grant, \$1000, August, 2011

Center for Statistics and the Social Sciences travel grant, \$870, January, 2011

David J. Olson Research Grant, University of Washington Political Science, \$2,000, January, 2011

Warren Miller Scholarship Award, Inter-University Consortium for Political and Social Research, Summer 2009

Matthews Fellowship, University of Washington, Winter 2008 - Spring 2009

Brennan Center for Justice, New York University [with Matt Barreto]

Indiana Voter Identification Study, \$40,000 – Oct. 2007, 6 months

## Teaching Experience

POSC 10 (American Politics); POSC 146 (Mass Media & Public Opinion); POSC 171 (State Politics); POSC 104S (Race and Ethnic Politics Special Topics); POSC 108 (Race and Ethnic Politics)

POLS 300: Immigration Politics with Focus on Latino Politics

POLS 300: The Voting Rights Act: Causes and Effects

POSC 202A: Introduction to Quantitative Methods (Graduate)

POSC 207: Statistical Programming and Data Science for the Social Sciences (Graduate)

POSC 207: Quantitative Text Analysis (Graduate)

POSC 220: Graduate Seminar in Race and Ethnic Politics in the U.S.

POSC 256: Graduate Seminar in Public Opinion

POSC 253: Graduate Seminar in Electoral Politics

Text Classification with R using the `RTextTools` package, UNC-Chapel Hill Workshop

Text Analysis with Political Data, Claremont Graduate School, 2019

CSSS Intermediate R Workshop 2011, Instructor (Summer)

POLS 501: Advanced Research Design and Analysis, Teaching Assistant (2 quarters)

ICPSR Summer Course: Methodological Issues in Quantitative Research on Race and Ethnicity, Teaching Assistant

POLS 202: Introduction to American Politics, Teaching Assistant

CSSS Math Camp 2011, Teaching Assistant

POLS 499D: Center for American Politics and Public Policy Undergraduate Honors Seminar (2 quarters)

## Professional Service

Co-editor, *Politics of Groups and Identities*, 2020-2021

Reviewer, Political Behavior, Journal of Information Technology and Politics, American Politics Research, Social Sciences Quarterly, Journal of Politics, Politics of Groups and Identities, American Journal of Political Science, Political Research Quarterly, State Politics and Public Policy, American Political Science Review, British Journal of Political Science, Journal of Race and Ethnic Politics, Urban Studies, Urban Affairs Review; many other journals

## Conference Papers and Presentations

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk California Lutheran University. (October 2020).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk California State University, Chico. (March 2020).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk Humboldt State University. (March 2020).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk Oregon State University. (February 2020).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of San Diego. (November 2019).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk University of Massachusetts. (January 2020).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk University of New Mexico. (December 2019).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk California State University, Northridge, Los Angeles. (November 2019).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk Occidental College, Los Angeles. (November 2019).

Collingwood, Loren (with Sean Long). "Can States Promote Minority Representation? Assessing the Effects of the California Voting Rights Act." UC Irvine Critical Observations on Race and Ethnicity Conference. (November 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Geneva, Switzerland. (November 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Bern, Switzerland. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk ETH Zurich, Switzerland. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk London School of Economics, U.K. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Leeds, U.K. (October 2019).

Valenzuela, Ali, Kassra Oskooii, and Loren Collingwood. "Threat or Reassurance? Framing Midterms Results among Latinos and Whites." American Political Science Association, Washington, DC. (August 2019).

Paarlberg, Michael A. and Loren Collingwood. "Much Ado about Nothing: Local Immigration Policy and the MS-13 'Threat' ." American Political Science Association, Washington, DC. (August 2019).

Collingwood, Loren. "A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement." International Center for Local Democracy (ICLD) Conference on Local Democracy. Umea, Sweden (June 2019).

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk University of California, Irvine (May 2019).

Collingwood, Loren. "Text Analysis with R." Invited talk and presentation. Claremont Graduate University (May 2019)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." PRIEC. UC Davis (May 2019).

Collingwood, Loren. "Data Analysis with R." Invited presentation and training Cal Poly Pomona (May 2019)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk Northern Arizona University (May 2019)

Collingwood, Loren (with Jason Morín). "Contractor Politics: How Political Events Influence Private Prison Company Stock Shares in the Pre and Post Trump Era." Invited Talk Universidad Nacional Autonoma de Mexico, Distrito Federal, Mexico (February 2019).

Roman, Marcel, Allan Colbern, and Loren Collingwood. "A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement." PRIEC Consortium. University of Houston (December 2018)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk University of Illinois Chicago (November 2018)

Collingwood, Loren. "Ongoing Research in Sanctuary Cities and Immigration Politics." Invited Talk University of Pennsylvania Perry World House (November 2018)

Collingwood, Loren. "Unfair Detention: How Protests Activated Racial Group Empathy to Shift Attitudes on Child Detention." Invited Talk Rutgers University (October 2018)

Collingwood, Loren. "Unfair Detention: How Protests Activated Racial Group Empathy to Shift Attitudes on Child Detention." UCR Alumni Research Presentation Washington and Philadelphia (October 2018)

Collingwood, Loren, Jason Morin. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." Invited Talk UCLA (October 2018).



Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "Opinion Shift and Stability: Enduring Opposition to Trump's "Muslim Ban". APSA (September 2018).

Collingwood, Loren, Jason Morin, and Stephen Omar El-Khatib. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." American Political Science Association Conference (August 2018).

Collingwood, Loren, Sergio Garcia-Rios, and Hannah Walker. "The Impact of Exposure to Police Brutality on Political Attitudes Among Black and White Americans." Cooperative Comparative Post-Election Survey (CMPS) Conference. (August, 2018).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "Opinion Shift and Stability: Enduring Opposition to Trump's "Muslim Ban". Politics of Race Immigration and Ethnicity Consortium (August 2018).

Collingwood, Loren, Jason Morin, and Stephen Omar El-Khatib. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." Politics of Race Immigration and Ethnicity Consortium, Michigan State University (April 2018)

Collingwood, Loren, Benjamin Gonzalez O'Brien, and Joe Tafoya. "Partisan Learning or Racial Learning: Opinion Change on Sanctuary City Policy Preferences in California and Texas." Midwest Political Science Association Conference (April 2018).

El-Khatib, Stephen Omar and Loren Collingwood. "State Policy Responses to Sanctuary Cities: Explaining the Rise of Sanctuary City Legislative Proposals." Midwest Political Science Association Conference (April 2018).

Hannah Walker, Loren Collingwood, and Tehama Lopez Bunyasi. "Under the Gun: Black Responsiveness and White Ambivalence to Racialized Black Death." Midwest Political Science Association Conference (April 2018).

Hannah Walker, Loren Collingwood, and Tehama Lopez Bunyasi. "Under the Gun: Black Responsiveness and White Ambivalence to Racialized Black Death." Western Political Science Association Conference (April 2018).

DeMora, Stephanie, Adriana Ninci, and Loren Collingwood. "Shoot First in ALEC's Castle: The Diffusion of Stand Your Ground Laws." Politics of Race Immigration and Ethnicity Consortium, ASU (February 2018).

El-Khatib, Stephen Omar and Loren Collingwood. "State Policy Responses to Sanctuary Cities: Explaining the Rise of Sanctuary City Legislative Proposals." Politics of Race Immigration and Ethnicity Consortium, UCR (September 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." APSA (September 2017).

Collingwood, Loren, McGuire, Will, Gonzalez O'Brien Ben, Hampson, Sarah, and Baird, Katie. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." APSA (September 2017).

Collingwood, Loren, Reny, Tyler, Valenzuela, Ali. "Flipping for Trump: In 2016, Immigration and Not Economic Anxiety Explains White Working Class Vote Switching." UCLA (May 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." UCLA (May 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." Politics of Race Immigration and Ethnicity Consortium, UCSB (May 2017).

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." Vancouver, Western Political Science Association Conference (April. 2017).

Collingwood, Loren, McGuire, Will, Gonzalez-O'Brien Ben, Hampson, Sarah, and Baird, Katie. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." WPSA (April 2017).

Gonzalez-O'Brien, Benjamin, Loren Collingwood, and Stephen El-Khatib. "Gimme Shelter: The Myth and Reality of the American Sanctuary City". Vancouver, Western Political Science Association Conference WPSA (April 2017).

Rush, Tye, Pedraza, Francisco, Collingwood, Loren. "Relieving the Conscience: White Guilt and Candidate Evaluation." Politics of Race Immigration and Ethnicity Consortium, UCI (March 2017).

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." Philadelphia, American Political Science Association Conference (Sept. 2016)

Barreto, Matt, Loren Collingwood, Sergio Garcia-Rios, and Kassra Oskooii. "Estimating Candidate Support: Comparing EI & EI-RxC." Chicago, Midwest Political Science Association Conference (April 2016)

Bishin, Benjamin, Loren Collingwood, and Erinn Lauterbach. "Cross-Racial Mobilization in a Rapidly Diversifying Polity: Latino Candidates and Anglo Voters" Chicago, Midwest Political Science Association Conference (April 2016)

Gonzalez-O'Brien, Benjamin, Loren Collingwood, and Stephen El-Khatib. "Gimme Shelter: The Myth and Reality of the American Sanctuary City". San Diego, Western Political Science Association Conference (April 2016)

Collingwood, Loren and Antoine Yoshinaka. The new carpetbaggers? Analyzing the effects of migration on Southern politics. The Citadel Conference on Southern Politics, Charleston, SC (Mar 2016)

Alamillo, Rudy and Loren Collingwood. Chameleon Politics: Social Identity and Racial Cross-Over Appeals. American Political Science Association Conference, San Francisco (Sept 2015)

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." San Francisco, American Political Science Association Conference (Sept 2015)

Alamillo, Rudy and Loren Collingwood. Chameleon Politics: Social Identity and Racial Cross-Over Appeals. Western Political Science Association Conference, Las Vegas (April 2015)

Barreto, Matt and Loren Collingwood. Confirming Electoral Change: The 2012 U.S. Presidential Election OSU Conference (October, 2013). "Earning and Learning the Latino Vote in 2008 and 2012: How the Obama Campaign Tried, Refined, Learned, and Made Big Steps in Cross-Racial Mobilization to Latinos.



Collingwood, Loren and Ashley Jochim. 2012 Midwest Political Science Association Annual Conference (April) Chicago, IL. "Electoral Competition and Latino Representation: The Partisan Politics of Immigration Policy in the 104th Congress."

Collingwood, Loren. 2012 Western Political Science Association Annual Conference (March) Portland, OR. "The Development and Use of Cross-Racial Mobilization as Campaign Strategy in U.S. Elections: The Case of Texas 1948-2010."

Collingwood, Loren. 2012 Institute for Pragmatic Practice Annual Conference (March) Seattle, WA. "Changing Demographics, Rural Electorates, and the Future of American Politics."

Collingwood, Loren. 2012 Politics of Race, Immigration, and Ethnicity Consortium (January) Riverside, CA. "The Development of Cross-Racial Mobilization: The Case of Texas 1948-2010."

Collingwood, Loren. 2011 American Political Science Association Annual Conference (September) Seattle, WA. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization."

Forman, Adam and Loren Collingwood. 2011 American Political Science Association Annual Conference (September) Seattle, WA. "Measuring Power via Presidential Phone Records." (Poster)

Collingwood, Loren with (Tim Jurka, Wouter Van Atteveldt, Amber Boydston, and Emiliano Grossman). UseR! 2011 Conference. (August) Coventry, United Kingdom. "RTextTools: A Supervised Learning Package for Text Classification in R."

Jurka, Tim, Loren Collingwood, Wouter Van Atteveldt, Amber Boydston, and Emiliano Grossman. 2011 Comparative Agendas Project Conference. (June) Catania, Italy. "RTextTools: A Supervised Learning Package for Text Classification in R."

Collingwood, Loren and John Wilkerson. 2011 Journal of Information Technology & Politics Conference. (May) Seattle, WA. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren. 2011 Politics of Race, Immigration, and Ethnicity Consortium (May) Davis, CA. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization"

Collingwood, Loren. 2011 Western Political Science Conference (April) San Antonio, TX. "Race-Matching as Targeted Mobilization."

Collingwood, Loren. 2011 Western Political Science Conference (April) San Antonio, TX. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization"

Collingwood, Loren (with John Wilkerson). Invited Talk: Texas A&M University. (April, 2011) "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren (with John Wilkerson). Invited Talk: Rice University. (April, 2011) "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren. 2011 Midwest Political Science Association Annual Conference (April) Chicago, IL. "Race-Matching as Targeted Mobilization."

Collingwood, Loren and John Wilkerson. 2011 Text as Data Conference. (March) Evanston, IL. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren and John Wilkerson. 2011 Southern Political Science Conference. (January) New Orleans, LA. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren (with Ben Gonzalez). 2010 American Political Science Association Annual Conference. (September) Washington, DC. "The Political Process in Florida: Modeling African American Registration Rates Post *Smith v. Allwright*, 1944-1964."

Wilkerson, John, Steve Purpura, and Loren Collingwood. 2010 NSF Funded Tools for Text Workshop. (June) Seattle, WA. "Rtexttools: A Supervised Machine Learning Package in an R-Wrapper."

Collingwood, Loren and Marcela Garcia-Castanon. 2010 Western Political Science Association Annual Conference. (April) San Francisco, CA. "Negativity as a Tool: candidate poll standing and attack politics."

Collingwood, Loren. 2010 Politics of Race, Immigration, and Ethnicity Consortium. (January) Riverside, CA. "White Outreach: A spatial approach to modeling black incorporation in Florida post *Smith v. Allwright*, 1944-1965."

Collingwood, Loren. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Levels of Education, Political Knowledge and Support for Direct Democracy."

Collingwood, Loren. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "The Negativity Effect: Psychological underpinnings of advertising recall in modern political campaigns."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Negativity as a Tool: predicting negative responses and their effectiveness in the 2008 campaign season."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Switching codes: analyzing Obama's strategy for addressing Latinos in the 2008 presidential campaign."

Collingwood, Loren, (with Matt Barreto and Sylvia Manzano) 2009 Shambaugh Conference. (March) University of Iowa, IA. "More than one way to shuck a tamale: Latino influence in the 2008 general election."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Switching codes: analyzing Obama's strategy for addressing Latinos in the 2008 presidential campaign."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Pacific Northwest Political Science Conference. (October) Victoria, BC. "Negativity as a Tool: predicting negative responses and their effectiveness in the 2008 campaign season."

Collingwood, Loren and Francisco Pedraza (with Matt Barreto and Chris Parker). 2009 Center for Statistics and the Social Sciences 10th Anniversary Conference. (May) Seattle, WA. "Race of interviewer effects: perceived versus actual."

Collingwood, Loren (with Matt Barreto, Chris Parker, and Francisco Pedraza). 2009 Pacific Northwest Political Science Conference. (October) Victoria, BC. "Race of interviewer effects: perceived versus actual."

Barreto, Matt, Loren Collingwood and Todd Donovan. 2008 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Early Presidential Primaries, Viability, and Vote Switching in 2008."

Collingwood, Loren. 2008 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Levels of Education and Support for Direct Democracy: A Survey Experiment."

Collingwood, Loren. 2008 American Political Science Association Annual Conference. (September) Boston, MA. "Levels of Education and Support for Direct Democracy: A Survey Experiment." (Poster)

Collingwood, Loren. 2008 American Political Science Association Annual Conference. (September) Boston, MA. "Response Effects in Multi-Candidate Primary Vote Questions." (Poster)

## Computer Skills

R, Stata, Python, WinBugs/JAGS, L<sup>A</sup>T<sub>E</sub>X, SPSS, MySQL, Access, ArcGIS, Some C++ when interacting with R.

---

## Reports

Collingwood, Loren. (2008). *The Washington Poll: pre-election analysis*. [www.washingtonpoll.org](http://www.washingtonpoll.org).

Collingwood, Loren. (2008). *Democratic underperformance in the 2004 gubernatorial election: explaining 2004 voting patterns with an eye towards 2008*. [www.washingtonpoll.org](http://www.washingtonpoll.org).

Barreto, Matt, Loren Collingwood, Francisco Pedraza, and Barry Pump. (2009). *Online voter registration in Washington State and Arizona*. Commissioned by Pew Research Center.

Collingwood, Loren, Todd Donovan, and Matt Barreto. (2009). *An assessment of ranked choice voting in Pierce County, WA*.

Collingwood, Loren. (2009). *An assessment of the fiscal impact of ranked choice voting in Pierce County, WA*. Commissioned by the League of Women Voters.

Barreto, Matt, and Loren Collingwood. (2009). *Latino candidates and racial block voting in primary and judicial elections: An analysis of voting in Los Angeles County board districts*. Commissioned by the Los Angeles County Chicano Employees Association.

Barreto, Matt, and Loren Collingwood. (2011). *A Review of Racially Polarized Voting For and Against Latino Candidates in Los Angeles County 1994-2010*. Commissioned by Los Angeles County Supervisor Gloria Molina. August 4.

Collingwood, Loren. (2012). *Recent Political History of Washington State: A Political Map*. Commissioned by the Korean Consulate.

Collingwood, Loren. (2012). *Analysis of Polling on Marijuana Initiatives*. Commissioned by Greenberg Quinlan Rosner.

Collingwood, Loren, Sean Long, and Francisco Pedraza. (2019). *Evaluating AltaMed Voter Mobilization in Southern California, November 2018*. Commissioned by AltaMed.

---

Loren Collingwood

16

## Relevant Work Experience

### *Collingwood Research, LLC*

Statistical Consulting and Analysis

January 2008 - Present

Conducted over 200 projects involving political research, polling, statistical modeling, redistricting analysis and mapping, data analysis, micro-targeting, and R software development for political and non-profit clients. Clients include: Greenberg Quinlan Rosner, Latino Decisions, Pacific Market Research, Beck Research, Squier Knapp Dunn Communications, Anzalone-Lizst Research, League of Women Voters, Shelia Smoot for Congress, pollster.com, Comparative Agendas Project, Amplified Strategies, Gerstein Bocian & Agne, Strategies 360, the Korean Consulate, the California Redistricting Commission, Monterey County Redistricting Commission, ClearPath Strategies, Los Angeles County Council, Demchak & Baller Legal, Arnold & Porter LLP, JPM Strategic Solutions, National Democratic Institute (NDI) – on site in Iraq, Latham & Watkins, New York ACLU, United States Department of Justice (Demography), Inland Empire Funder's Alliance (Demography), Perkins & Coie, Elias Law Group; Campaign Legal Center; Santa Clara County (RPV Analysis); Native American Rights Fund (NARF); West Contra Costa Unified School District (Demography); Lawyers' Committee for Civil Rights Under Law; LatinoJustice PRLDEF, Voces de Frontera; Roswell, NM Independent School District

## Expert Witness Work

Expert Witness: *LOWER BRULE SIOUX TRIBE v. LYMAN COUNTY*, 2022

Expert Witness: *Walen and Henderson v. Burgum and Jaeger No 1:22-cv-00031-PDW-CRH*, 2022

Expert Witness: *Faith Rivera, et al. v. Scott Schwab and Michael Abbott No. 2022-CV-000089*, 2022

Expert Witness: *LULAC Texas et al. v. John Scott et al (1:21-cv-0786-XR)*, 2022

Expert Witness: *Pendergrass v. Raffensperger (N.D. Ga. 2021)*,

Expert Witness: *Johnson, et al., v. WEC, et al., No. 2021AP1450-OA*, 2021

Expert Witness: *East St. Louis Branch NAACP vs. Illinois State Board of Elections*, 2021

Expert Witness: *LULAC of Iowa vs. Pate*, 2021-2022

Expert Witness: *United States Department of Justice vs. City of Hesperia*, 2021-2022

Expert Witness: *NAACP vs. East Ramapo Central School District*, New York, 2018-2019

Riverside County, Corona and Eastvale, 2015

Los Angeles County Redistricting Commission, 2011

Racially Polarized Voting analysis of Latino and Asian candidates in San Mateo County and alternative map creation, 2010-2011

State of California, Citizens Redistricting Commission, including Blythe, CA, in Riverside County, 2011

Monterey County, CA Redistricting, alternative map creation, 2011

*Loren Collingwood*

17

*Greenberg Quinlan Rosner*

Assistant Analyst, Anna Greenberg

June 2005 - May 2007

Assisted in the development of questionnaires, focus group guidelines, memos, and survey reports for political, non-profit, and corporate clients. Moderated in-depth interviews and focus groups.

*Greenberg Quinlan Rosner*

Field Associate

December 2003 - June 2005

Managed qualitative and quantitative data collection process in the U.S. and internationally. Provided methodological advice, including sample stratification, sampling Latino populations, and modal sampling strategies.

*Congressman Adam Schiff*

Database Manager

March 2003 - June 2003

Managed constituent mail and survey databases; updated and maintained Member's Congressional voting record.

*Strategic Consulting Group*

Field Organizer, Carol Roberts for Congress

July 2002 - November 2002

Recruited and coordinated over 100 volunteers for mailings, canvassing, phone banking, and GOTV operations. Developed internship program and managed 15 interns from local colleges and high schools.

*Institute for Policy Studies*

Intern, John Cavanagh

May 2001 - August 2001

Provided research assistance for projects advocating reform of the WTO, World Bank, and IMF. Worked on reports and op-ed pieces on global economic issues advocating fair trade.

[UNM A-Z \(https://directory.unm.edu/departments/\)](https://directory.unm.edu/departments/)[myUNM \(https://my.unm.edu\)](https://my.unm.edu)[Directory \(https://directory.unm.edu\)](https://directory.unm.edu)

# UNM Political Science

(<http://polisci.unm.edu>)

## Loren Collingwood

### Associate Professor



**Email:** [lcollingwood@unm.edu](mailto:lcollingwood@unm.edu) (<mailto:lcollingwood@unm.edu>)

**Personal Website (** <https://www.collingwoodresearch.com/> **)**

**Curriculum vitae** (<cvs/collingwood-cv-2020.pdf>)

### Research Area/s:

American Politics



## Biography:

Loren Collingwood is an associate professor in the Department of Political Science at University of New Mexico. His research interests include American politics, as well as race and ethnic politics with a particular emphasis on Latino politics and immigration. He is the co-author of "Sanctuary Cities: The Politics of Refuge" (2019) and author of "Campaigning in a Racially Diversifying America: When and How Cross-Racial Electoral Mobilization Works" (2020) both with Oxford University Press. Collingwood holds a Ph.D. from University of Washington and B.A. from California State University, Chico.

---

## Department Office

Phone: 505 277-5104

Fax: 505 277-2821

(mailto:polisci@unm.edu)

## Contact

Department Chair: Jami Nelson-Nunez (<https://polisci.unm.edu/people/faculty/profile/jami-g.-nelson-nunez.html>)

Department Administrator: Marliiss McGarvey

(<https://polisci.unm.edu/people/staff/profile/ashley-banks.html>)

Graduate Director: Christopher Butler

(<http://polisci.unm.edu/people/faculty/profile/christopher-butler.html>)

Graduate Program Coordinator: Amaris Gutierrez (mailto:agutierrez174@unm.edu)

Undergraduate Advisor (Arts & Sciences): Cory Munoz

(<https://polisci.unm.edu/people/staff/profile/cory-mu%C3%B1oz.html>)

Pre-Law Advisor: Cory Munoz (mailto:pkierst@unm.edu) (mailto:egrigsby@unm.edu)



(<https://www.facebook.com/polisci.unm.edu/>)



(<https://twitter.com/UNMPoliSci>)

## Mailing Address

Department of Political Science

MSC 05-3070

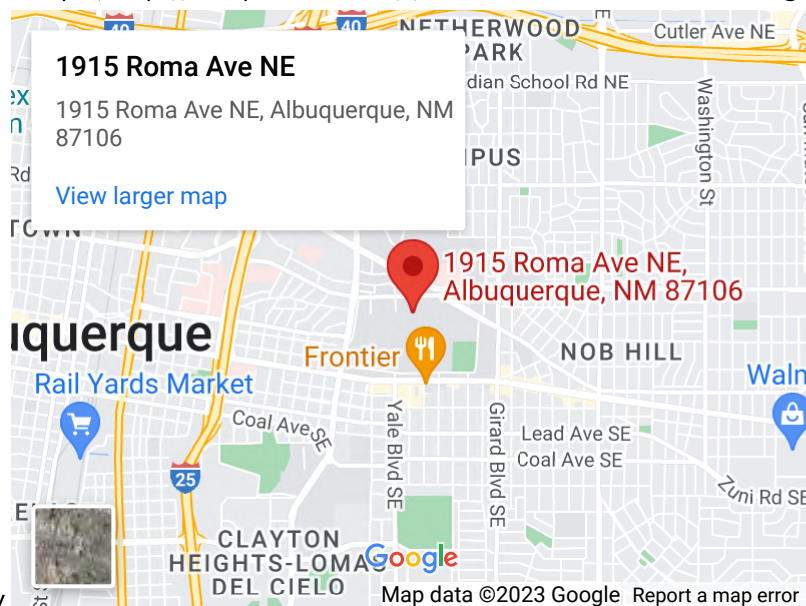
1 University of New Mexico

Albuquerque, NM 87131-0001

## Physical Street Address

The University of New Mexico  
Department of Political Science  
Social Sciences Building #78  
MSC 05-3070  
1 University of New Mexico  
Albuquerque, NM 87131-0001

Find us on the UNM Campus Map (<http://map.unm.edu/>): Social Sciences Building, #78, just



north of Zimmerman Library.

(<https://www.unm.edu>)

© The University of New Mexico  
Albuquerque, NM 87131, (505) 277-0111  
New Mexico's Flagship University



(<https://www.facebook.com/universityofnewmexico>)



(<https://instagram.com/uofnm>)



(<https://twitter.com/unm>)



(<https://www.youtube.com/user/unmlive>)

more at [social.unm.edu](https://social.unm.edu) (<https://social.unm.edu>)

Accessibility (<https://www.unm.edu/accessibility.html>) Legal (<https://www.unm.edu/legal.html>)

Contact UNM (<https://www.unm.edu/contactunm.html>)

Consumer Information (<https://www.unm.edu/consumer-information/>)

New Mexico Higher Education Dashboard ([https://hed.state.nm.us/resources-for-schools/public\\_schools/tableau-charts-and-tables](https://hed.state.nm.us/resources-for-schools/public_schools/tableau-charts-and-tables))





# EXHIBIT 4

## Expert Report of Dr. Loren Collingwood

*Grant v. Raffensperger*, No. 1:22-cv-00122-SCJ (N.D. Ga. 2022)

January 13, 2022

*Loren Collingwood*

---

## Background and Qualifications

I am an associate professor of political science at the University of New Mexico. Previously, I was an associate professor of political science and co-director of civic engagement at the Center for Social Innovation at the University of California, Riverside. I have published two books with Oxford University Press, 39 peer-reviewed journal articles, and nearly a dozen book chapters focusing on sanctuary cities, race/ethnic politics, election administration, and racially-polarized voting. I received a Ph.D. in political science with a concentration in political methodology and applied statistics from the University of Washington in 2012 and a B.A. in psychology from California State University, Chico, in 2002. I have attached my curriculum vitae, which includes an up-to-date list of publications.

In between my B.A. and Ph.D., I spent 3-4 years working in private consulting for the survey research firm Greenberg Quinlan Rosner Research in Washington, D.C. I also founded the research firm Collingwood Research, which focuses primarily on the statistical and demographic analysis of political data for a wide array of clients, and led redistricting and map-drawing and demographic analysis for the Inland Empire Funding Alliance in Southern California. I am the redistricting consultant for the West Contra Costa Unified School District, CA, independent redistricting commission in which I am charged with drawing court-ordered single member districts.

I served as a testifying expert for the plaintiff in the Voting Rights Act Section 2 case *NAACP v. East Ramapo Central School District*, No. 17 Civ. 8943 (S.D.N.Y. 2020), in which I participated from 2018 to 2020. In that case, I used the statistical software eiCompare and WRU to implement Bayesian Improved Surname Geocoding (BISG) to identify the racial/ethnic demographics of voters and estimate candidate preference by race using ecological data. I am the quantitative expert in *LULAC v. Pate*, Case No. CVC056403 (D. Iowa 2021), and have filed an expert report in that case. I am the racially-polarized voting expert for plaintiff in *East St. Louis Branch NAACP, et al. vs. Illinois State Board of Elections, et al.*, Case No. 1:21-CV-03091 (N.D. Ill. 2021), having filed two reports in that case. I am the racially-polarized voting expert for the plaintiff in *Johnson, et al., v. WEC, et al.*, No. 2021AP1450-OA (Wis. 2021), having filed a report in that case. I am compensated at a rate of \$400/hour.

## Executive Summary

- On every metric, Black Georgians are disadvantaged socioeconomically relative to non-Hispanic White Georgians. Blacks are worse off than Whites on the following measures— income, unemployment, poverty, health, and educational attainment.
- These socioeconomic disparities have an adverse effect on the ability of Black Georgians to participate in the political process, as measured by voter turnout and other forms of political participation.
- Black Georgians vote at significantly lower rates than White Georgians. That is true at the statewide, county, and precinct levels, including in the Atlanta-Sandy Springs-Alpharetta Metropolitan area and in Georgia’s Black Belt region.
- The data show a significant relationship between turnout and disparities in health, employment, and education; as health, education, and employment outcomes increase, so does voter turnout in a material way.
- Black Georgians also lag behind White Georgians in other forms of political participation, such as making campaign contributions, engaging local officials, and running for office.
- The academic literature overwhelmingly shows that these low levels of political participation are attributable to the socioeconomic disparities discussed above.

My opinions are based on the following data sources: the American Community Survey (ACS) across time, 2020 statewide, county-level, and precinct-level voter registration and turnout aggregate data from the Georgia Secretary of State, 2010-2020 statewide voter turnout from Georgia Secretary of State, 2014-2020 county-level voter turnout data from the Georgia Secretary of State, and the 2020 Cooperative Election Study.

## Analysis

### A. Senate Factor 5

I have been asked to examine item 5 of what has come to be known as the Senate Factors (United States Senate 1982, 27). In the 1982 Voting Rights Act extension, the Senate Judiciary Committee listed out factors that could be considered (alongside the *Gingles* Test) in evaluating a Section 2 claim under the Voting Rights Act. These factors allow experts to inform the court regarding the extent that minorities “are denied equal access to the political process.”

Senate Factor 5 examines the extent that minority group members (here, Black individuals) in a political jurisdiction (in this case, the state of Georgia) bear the effects of discrimination in education, employment, and health which hinder said group’s political participation. Without a doubt, my analysis demonstrates that Black Georgians face clear and significant disadvantages in the above areas that reduce their ability to participate in the political process.

## B. Socioeconomic Disparities

From the 2015-2019 ACS, I constructed the following metrics for both the Black and White populations in Georgia: household median income; total households reporting income above \$100,000; total households reporting income above \$125,000; households receiving Supplemental Nutrition Assistance Program (“SNAP” or “food stamps”) benefits in the past 12 months; percent of the population living below the poverty line in the last 12 months; percent of children living below the poverty line; percent of adults living below the poverty line; percent of the population over the age of 25 with a high-school diploma; percent of the population over the age of 25 with a college degree; unemployment rate; percent of the population reporting a disability; and percent of the population reporting health insurance. These metrics reflect broad racial disparities in education, employment, income, and health.

As shown in Table 1, there are clear racial disparities in employment. The unemployment rate among Black Georgians (8.7%) is nearly double that of White Georgians (4.4%). And disparities persist even among those *with* employment: White households are twice as likely as Black households to report an annual income above \$100,000. Black Georgians, meanwhile, were more than twice as likely—and Black children in particular more than three times as likely—to live below the poverty line over the past year. And Black Georgians were nearly three times more likely than White Georgians to receive SNAP benefits.

On education, Black adults over the age of 25 are more likely than their White peers to lack a high school diploma (13.3% compared to 9.4%). These disparities fare no better in higher education. 35% of White adults over the age of 25 have obtained a bachelor’s degree or higher compared to 24% of their Black counterparts.

Finally, on health, the Black population in Georgia is slightly more likely to report a disability (11.8% compared to 10.9% for Whites), and is more likely to lack health insurance (18.9% compared to 14.2% among 19–64-year-olds). All told, the numbers convey consistent racial disparities across economics, health, employment, and education.

	Black	White	White - Black
Median Household Income	\$44670	\$67955	\$23285
Pct. HH Income > \$100K	0.165	0.322	0.157
Pct. HH Income > \$125K	0.096	0.224	0.128
Pct. HH receiving SNAP	0.227	0.077	-0.15
Pct. below poverty line	0.215	0.101	-0.114
Pct. below poverty line, children	0.313	0.115	-0.198
Pct. below poverty line, VAP	0.18	0.098	-0.082
Pct. w/ Less than HS Diploma	0.133	0.094	-0.039
Pct. w/ Bachelor's Degree or higher	0.24	0.351	0.111
Pct. Unemployed	0.087	0.044	-0.043
Pct Disabled, ages 19-64	0.118	0.109	-0.009
Pct. Uninsured, ages 19-64	0.189	0.142	-0.047

Table 1. Socio-economic indicators across Black and White individuals in Georgia, 2015-2019 American Community Survey (ACS).

These patterns hold across nearly every county in the state. I gathered the same metrics at the county level, and only considered counties with at least 1,000 White and Black residents, respectively. Georgia has 159 counties; of these, 141 meet this threshold. Whites have a higher median household income than Blacks in 136 of 141 of these counties.<sup>1</sup> Just two counties—Habersham and Paulding—feature a higher Black median household income (Habersham: \$64,286 vs. \$50,418; Paulding: \$68,843 vs. \$50,418). Among households making more than \$100,000 per year, Whites have an advantage over Blacks in 140 of the 141 counties.

Turning to SNAP, a higher percentage of Blacks have relied on SNAP in the past 12 months than Whites in 140 of the 141 counties. In 136 of the 141 counties, Blacks are more likely to live below the poverty line than Whites. And in 130 of the 141 counties, Whites are more likely than Blacks to have a 4-year college degree or higher.

<sup>1</sup> The ACS does not provide median income for Black households in three counties; these counties are treated as missing for this median household income comparison.

Finally, the county distribution is not as extreme with respect to unemployment and uninsured status—but is still heavily weighted strongly towards Black disadvantage. Blacks have a higher unemployment rate than Whites in 118 of the 141 counties (84%), and the share of the population that is uninsured is higher for Blacks than for Whites in 92 of the 141 counties (65%).

## **C. Effect on Political Participation**

### **1. Academic Literature**

Socioeconomic disparities unquestionably affect political participation. There is vast literature in political science that demonstrates a strong and consistent link between socio-economic status (SES) and voter turnout. In general, voters with higher income and education are disproportionately likely to vote and participate in American politics (Wolfinger and Rosenstone 1980; Leighley and Nagler 2013; Nie et al. 1996; Mayer 2011). Brady, Verba, and Schlozman (1995) argue that resources—conceptualized as time, money, and civic skills (all related to education and income)—drive donation behavior, campaign volunteering, and voting. These broad SES findings hold across a variety of research designs. For example, Henderson (2018) uses a hookworm eradication program haphazardly (i.e., at random) applied to counties in the early 20th century South (the program exogenously covaries with educational attainment) to show a causal relationship between education and political participation.

Other research is in accord. Avery (2015) indicates that states with higher income inequality have greater income bias in turnout. Shah and Wichowsky (2019) show a link between home foreclosures and participation—neighborhoods with a higher share of home foreclosures during the 2008 financial crisis subsequently experienced a drop in voter turnout, and affected individuals were less likely to vote in future elections. Additional findings in Pacheco and Fletcher (2015) indicate an association between self-reported health and voter turnout.

This overwhelming academic literature shows that the socioeconomic disadvantages suffered by Black Georgians will affect their ability to participate in the political process.

### **2. Voter Turnout**

When Georgians register to vote, they indicate their race. The Georgia Secretary of State maintains yearly state, county, and precinct-level voter registration and turnout by race. I gathered this data for the 2020 general election.<sup>2</sup> To calculate voter turnout, for both Black and White, respectively, I divide the total number of people who voted by the total number of registered voters.

#### **a. Statewide Analysis**

For the years 2010-2020, I gathered statewide turnout by race data. The 2010-2012 turnout data is only available on the Secretary of State's website at the statewide level. Table 2 displays even-year statewide voter turnout by race across the 2010-2020 period. For each election cycle, registered White voters turned out at higher rates than did registered Black voters. For instance, in

---

<sup>2</sup> General Election Turnout by Demographics November 2020, Georgia Sec. of State (Nov. 3, 2020), [https://sos.ga.gov/index.php/elections/general\\_election\\_turnout\\_by\\_demographics\\_november\\_2020](https://sos.ga.gov/index.php/elections/general_election_turnout_by_demographics_november_2020) (last accessed Dec. 23, 2021).



2020, Whites turned out at 72.6%, whereas Blacks turned out at 60%. The gap is most narrow during Obama’s 2012 re-election—at 3.1%—but in every single case, Whites vote at a higher rate than Blacks.

Year	Black TO	White TO	Gap	Total Turnout
2020	60	72.6	-12.6	65.7
2018	53.9	62.2	-8.3	56.4
2016	56.2	67.9	-11.6	62
2014	40.6	47.5	-6.9	42.9
2012	72.6	75.7	-3.1	72.9
2010	50.4	55.9	-5.5	52.1

Table 2. Voter turnout by race, statewide between 2010-2020, taken from Georgia Secretary of State website.

*b. Countywide Analysis*

Next, I compare the share of a county’s White registrants who voted in 2020 against the share of a county’s Black registrants who voted in 2020. Figure 1 visually compares turnout (denominator is registration) between Whites and Blacks across the state’s counties. In almost every single county, White registrants voted at higher rates than did Black registrants. This is visually demonstrated by the fact that almost all dots (counties) fall below the identity line, as opposed to above. Only in Chattahoochee and Liberty Counties did Black registrants cast ballots at higher rates than White registrants.

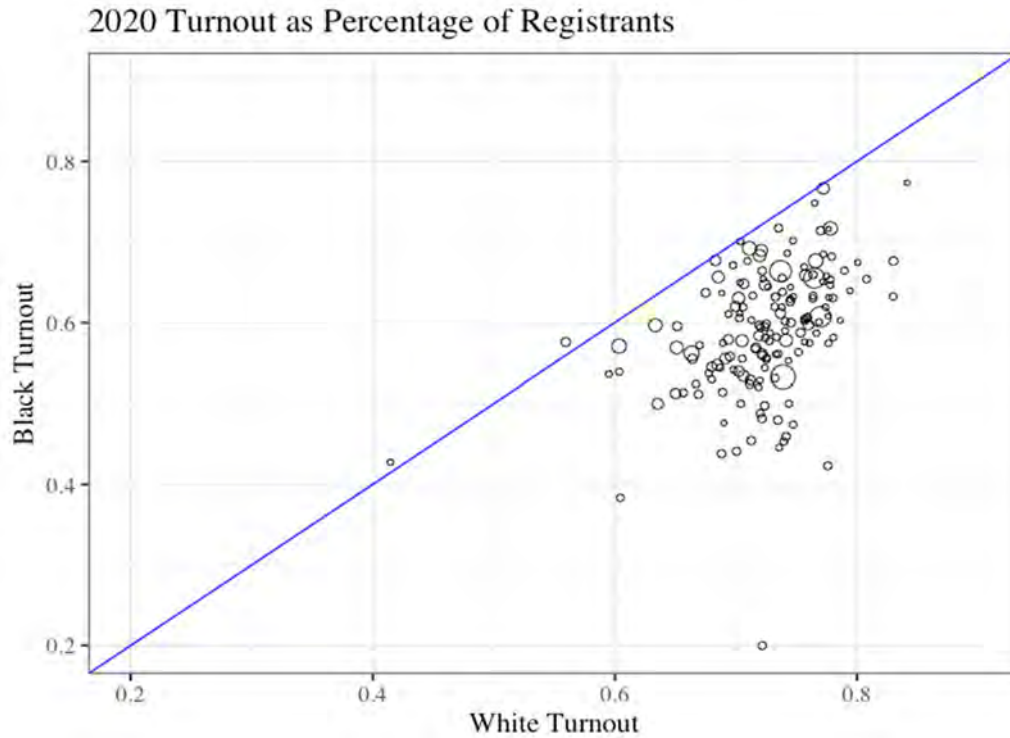


Figure 1. 2020 Turnout White-Black differential by County, registered voters.

Below, Figure 2 plots out the same relationship, but swaps out registration for voting age population (VAP) in the denominator. The relationship is very similar. The substantive findings do not change regarding which denominator is selected; Whites vote at higher rates than do Blacks.

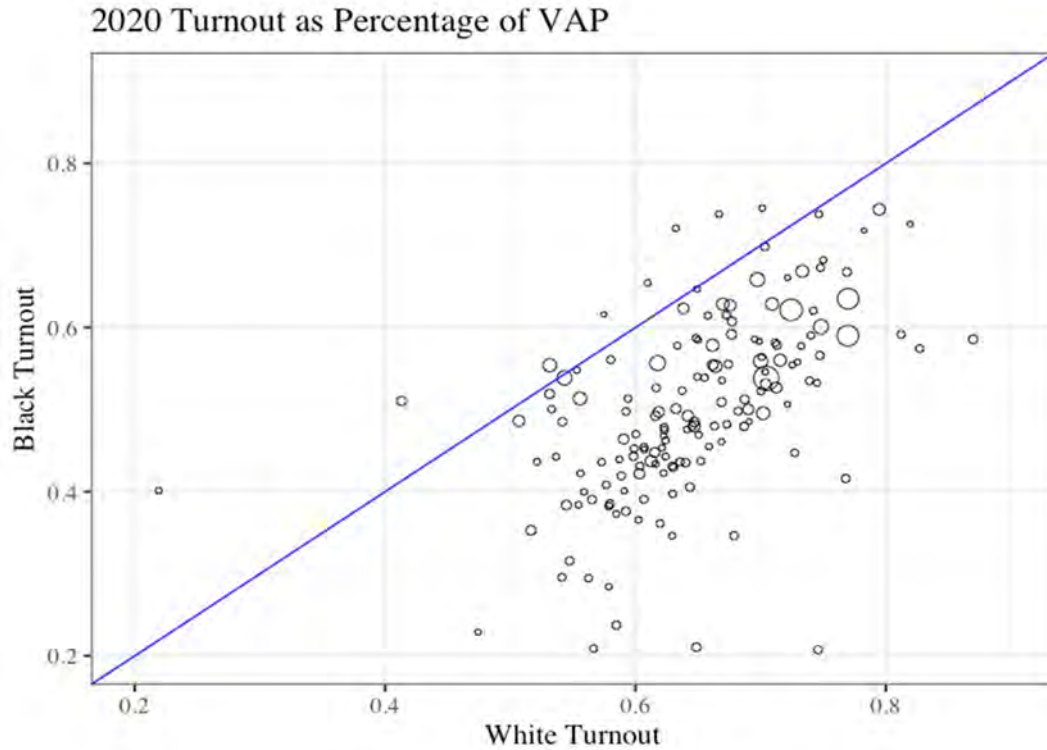


Figure 2. 2020 Turnout White-Black differential by County, voting age population.

I replicate this analysis for 2014-2018 because this data is readily available from the Georgia Secretary of State. Figure 3 plots out the 2018 White vs. Black turnout gap and demonstrates substantially the same trends discussed above. The next set of figures present the same analyses for 2016 and 2014.

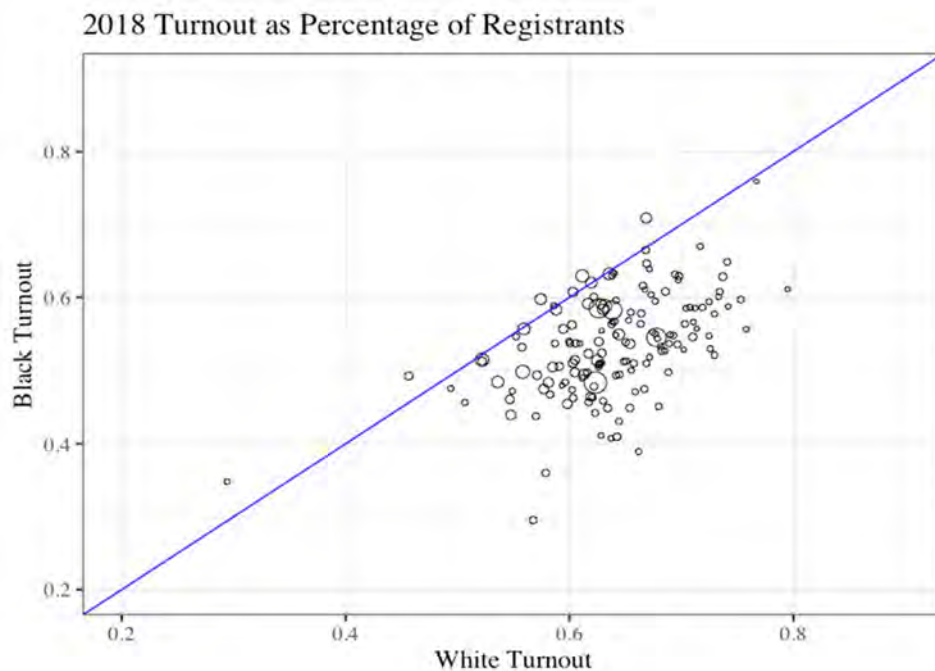


Figure 3. 2018 Turnout White-Black differential by County.

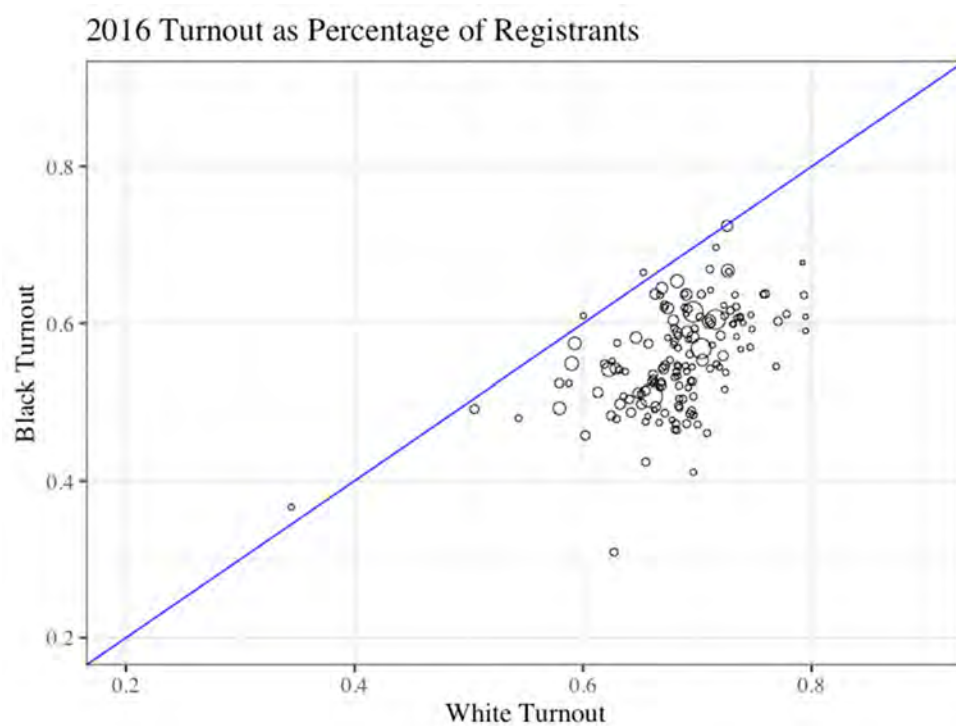


Figure 4. 2016 Turnout White-Black differential by County.

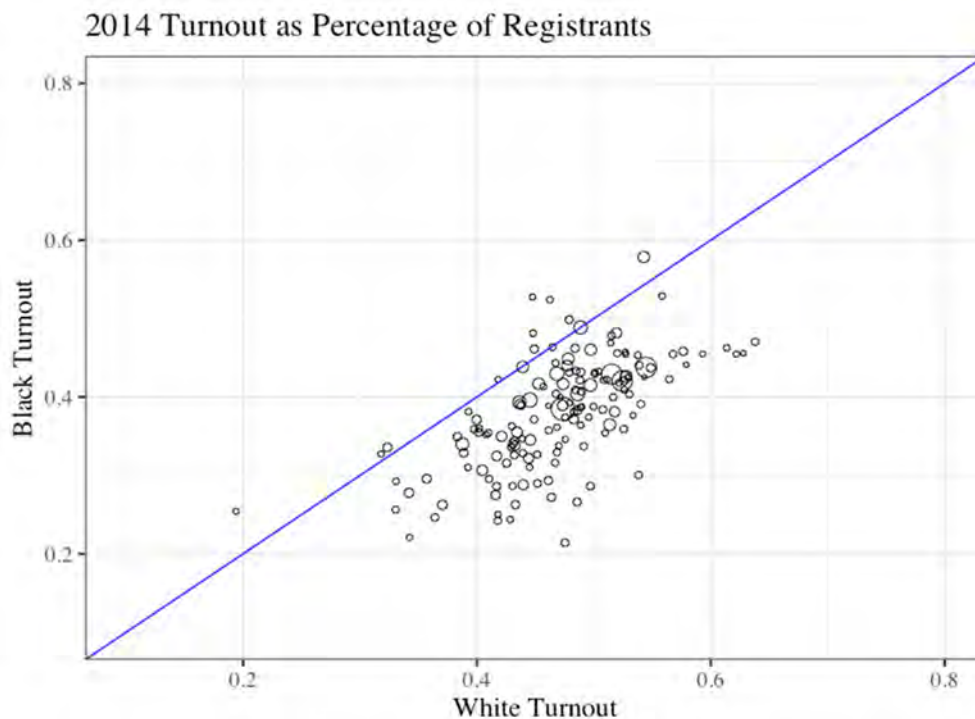


Figure 5. 2014 Turnout White-Black differential by County.

c. Precinct-Level Analysis

I replicated the above county analysis with Georgia precincts gathered from the Secretary of State's website.<sup>3</sup> The 2020 precinct file contains 2,784 precincts across the state and includes both registration and votes cast for Whites and Blacks. I subset the data to precincts with more than 100 Blacks and 100 Whites, reducing the dataset to 1,957 precincts., in order to reduce the influence of outliers. The analysis of all precincts does not change the core substance of the findings. Of the 1,957 precincts, Whites have a higher turnout in 1,549 (79.2%) precincts, Blacks in 408 (20.8%) precincts. Figure 6 visually displays the results, which are consistent with both the statewide and county analyses. The clear majority of precincts dots fall below the blue identity line.

<sup>3</sup> General Election Turnout, *supra* note 2.

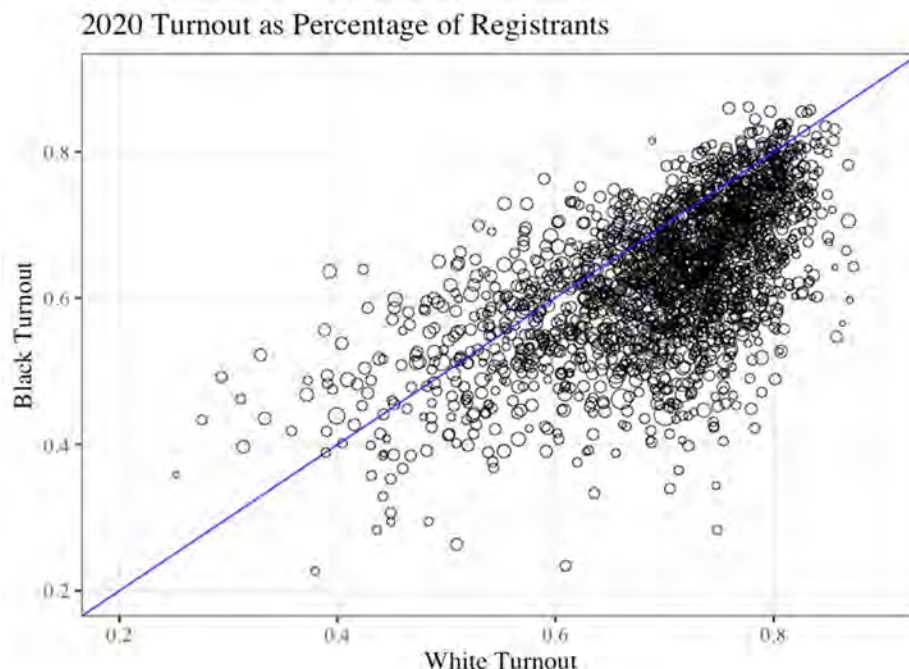


Figure 6. 2020 Turnout White-Black differential by precinct.

*d. Analysis of Atlanta-Sandy Springs-Alpharetta Metropolitan Area*

I also examined Black vs. White voter turnout rates in the Atlanta-Sandy Springs-Alpharetta Metropolitan area, which is one of the areas under legal review. I therefore subset Georgia's counties to just those in the Atlanta-Sandy Springs-Alpharetta, GA Metropolitan Statistical Area.<sup>4</sup> Figures 7 and 8 plot out the White vs. Black turnout gap based on both registration and voting age population. The trend is very similar to the overall Georgia trend.

---

<sup>4</sup> The counties include Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton.

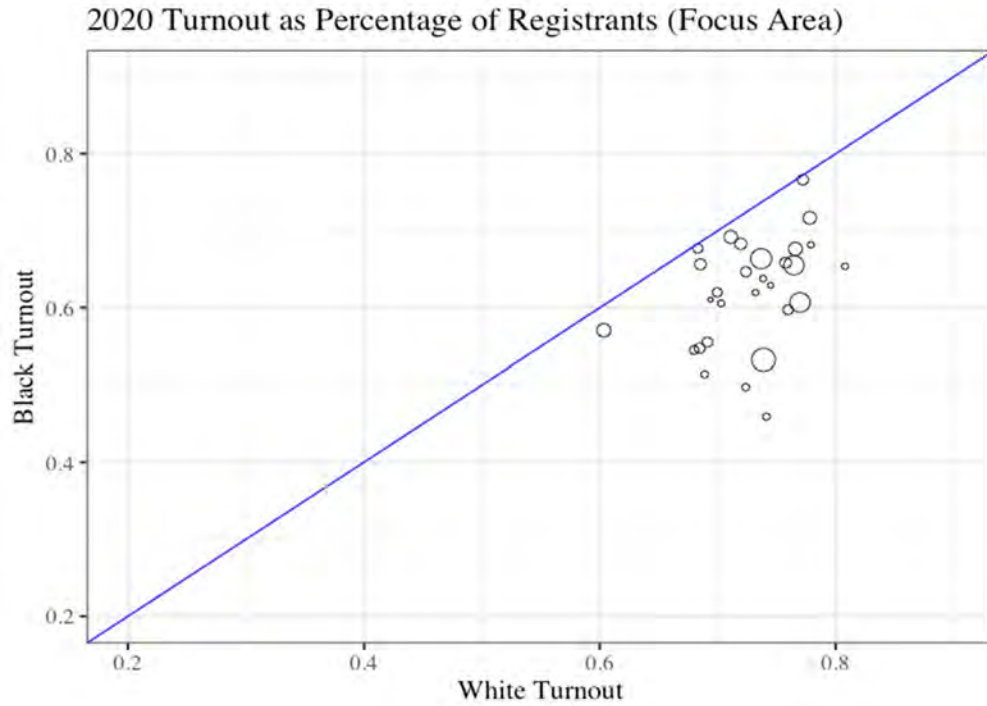


Figure 6. 2020 Turnout White-Black differential by county in Atlanta-Sandy Springs-Alpharetta Focus Area.

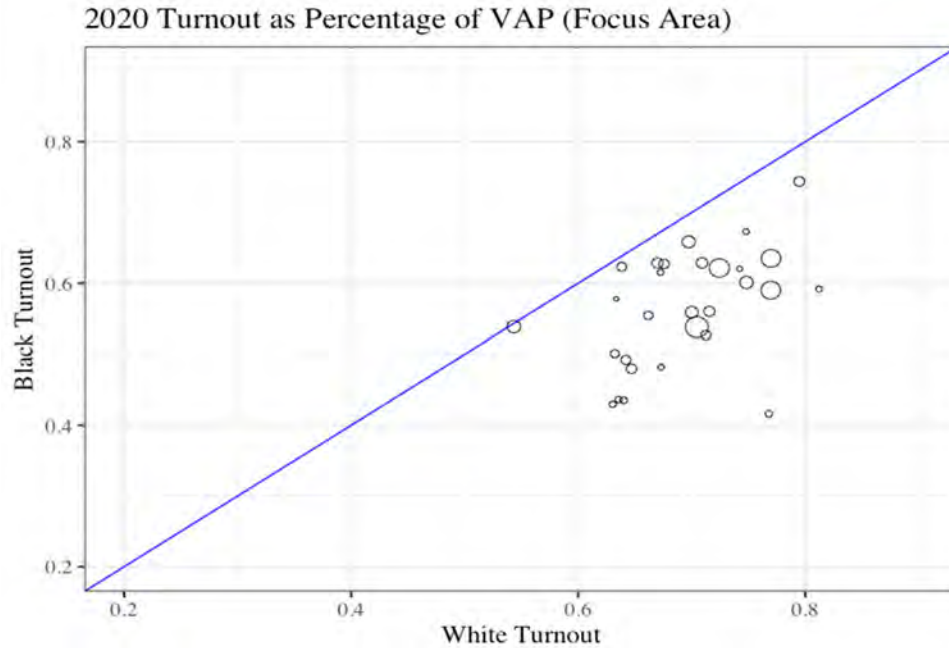


Figure 7. 2020 Turnout White-Black differential by county in Atlanta-Sandy Springs-Alpharetta Focus Area, Voting Age Population.

Finally, I conduct the same analysis among precincts falling into the same set of counties. Again, in the overwhelming majority of precincts, Whites vote at higher rates than Blacks.

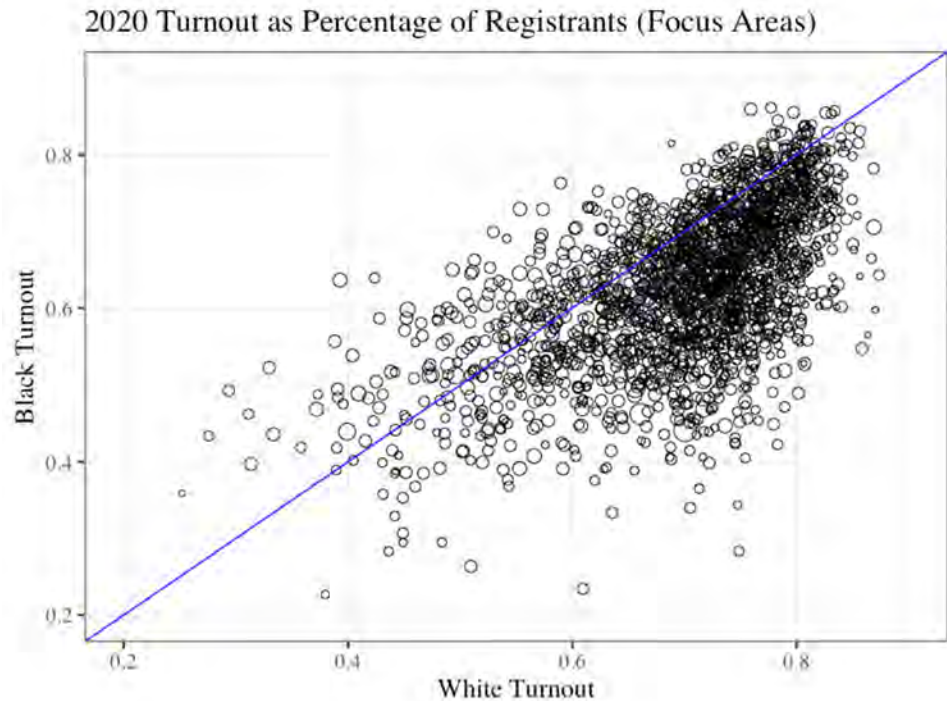


Figure 8. 2020 Turnout White-Black differential by precinct in Atlanta-Sandy Springs-Alpharetta Focus Area.

*e. Analysis of Georgia's Black Belt Area*

As an additional set of analyses, I also examined Black vs. White voter turnout rates in the traditional “Black Belt” area of the state, which is also under legal review in this case. The geographic area includes the following counties, which I subset the data to: Baker, Bibb, Burke, Calhoun, Chattahoochee, Clay, Dooly, Dougherty, Early, Glascock, Hancock, Houston, Jefferson, Lee, Macon, Marion, McDuffie, Miller, Mitchell, Muscogee, Peach, Quitman, Randolph, Richmond, Schley, Stewart, Sumter, Talbot, Taliaferro, Taylor, Terrell, Twiggs, Warren, Washington, Webster, and Wilkinson.

Figures 9 and 10 plot out the White vs. Black turnout gap based on both registration and voting age population in this area. The trend is very similar to the overall Georgia trend.



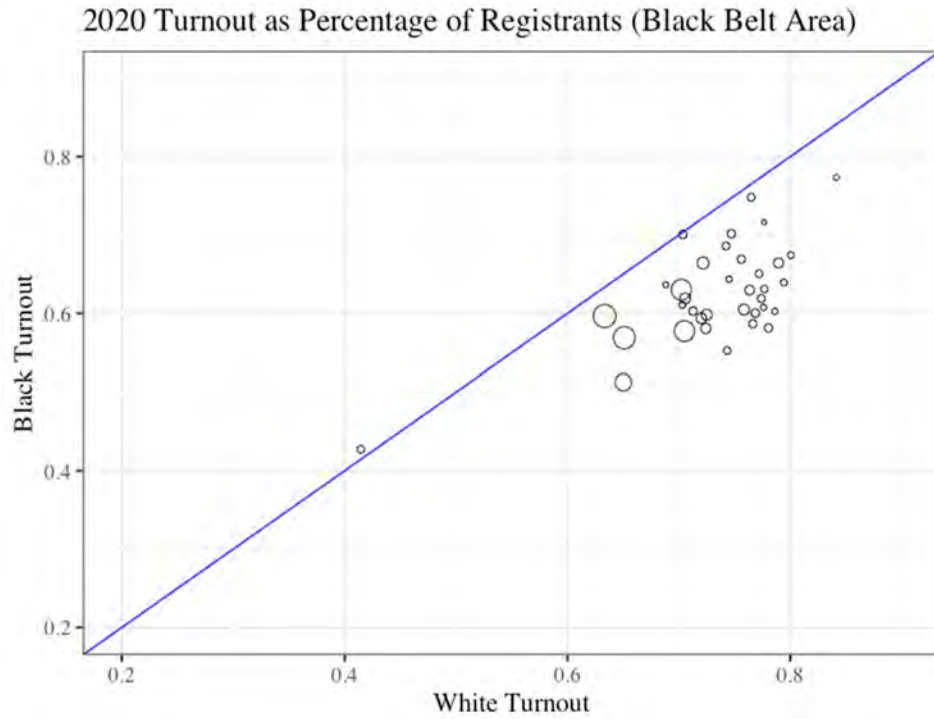


Figure 9. 2020 Turnout White-Black differential by county in Black Belt Focus Area.

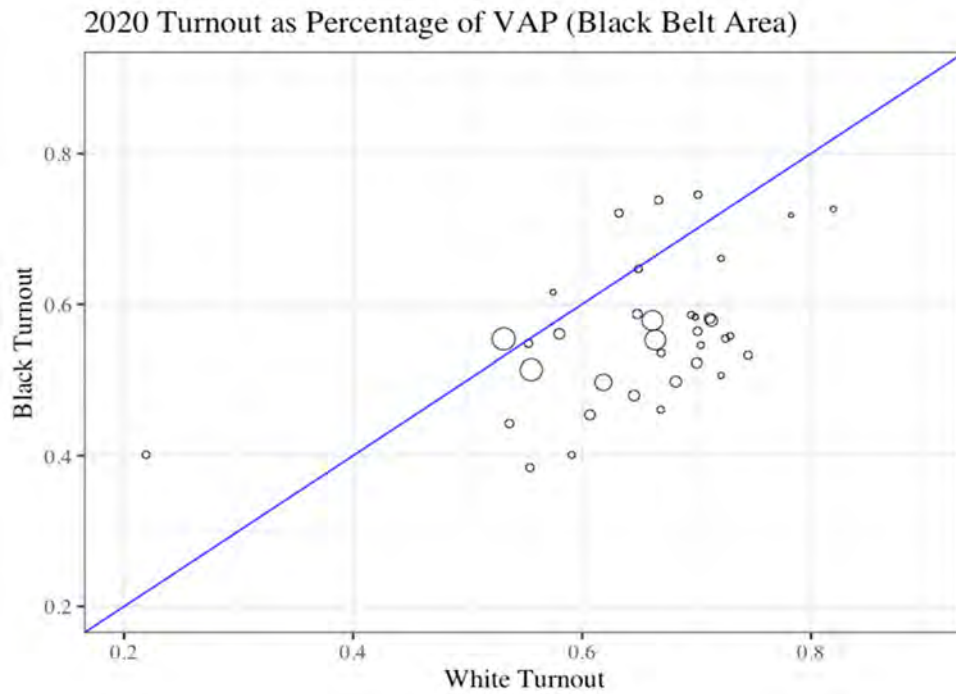


Figure 10. 2020 Turnout White-Black differential by county in Black Belt Focus Area, Voting Age Population

Similar to the analysis in the Atlanta-Sandy Springs-Alpharetta focus area, I examined the White-Black turnout differential among precincts falling into the set of Black Belt counties. As depicted in Figure 11, once again, I find that Whites vote at higher rates than do Blacks in the majority of precincts.

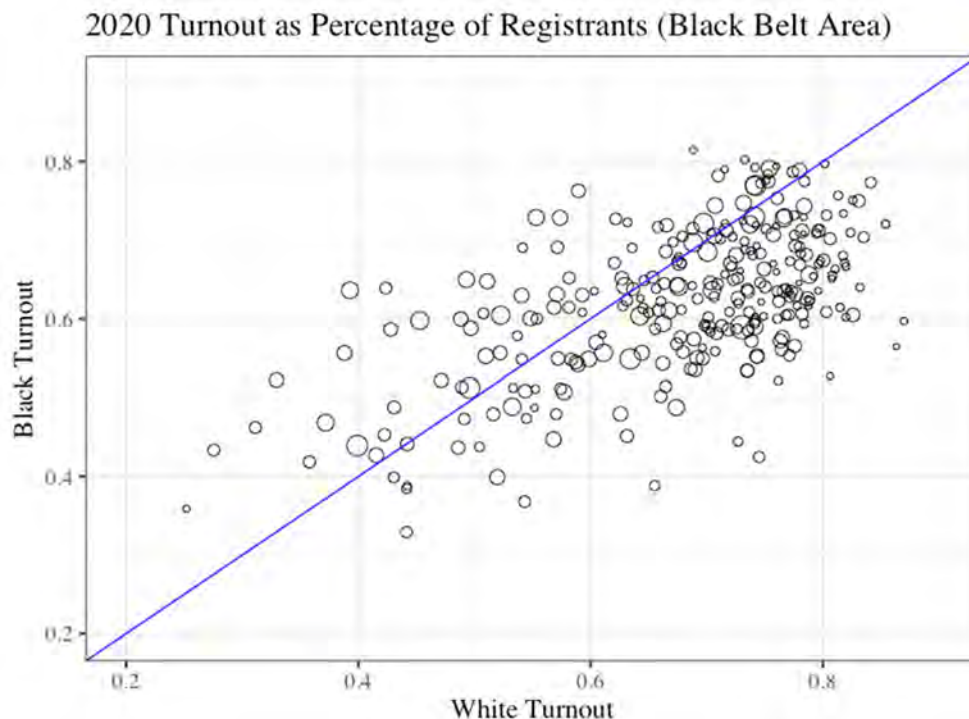


Figure 11. 2020 Turnout White-Black differential by precinct in Black Belt Focus Area, Percentage of Registrants

*f. Relationship Between Turnout and Socioeconomic Disparities*

This section examines how these turnout differences are related to the socio-economic disparities discussed at the outset of this report, like education and income. Specifically, I examine the county-level relationship between different measures of Black educational attainment and Black voter turnout. Figure 9 plots out the relationship between percent Black with less than a high school education and Black voter turnout.<sup>5</sup> The blue line is the bivariate regression line ( $\beta = -0.35$ ,  $p < 0.001$ ), which shows that each 10 percentage-point increase in the size of the Black population without a high school degree decreases Black turnout by 3.5 percentage points.

<sup>5</sup> For each analysis, I subset the data to counties with more than 1,000 registered Black voters. I do this to avoid outlier issues that can emerge with smaller counties. However, this subset does not change in any substantive way the results compared to a full data analysis. All regression analyses are weighted by total Black registration in the county.

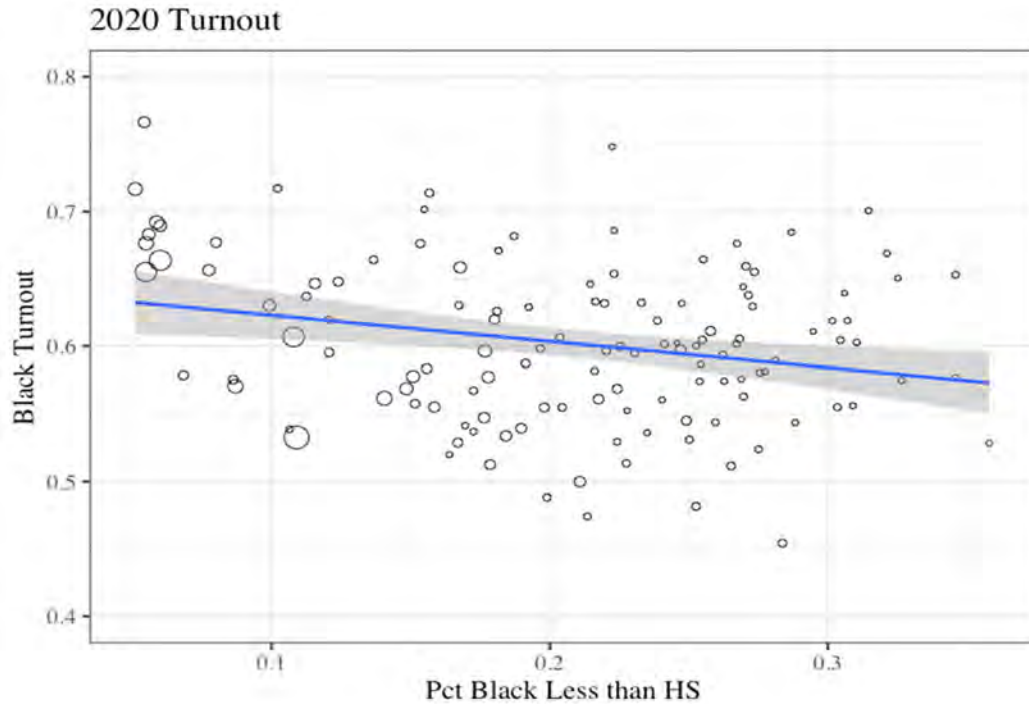


Figure 9. Association between Pct. Black Less than High School education and Black turnout.

Figure 10 plots out the relationship between the share of Blacks with a 4-year college degree and the share of Black registrants who voted by county. The relationship paints an inverse picture to the previous plot. As a county's Black education rises, so does the turnout rate. A bivariate regression reveals a statistically significant relationship ( $\beta = 0.23$ ,  $p < 0.001$ ), indicating that Black turnout rises 2.3 percentage points for each 10 percentage-point increase in percent Black 4-year degree.

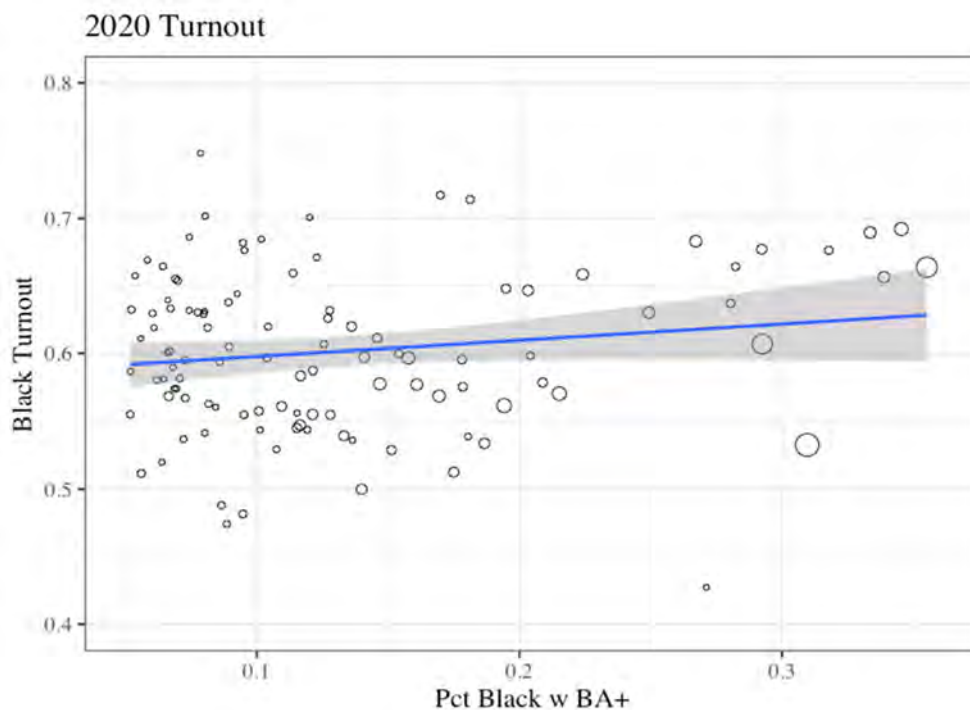


Figure 10. Association between Pct. 4-year degree and Black turnout.

Turning to income-related measures, Figure 11 plots out the relationship between the share of Blacks below the poverty line and the share of Black registrants who voted by county. As a county's Black poverty rises, the turnout rate declines. A bivariate regression reveals a statistically significant relationship ( $\beta = -0.49$ ,  $p < 0.001$ ), indicating that Black turnout falls 4.9 percentage points for each 10 percentage-point increase in percent Black below the poverty line.

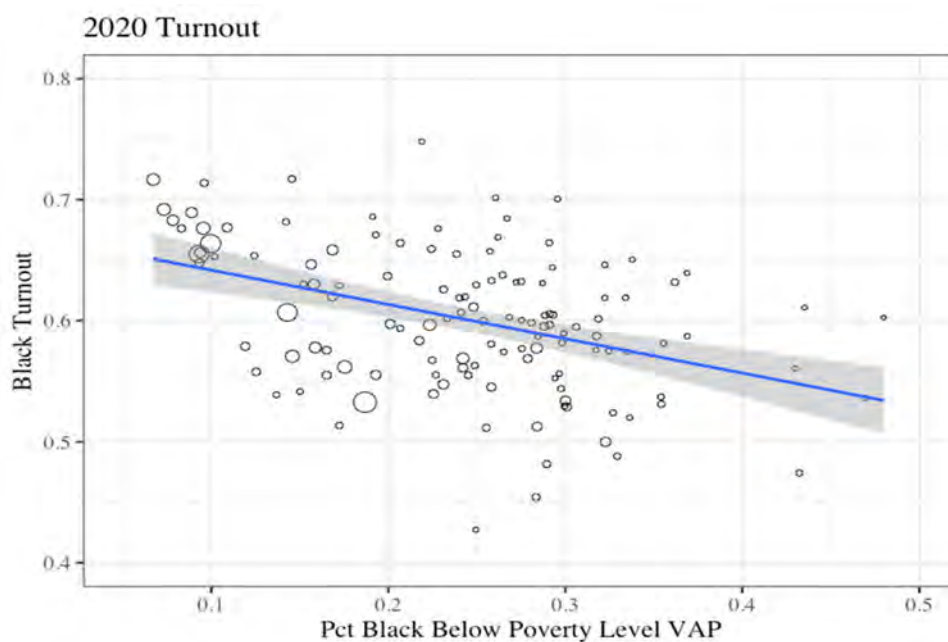


Figure 11. Association between Percent Black below the poverty line and Black turnout.

Figure 12 plots out the relationship between the logged Black median household income and the share of Black registrants who voted by county. As a county's Black household income rises, the turnout rate rises. A bivariate regression reveals a statistically significant relationship ( $\beta = 0.117$ ,  $p < 0.001$ ).

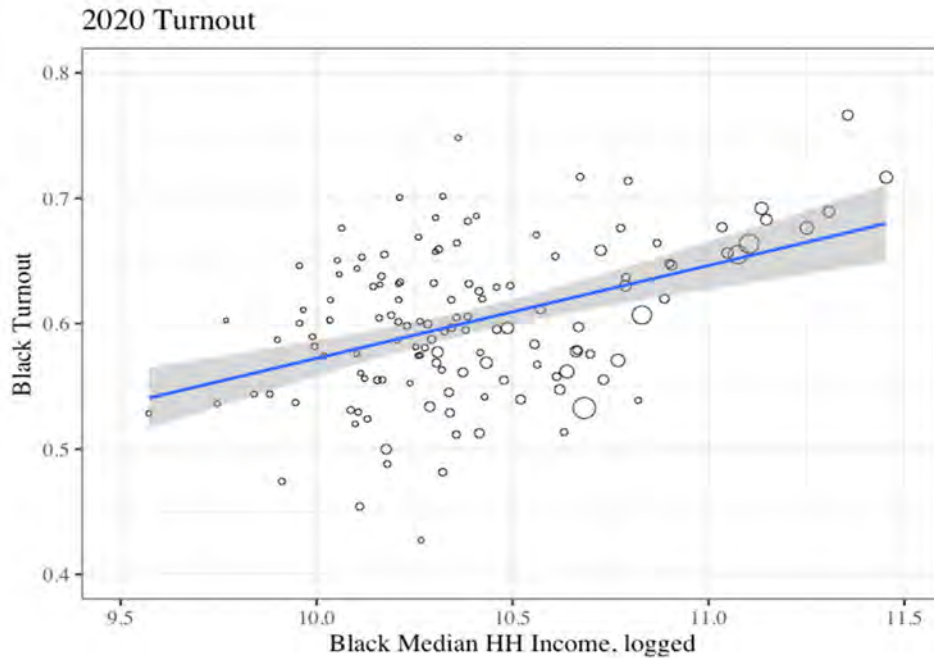


Figure 12. Association between Percent Black median household income and Black turnout.

### 3. Other Forms of Voter Participation

This next section examines disparities between Blacks and Whites among other modes of voter participation. I downloaded the 2020 Cooperative Election Study (CES) common form post-election survey.<sup>6</sup> The CCES is a widely-used, publicly-available survey dataset that political scientists use to write academic papers and inform our scientific knowledge of the American voter. The full dataset contains 61,000 interviews. I subset the data to Georgia respondents, of which there are 2,002. To compare White vs. Black political participation, I further subset the data to only non-Hispanic White and Black respondents. This yields a dataset of  $n=1,753$ . Finally, 339 individuals who CCES initially interviewed in the pre-election survey did not ultimately take the post-election survey; thus, the final dataset is  $n=1,414$ . All tabulations presented below include survey weights to ensure that the analysis is representative of the target audience.<sup>7</sup>

<sup>6</sup> 2020 Cooperative Election Study, Harvard University, available online at: <https://cces.gov.harvard.edu> (last accessed Dec. 23, 2021).

<sup>7</sup> Weighting data here has the effect of growing the sample size of the dataset to  $n=1,557$  respondents.

The survey asks a battery of political participation questions where respondents indicate they have (1) or have not (0) participated in such an act.

1. Attend local political meetings (such as school board or city council)
2. Put up a political sign (such as a lawn sign or bumper sticker)
3. Work for a candidate or campaign
4. Attend a political protest, march or demonstration
5. Contact a public official
6. Donate money to a candidate, campaign, or political organization

I also analyze two other yes (1) / no (0) questions related to political participation:

1. Did a candidate or political campaign organization contact you during the 2020 election?
2. Have you ever run for elective office at any level of government (local, state or federal)?

Below, I present cross-tabulations between each item and race (White/Black), along with a chi-square statistical test. The cross-tabulation shows, for instance, the share of Whites that participate in a particular activity vs. the share of Whites that do not participate in such activity. The analysis is designed to assess whether Blacks and Whites engage in political participation at different rates. If the chi-square p-value is .10 then we can say that we have 90% confidence that this relationship has not occurred by chance. In short, the lower the p-value, the more statistical confidence we have that Whites and Blacks behave differently politically.

Overall, the results strongly point to relative Black disparity in political participation. In five of the eight survey items, a statistically significant relationship exists between race and political participation (at either  $p < .10$  or  $p < .05$ ). That is, Whites are more likely to say that they engaged in the political activity than Blacks.

For instance, 5.9% of Whites say they attended a political meeting, whereas 3.5% of Blacks said they did ( $p < 0.05$ ). On political signs, 17.9% of Whites put one up vs. 6.5% of Blacks ( $p < 0.001$ ). Whites are also more likely to report having worked for a candidate or campaign (3.6% vs. 1.8%,  $p < 0.05$ ). One of the larger differences emerges on the question regarding contacting a public official. Twenty-one percent (21%) of Whites say they contact an official, whereas 8.8% of Blacks report doing so ( $p < 0.001$ ). Differences emerge across donation behavior too: 24.4% vs. 13.6% ( $p < 0.001$ ).

There are three questions where significant statistical differences do not emerge, although Whites nonetheless engage in the political activity to a greater degree than Blacks: political protest (Whites = 6.2% vs Blacks = 4.4%,  $p = 0.142$ ); being contacted by a political campaign organization (61.3% vs. 61.3%,  $p = 0.995$ ), and running for office (White = 1.7% vs. Black = 0.7%,  $p = 0.12$ ).

**Attend local political meetings (such as school board or city council)**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	954	94.08%	60	5.92%
Black	523	96.49%	19	3.51%
<i>Chi-2 = 4.262 DF = 1 P-Value = 0.039</i>				

Table 3. Attend local political meetings (such as school board or city council)**Put up a political sign (such as a lawn sign or bumper sticker)**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	832	82.05%	182	17.95%
Black	507	93.54%	35	6.46%
<i>Chi-2 = 38.863 DF = 1 P-Value = 0</i>				

Table 4. Put up a political sign (such as a lawn sign or bumper sticker)**Work for a candidate or campaign**

<i>Race</i>	<i>No</i>	<i>Pct. No.</i>	<i>Yes</i>	<i>Pct. Yes.</i>
White	978	96.35%	37	3.65%
Black	533	98.16%	10	1.84%
<i>Chi-2 = 3.934 DF = 1 P-Value = 0.0473</i>				

Table 5. Work for a candidate or campaign

**Attend a political protest, march or demonstration**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	951	93.79%	63	6.21%
Black	519	95.58%	24	4.42%
<i>Chi-2 = 2.155 DF = 1 P-Value = 0.1421</i>				

Table 6. Attend a political protest, march or demonstration**Contact a public official**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	801	78.99%	213	21.01%
Black	495	91.16%	48	8.84%
<i>Chi-2 = 37.513 DF = 1 P-Value = 0</i>				

Table 7. Contact a public official**Donate money to a candidate, campaign, or political organization**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	767	75.64%	247	24.36%
Black	469	86.37%	74	13.63%
<i>Chi-2 = 24.882 DF = 1 P-Value = 0</i>				

Table 8. Donate money to a candidate, campaign, or political organization



**Did a candidate or political campaign organization contact you during the 2020 election?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	392	38.66%	622	61.34%
Black	210	38.67%	333	61.33%
<i>Chi-2 = 0 DF = 1 P-Value = 0.9953</i>				

Table 9. Did a candidate or political campaign organization contact you during the 2020 election?**Have you ever run for elective office at any level of government (local, state or federal)?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	986	98.31%	17	1.69%
Black	539	99.26%	4	0.74%
<i>Chi-2 = 2.414 DF = 1 P-Value = 0.1202</i>				

Table 10. Have you ever run for elective office at any level of government (local, state or federal)?

All told, the results are compelling: Georgia Whites engage in a wide range of political activity at higher rates than Black Georgians, including activities like donating to campaigns, contacting public officials, and posting political signs like a yard sign. And as the academic literature discussed earlier in this report shows, these differences are directly attributable to socioeconomic disparities in health, education, and income.

**Conclusion**

The picture that this data paints is straightforward: Black Georgians experience significant disparities in income, education, and health compared to non-Hispanic Whites. And these disparities cause Black Georgians to be less likely to participate effectively in the political process, as measured by voter turnout and other forms of voter participation like making political donations, engaging elected officials, and even running for office. These trends are in accord with overwhelming academic literature showing that Blacks suffer socio-economic disparities and are therefore less likely than Whites to participate in the political process. As a result, these findings provide strong evidence for the presence of Senate Factor 5 in the state of Georgia.

## References

- Avery, James M. 2015. “Does Who Votes Matter? Income Bias in Voter Turnout and Economic Inequality in the American States from 1980 to 2010.” *Political Behavior* 37 (4): 955–76.
- Brady, Henry E, Sidney Verba, and Kay Lehman Schlozman. 1995. “Beyond Ses: A Resource Model of Political Participation.” *American Political Science Review* 89 (2): 271–94.
- Henderson, John A. 2018. “Hookworm Eradication as a Natural Experiment for Schooling and Voting in the American South.” *Political Behavior* 40 (2): 467–94.
- Leighley, Jan E, and Jonathan Nagler. 2013. *Who Votes Now?* Princeton University Press.
- Mayer, Alexander K. 2011. “Does Education Increase Political Participation?” *The Journal of Politics* 73 (3): 633–45.
- Nie, Norman H, Jane Junn, Kenneth Stehlik-Barry, and others. 1996. *Education and Democratic Citizenship in America*. University of Chicago Press.
- Pacheco, Julianna, and Jason Fletcher. 2015. “Incorporating Health into Studies of Political Behavior: Evidence for Turnout and Partisanship.” *Political Research Quarterly* 68 (1): 104–16.
- Shah, Paru, and Amber Wichowsky. 2019. “Foreclosure’s Fallout: Economic Adversity and Voter Turnout.” *Political Behavior* 41 (4): 1099–1115.
- Wolfinger, Raymond E, and Steven J Rosenstone. 1980. *Who Votes?* Yale University Press.

# Loren Collingwood

University of New Mexico  
Department of Political Science  
1 University of New Mexico  
Albuquerque, NM 87131

Office: (951) 827-5590  
Email: [lcollingwood@unm.edu](mailto:lcollingwood@unm.edu)  
website: <http://www.collingwoodresearch.com>

---

## Employment

Associate Professor, University of New Mexico, 2020 - Present  
Associate Professor, University of California, Riverside 2019 - 2020  
Assistant Professor, University of California, Riverside 2012 - 2019  
Assistant Analyst, Greenberg Quinlan Rosner, Washington DC 2005-2007  
Field Associate, Greenberg Quinlan Rosner, Washington DC 2003-2005

---

## Education

Ph.D., Political Science, University of Washington 2007 - 2012  
Committee: Matt Barreto (chair), Chris Parker, Luis Fraga, Chris Adolph, Peter Hoff  
M.A., Political Science, University of Washington, 2009  
B.A., Psychology, California State University, Chico, 1998 - 2002  
Minor: Political Science  
Honors: *Cum Laude*, NCAA Scholar-Athlete in soccer

---

## Research Fields

American Politics, Political Behavior, Methods, Race and Ethnic Politics, Immigration

---

## Books

2. **Collingwood, Loren.** *Campaigning in a Racially Diversifying America: When and How Cross-Racial Electoral Mobilization Works.* 2020. Oxford University Press.

Featured in *Veja*, Brazil

1. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. *Sanctuary Cities: The Politics of Refuge.* 2019. Oxford University Press.

Featured in *Teen Vogue*, *Seattle Times*; *Phoenix New Times*

---

## Articles

39. **Collingwood, Loren**, Gabriel Martinez, and Kassra Oskooii. “Undermining Sanctuary? When Local and National Partisan Cues Diverge.” *Urban Affairs Review*. (Forthcoming).
38. **Collingwood, Loren** and Benjamin Gonzalez O’Brien. “Is Distance to Drop Box an Appropriate Proxy for Drop Box Treatment? A Case Study of Washington State.” *American Politics Research*. (Forthcoming)
37. Morín, Jason L., Rachel Torres, and **Loren Collingwood**. “Cosponsoring and Cashing in: U.S. House Members’ support for punitive immigration policy and financial payoffs from the private prison industry.” *Business and Politics*. (Forthcoming).

Featured in KOAT-ABQ news

36. Barreto, Matt, Michael Cohen, **Loren Collingwood**, Chad Dunn, and Sonni Waknin. “A Novel Method for Showing Racially Polarized Voting: The Promise of Bayesian Improved Surname Geocoding.” *New York University Review of Law and Social Change*. 46(1). (Forthcoming)
35. Hickel, Flavio, Rudy Alamillo, Kassra Oskooii, and **Loren Collingwood**. “When American Identity Trumps Latinx Identity: Explaining Support for Restrictive Immigration Policies.” *Public Opinion Quarterly* (Forthcoming)

Featured in Academic Times

34. Walker, Hannah, **Loren Collingwood**, and Tehama Lopez Bunyasi. “White Response to Black Death: A Racialized Theory of White Attitudes About Gun Control.” *DuBois Review*. (Forthcoming).
33. Barreto, Matt, **Loren Collingwood**, Sergio Garcia-Rios, and Kassra Oskooii. “Estimating Candidate Support: Comparing Iterative EI & EI-RxC Methods.” *Sociological Methods & Research*. (Forthcoming).
32. Newman, Benjamin; Merolla, Jennifer; Shah, Sono; Lemi, Danielle; **Collingwood, Loren**; Ramakrishnan, Karthick. “The Trump Effect: An Experimental Investigation of the Emboldening Effect of Racially Inflammatory Elite Communication.” *British Journal of Political Science*. (Forthcoming).

Featured in New York Times; Washington Post; The Times of India; Washington Post; NBC News; New York Times; Forbes; NBC News

31. **Collingwood, Loren** and Sean Long. 2021. “Can States Promote Minority Representation? Assessing the Effects of the California Voting Rights Act.” *Urban Affairs Review*. 57(3): 731-762.

Featured in NPR; Modesto Bee, IVN News San Diego; Woodland Daily Democrat; Silicon Valley Voice; Spectrum 1

30. Oskooii, Kassra, Nazita Lajevardi, and **Loren Collingwood**. 2021. “Opinion Shift and Stability: Enduring Individual-Level Opposition to Trump’s ‘Muslim Ban’.” *Political Behavior*. 43: 301-337.

Featured in Washington Post

29. Filindra, Alexandra, **Loren Collingwood**, and Noah Kaplan. 2020. "Anxiety and Social Violence: The Emotional Underpinnings of Support for Gun Control." *Social Science Quarterly*. 101: 2101-2120.
28. McGuire, William, Benjamin Gonzalez O'Brien, Katherine Baird, Benjamin Corbett, and **Loren Collingwood**. 2020. "Does Distance Matter? Evaluating the Impact of Drop Boxes on Voter Turnout." *Social Science Quarterly*. 101: 1789-1809.
27. Reny, Tyler, Ali Valenzuela, and **Loren Collingwood**. 2020. "'No, You're Playing the Race Card': Testing the Effects of Anti-Black, Anti-Latino, and Anti-Immigrant Appeals in the Post-Obama Era." *Political Psychology*. 41(2): 283-302.

Featured in VOX The Weeds Podcast

26. **Collingwood, Loren**, Benjamin Gonzalez O'Brien, and Joe Tafoya. 2020. "Partisan Learning or Racial Learning: Opinion Change on Sanctuary City Policy Preferences in California and Texas." *Journal of Race and Ethnic Politics*. 5(1): 92-129.
25. **Collingwood, Loren** and Benjamin Gonzalez. 2019. "Covert Cross-Racial Mobilization, Black Activism, and Political Participation Pre-Voting Rights Act." *Florida Historical Quarterly* 97(4) Spring.
24. Gonzalez O'Brien, Ben, Elizabeth Hurst, Justin Reedy, and **Loren Collingwood**. 2019. "Framing Refuge: Media, Framing, and Sanctuary Cities." *Mass Communication and Society*. 22(6), 756-778.
23. DeMora, Stephanie, **Loren Collingwood**, and Adriana Ninci. 2019. "The Role of Super Interest Groups in Public Policy Diffusion." *Policy and Politics*. 47(4): 513-541.
22. **Collingwood, Loren**, Stephen Omar El-Khatib, Ben Gonzalez O'Brien. 2019. "Sustained Organizational Influence: American Legislative Exchange Council and the Diffusion of Anti-Sanctuary Policy." *Policy Studies Journal*. 47(3): 735-773.
21. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. 2019. "Public Opposition to Sanctuary Cities in Texas: Criminal Threat or Immigration Threat?" *Social Science Quarterly*. 100(4): 1182-1196.
20. Reny, Tyler, **Loren Collingwood**, and Ali Valenzuela. 2019. "Vote Switching in the 2016 Election: Racial and Immigration Attitudes, Not Economics, Explains Shifts in White Voting." *Public Opinion Quarterly*. 83(1): 91-113.

Featured in VOX; The Week; The Economist; New York Times; The Economist

19. Gonzalez-O'Brien, Benjamin, **Loren Collingwood**, and Stephen Omar El-Khatib. 2019. "The Politics of Refuge: Sanctuary Cities, Crime, and Undocumented Immigration." *Urban Affairs Review*. 55(1): 3-40.

Featured in WaPo Monkey Cage I; and Monkey Cage II; WaPo Fact Check; InsideHigherEd; PolitiFact; The Hill; Christian Science Monitor; Pacific Standard; NBC News; Huffington Post; Seattle Times; The Denver Post; San Jose Mercury News; Chicago Tribune; San Diego Union Tribune; VOX

18. Oskooii, Kassra, Sarah Dreier, and **Loren Collingwood**. 2018. "Partisan Attitudes Toward Sanctuary Cities: The Asymmetrical Effects of Political Knowledge." *Politics and Policy* 46(6): 951-984.

17. **Collingwood, Loren**, Jason Morín, and Stephen Omar El-Khatib. 2018. “Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy.” *Race and Social Problems*. 10(4): 275-292.  
  
Featured in CityLab; The Guardian; Mother Jones; NPR
16. **Collingwood, Loren**, Benjamin Gonzalez O’Brien, and Sarah K. Dreier. 2018. “Evaluating Public Support for Legalized Marijuana: The Case of Washington.” *International Journal of Drug Policy*. 56: 6-20.
15. **Collingwood, Loren**, McGuire, Will, Gonzalez O’Brien, Ben, Baird, Katie, and Hampson, Sarah. 2018. “Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington.” *Election Law Journal*. 17:1.  
  
Featured in Seattle Times; CBS News
14. **Collingwood, Loren**, Nazita Lajevardi, and Kassra Oskooii. 2018. “A Change of Heart? How Demonstrations Shifted Individual-Level Public Opinion on Trump’s Muslim Ban.” *Political Behavior*. 40(4): 1035-1072.  
  
Featured in VOX; ThinkProgress; LSE Blog; Al Jazeera; San Francisco Chronicle; NPR; Business Insider; Washington Post
13. **Collingwood, Loren**, Ashley Jochim, and Kassra Oskooii. 2018. “The Politics of Choice Reconsidered: Partisanship and Minority Politics in Washington’s Charter School Initiative.” *State Politics & Policy Quarterly* 18(1): 61-92.
12. Newman, Ben, Sono Shah, and **Loren Collingwood**. 2018. “Race, Place, and Building a Base: Ethnic Change, Perceived Threat, and the Nascent Trump Campaign for President.” *Public Opinion Quarterly*. 82(1): 122-134.  
  
Featured in Pacific Standard; LSE Blog; Newsweek
11. Skulley, Carrie, Andrea Silva, Marcus J. Long, **Loren Collingwood**, and Ben Bishin, “Majority Rule vs. Minority Rights: Immigrant Representation Despite Public Opposition on the 1986 Immigration Reform and Control Act.” 2018. *Politics of Groups and Identities*. 6(4): 593-611.
10. Alamillo, Rudy and **Loren Collingwood**. 2017. “Chameleon Politics: Social Identity and Racial Cross-Over Appeals.” *Politics of Groups and Identities*. 5(4): 533-650.  
  
Featured in WaPo’s Monkey Cage; NBC News; Los Angeles Times
9. **Collingwood, Loren**, Kassra Oskooii, Sergio Garcia-Rios, and Matt Barreto. 2016. “eiCompare: Comparing ecological inference estimates across EI and EI:RxC.” *The R Journal*. 8(2): 92-101.  
  
Featured in Investigate West
8. Barreto, Matt, **Loren Collingwood**, Christopher Parker, and Francisco Pedraza. 2015. “Racial Attitudes and Race of Interviewer Item Non-Response.” *Survey Practice*. 8:5.
7. Barreto, Matt and **Loren Collingwood**. 2015. “Group-based Appeals and the Latino Vote in 2012: How Immigration Became a Mobilizing Issue.” *Electoral Studies*. 40:490-499.  
  
Featured in Latino Decisions blog

6. **Collingwood, Loren**, Matt Barreto, and Sergio Garcia-Rios. 2014. "Revisiting Latino Voting: Cross-Racial Mobilization in the 2012 Election." *Political Research Quarterly*. 67(3): 632-645.

Featured in LSE Blog

5. Jurka, Tim, **Loren Collingwood**, Amber Boydston, Emiliano Grossman, and Wouter van Atteveldt. 2013. "RTextTools: A Supervised Learning Package for Text Classification in R" *The R Journal*. 5(1).
4. **Collingwood, Loren**. 2012. "Education Levels and Support for Direct Democracy." *American Politics Research*, 40(4): 571-602.
3. **Collingwood, Loren** and John Wilkerson. 2012. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods." *Journal of Information Technology and Politics*, 9(3).
2. **Collingwood, Loren**, Matt Barreto and Todd Donovan. 2012. "Early Primaries, Viability, and Changing Preferences for Presidential Candidates." *Presidential Studies Quarterly*, 42(2).
1. Barreto, Matt, **Loren Collingwood**, and Sylvia Manzano. 2010. "A New Measure of Group Influence in Presidential Elections: Assessing Latino Influence in 2008." *Political Research Quarterly*. 63(4).

Featured in Latino Decisions blog

---

## Book Chapters

11. **Collingwood, Loren**, Stephanie DeMora , and Sean Long. "Demographic Change, White Decline, and the Changing Nature of Racial Politics in Election Campaigns." In *Cambridge Handbook in Political Psychology*. Edited by Danny Osborne and Chris Sibley. [Forthcoming].
10. Morín, Jason L. and **Loren Collingwood**. "Contractor Politics: How Political Events Influence Private Prison Company Stock Shares in the Pre and Post Trump Era." In *Anti-immigrant Rhetoric, Actions, and Policies during the Trump Era (2017-2019)*. [Forthcoming]
9. Parker, Christopher S., Christopher C. Towler, **Loren Collingwood**, and Kassra Oskooii. 2020. "Race and Racism in Campaigns." In Oxford Encyclopedia of Persuasion in Political Campaigns. Edited by Elizabeth Suhay, Bernard Grofman, and Alexander H. Trechsel. DOI: 10.1093/oxfordhb/9780190860806.013.38
8. **Collingwood, Loren**, and DeMora, Stephanie. 2019. "Latinos and Obama." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.
7. DeMora, Stephanie, and **Collingwood, Loren**. 2019. "George P. Bush." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.
6. El-Khatib, Stephen Omar, and **Collingwood, Loren**. 2019. "Ted Cruz." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.



5. **Collingwood, Loren**, Sylvia Manzano and Ali Valenzuela. 2014. "November 2008: The Latino vote in Obama's general election landslide." In *Latino America: How America's Most Dynamic Population Is Poised to Transform the Politics of the Nation*. By Matt Barreto and Gary Segura. New York: Public Affairs Press. (co-authored chapter with Matt Barreto and Gary Segura)
4. **Collingwood, Loren**, Justin Gross and Francisco Pedraza. 2014. "A 'decisive voting bloc' in 2012." In *Latino America: How America's Most Dynamic Population Is Poised to Transform the Politics of the Nation*. By Matt Barreto and Gary Segura. New York: Public Affairs Press. (co-authored chapter with Matt Barreto and Gary Segura)
3. Barreto, Matt, **Loren Collingwood**, Ben Gonzalez, and Chris Parker. 2011. "Tea Party Politics in a Blue State: Dino Rossi and the 2010 Washington Senate Election." In William Miller and Jeremy Walling (eds.) *Stuck in the Middle to Lose: Tea Party Effects on 2010 U.S. Senate Elections*. Rowan and Littlefield Publishing Group.
2. **Collingwood, Loren** and Justin Reedy. "Criticisms of Deliberative Democracy." In Nabatchi, Tina, Michael Weiksner, John Gastil, and Matt Leighninger, eds., *Democracy in motion: Evaluating the practice and impact of deliberative civic engagement*. New York: Oxford University Press, 2010.
1. **Collingwood, Loren**. "Initiatives." In Haider-Markel, Donald P., and Michael A. Card. *Political Encyclopedia of U.S. States and Regions*. Washington, DC: CQ Press, 2009.

## Software

R package: **RTextTools**. This package uses supervised learning methods to automate text classification. Coauthors include Jurka, Boydstun, Grossman, and van Atteveldt. Available on CRAN.

R package: **eiCompare**. This package compares outcomes between ecological inference (EI) estimates and EI:Rows by Columns (RxC) estimates. Primary purpose is employed in racially polarized voting analysis. Development Version available here: [eiCompare](#) or on CRAN. Coauthors include Barreto, Oskooii, Garcia-Rios, Burke, Decter-Frain, Murayama, Sachdeva, Henderson, Wood, and Gross.

R package: **Rvoterdistance**. Calculates distance between voters and multiple polling locations and/or ballot drop boxes. Ports C++ code for high speed efficiency. Available on CRAN.

R package: **Rweights**. Creates survey weights via iterative variable raking. Survey design object and weights vector are produced for use with R, Stata, and other programs. Currently in alpha form with unix tarball available here: [Rweights](#).

R package: **Rmturkcheck**. Functions for cleaning and analyzing two-wave MTurk (or other) panel studies. Available: [Rmturkcheck](#)

R package: **RCopyFind**. Functions for extracting data frames then plotting results from WCopyFind plagiarism text program. Co-authored with and Maintained by Steph DeMora. Available: [RCopyFind](#)



## Under Review / Working Papers

Barreto, Matt, Michael Cohen, **Loren Collingwood**, Chad Dunn, and Sonni Waknin. “Using Bayesian Improved Surname Geocoding (BISG) to Assess Racially Polarized Voting in Voting Rights Act Challenges.” [Revise & Resubmit]

Collingwood, Loren, Juandalyn Burke, Ari Decter-Frain, Hikari Murayama, Pratik Sachdeva, Matt Barreto, Scott Henderson, Spencer Wood, and Joshua Zingher. “Comparing BISG to CVAP Estimates in Racially Polarized Voting Analyses.” [Under Review]

Collingwood, Loren, Jason Morín, and Edward Vargas. “Protesting Detention: How Protests Activated Group Empathy and Party ID to Shift Attitudes on Child Detention.” [Working Paper]

Paarlberg, Michael A. and Loren Collingwood. “Fact or Fiction: Testing the link between local immigration policy and the MS-13 ‘Threat’.” [Working Paper]

---

## Awards, Grants, and Fellowships

Matt Barreto and Loren Collingwood. Detection of Vote Dilution: New tools and methods for protecting voting rights. Data Science for Social Good project selection, University of Washington. 2020

Loren Collingwood. Measuring Cross-Racial Voter Preferences. UCR Faculty Senate. \$3,500. 2019.

Francisco Pedraza and Loren Collingwood. Evaluating AltaMed’s 2018 GOTV Efforts in Los Angeles. \$12,000. 2018-2019.

Allan Colbern, Loren Collingwood, Marcel Roman. A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement. Center for American Progress. \$7,100. 2018.

Karthick Ramakrishnan, Mindy Romero, Loren Collingwood, Francisco Pedraza, Evaluating California’s Voter’s Choice Act. Irvine Foundation. \$150,000, 2018-2019.

William McGuire, Loren Collingwood, Ben Gonzalez O’Brien, and Katie Baird, “Evaluating the Impact of Drop Boxes and Get-Out-The-Vote Advertising on Voter Turnout in Pierce County, WA.” MIT Election Data and Science Lab, \$16,365, 2017

Justin Freebourn and Loren Collingwood, Blum Initiative \$4,000, 2017

Hellman Fellowship Grant, UC Riverside, \$30,000, 2014-2015

Best Dissertation Award, 2013 Western Political Science Association

UC Riverside Harrison & Ethel Silver Fund, \$2,000, 2013

Best Graduate Student Paper Award State Politics section, 2012 American Political Science Association

Texas A&M Experimental Methods Winter Institute, \$800, January, 2011

UseR! 2011 Conference travel grant, \$1000, August, 2011

Center for Statistics and the Social Sciences travel grant, \$870, January, 2011

David J. Olson Research Grant, University of Washington Political Science, \$2,000, January, 2011

Warren Miller Scholarship Award, Inter-University Consortium for Political and Social Research, Summer 2009

Matthews Fellowship, University of Washington, Winter 2008 - Spring 2009

Brennan Center for Justice, New York University [with Matt Barreto]

Indiana Voter Identification Study, \$40,000 – Oct. 2007, 6 months

## Teaching Experience

POSC 10 (American Politics); POSC 146 (Mass Media & Public Opinion); POSC 171 (State Politics); POSC 104S (Race and Ethnic Politics Special Topics); POSC 108 (Race and Ethnic Politics)

POLS 300: Immigration Politics with Focus on Latino Politics

POLS 300: The Voting Rights Act: Causes and Effects

POSC 202A: Introduction to Quantitative Methods (Graduate)

POSC 207: Statistical Programming and Data Science for the Social Sciences (Graduate)

POSC 207: Quantitative Text Analysis (Graduate)

POSC 220: Graduate Seminar in Race and Ethnic Politics in the U.S.

POSC 256: Graduate Seminar in Public Opinion

POSC 253: Graduate Seminar in Electoral Politics

Text Classification with R using the `RTextTools` package, UNC-Chapel Hill Workshop

Text Analysis with Political Data, Claremont Graduate School, 2019

CSSS Intermediate R Workshop 2011, Instructor (Summer)

POLS 501: Advanced Research Design and Analysis, Teaching Assistant (2 quarters)

ICPSR Summer Course: Methodological Issues in Quantitative Research on Race and Ethnicity, Teaching Assistant

POLS 202: Introduction to American Politics, Teaching Assistant

CSSS Math Camp 2011, Teaching Assistant

POLS 499D: Center for American Politics and Public Policy Undergraduate Honors Seminar (2 quarters)

## Professional Service

Co-editor, *Politics of Groups and Identities*, 2020-2021

Reviewer, Political Behavior, Journal of Information Technology and Politics, American Politics Research, Social Sciences Quarterly, Journal of Politics, Politics of Groups and Identities, American Journal of Political Science, Political Research Quarterly, State Politics and Public Policy, American Political Science Review, British Journal of Political Science, Journal of Race and Ethnic Politics, Urban Studies, Urban Affairs Review; many other journals

## Conference Papers and Presentations

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk California Lutheran University. (October 2020).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk California State University, Chico. (March 2020).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk Humboldt State University. (March 2020).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk Oregon State University. (February 2020).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of San Diego. (November 2019).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk University of Massachusetts. (January 2020).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk University of New Mexico. (December 2019).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk California State University, Northridge, Los Angeles. (November 2019).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk Occidental College, Los Angeles. (November 2019).

Collingwood, Loren (with Sean Long). "Can States Promote Minority Representation? Assessing the Effects of the California Voting Rights Act." UC Irvine Critical Observations on Race and Ethnicity Conference. (November 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Geneva, Switzerland. (November 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Bern, Switzerland. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk ETH Zurich, Switzerland. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk London School of Economics, U.K. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Leeds, U.K. (October 2019).

Valenzuela, Ali, Kassra Oskooi, and Loren Collingwood. "Threat or Reassurance? Framing Midterms Results among Latinos and Whites." American Political Science Association, Washington, DC. (August 2019).

Paarlberg, Michael A. and Loren Collingwood. "Much Ado about Nothing: Local Immigration Policy and the MS-13 'Threat' ." American Political Science Association, Washington, DC. (August 2019).

Collingwood, Loren. "A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement." International Center for Local Democracy (ICLD) Conference on Local Democracy. Umea, Sweden (June 2019).

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk University of California, Irvine (May 2019).

Collingwood, Loren. "Text Analysis with R." Invited talk and presentation. Claremont Graduate University (May 2019)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." PRIEC. UC Davis (May 2019).

Collingwood, Loren. "Data Analysis with R." Invited presentation and training Cal Poly Pomona (May 2019)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk Northern Arizona University (May 2019)

Collingwood, Loren (with Jason Morín). "Contractor Politics: How Political Events Influence Private Prison Company Stock Shares in the Pre and Post Trump Era." Invited Talk Universidad Nacional Autonoma de Mexico, Distrito Federal, Mexico (February 2019).

Roman, Marcel, Allan Colbern, and Loren Collingwood. "A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement." PRIEC Consortium. University of Houston (December 2018)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk University of Illinois Chicago (November 2018)

Collingwood, Loren. "Ongoing Research in Sanctuary Cities and Immigration Politics." Invited Talk University of Pennsylvania Perry World House (November 2018)

Collingwood, Loren. "Unfair Detention: How Protests Activated Racial Group Empathy to Shift Attitudes on Child Detention." Invited Talk Rutgers University (October 2018)

Collingwood, Loren. "Unfair Detention: How Protests Activated Racial Group Empathy to Shift Attitudes on Child Detention." UCR Alumni Research Presentation Washington and Philadelphia (October 2018)

Collingwood, Loren, Jason Morin. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." Invited Talk UCLA (October 2018).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "Opinion Shift and Stability: Enduring Opposition to Trump's "Muslim Ban". APSA (September 2018).

Collingwood, Loren, Jason Morin, and Stephen Omar El-Khatib. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." American Political Science Association Conference (August 2018).

Collingwood, Loren, Sergio Garcia-Rios, and Hannah Walker. "The Impact of Exposure to Police Brutality on Political Attitudes Among Black and White Americans." Cooperative Comparative Post-Election Survey (CMPS) Conference. (August, 2018).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "Opinion Shift and Stability: Enduring Opposition to Trump's "Muslim Ban". Politics of Race Immigration and Ethnicity Consortium (August 2018).

Collingwood, Loren, Jason Morin, and Stephen Omar El-Khatib. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." Politics of Race Immigration and Ethnicity Consortium, Michigan State University (April 2018)

Collingwood, Loren, Benjamin Gonzalez O'Brien, and Joe Tafoya. "Partisan Learning or Racial Learning: Opinion Change on Sanctuary City Policy Preferences in California and Texas." Midwest Political Science Association Conference (April 2018).

El-Khatib, Stephen Omar and Loren Collingwood. "State Policy Responses to Sanctuary Cities: Explaining the Rise of Sanctuary City Legislative Proposals." Midwest Political Science Association Conference (April 2018).

Hannah Walker, Loren Collingwood, and Tehama Lopez Bunyasi. "Under the Gun: Black Responsiveness and White Ambivalence to Racialized Black Death." Midwest Political Science Association Conference (April 2018).

Hannah Walker, Loren Collingwood, and Tehama Lopez Bunyasi. "Under the Gun: Black Responsiveness and White Ambivalence to Racialized Black Death." Western Political Science Association Conference (April 2018).

DeMora, Stephanie, Adriana Ninci, and Loren Collingwood. "Shoot First in ALEC's Castle: The Diffusion of Stand Your Ground Laws." Politics of Race Immigration and Ethnicity Consortium, ASU (February 2018).

El-Khatib, Stephen Omar and Loren Collingwood. "State Policy Responses to Sanctuary Cities: Explaining the Rise of Sanctuary City Legislative Proposals." Politics of Race Immigration and Ethnicity Consortium, UCR (September 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." APSA (September 2017).

Collingwood, Loren, McGuire, Will, Gonzalez O'Brien Ben, Hampson, Sarah, and Baird, Katie. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." APSA (September 2017).

Collingwood, Loren, Reny, Tyler, Valenzuela, Ali. "Flipping for Trump: In 2016, Immigration and Not Economic Anxiety Explains White Working Class Vote Switching." UCLA (May 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." UCLA (May 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." Politics of Race Immigration and Ethnicity Consortium, UCSB (May 2017).

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." Vancouver, Western Political Science Association Conference (April. 2017).

Collingwood, Loren, McGuire, Will, Gonzalez-O'Brien Ben, Hampson, Sarah, and Baird, Katie. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." WPSA (April 2017).

Gonzalez-O'Brien, Benjamin, Loren Collingwood, and Stephen El-Khatib. "Gimme Shelter: The Myth and Reality of the American Sanctuary City". Vancouver, Western Political Science Association Conference WPSA (April 2017).

Rush, Tye, Pedraza, Francisco, Collingwood, Loren. "Relieving the Conscience: White Guilt and Candidate Evaluation." Politics of Race Immigration and Ethnicity Consortium, UCI (March 2017).

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." Philadelphia, American Political Science Association Conference (Sept. 2016)

Barreto, Matt, Loren Collingwood, Sergio Garcia-Rios, and Kassra Oskooii. "Estimating Candidate Support: Comparing EI & EI-RxC." Chicago, Midwest Political Science Association Conference (April 2016)

Bishin, Benjamin, Loren Collingwood, and Erinn Lauterbach. "Cross-Racial Mobilization in a Rapidly Diversifying Polity: Latino Candidates and Anglo Voters" Chicago, Midwest Political Science Association Conference (April 2016)

Gonzalez-O'Brien, Benjamin, Loren Collingwood, and Stephen El-Khatib. "Gimme Shelter: The Myth and Reality of the American Sanctuary City". San Diego, Western Political Science Association Conference (April 2016)

Collingwood, Loren and Antoine Yoshinaka. The new carpetbaggers? Analyzing the effects of migration on Southern politics. The Citadel Conference on Southern Politics, Charleston, SC (Mar 2016)

Alamillo, Rudy and Loren Collingwood. Chameleon Politics: Social Identity and Racial Cross-Over Appeals. American Political Science Association Conference, San Francisco (Sept 2015)

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." San Francisco, American Political Science Association Conference (Sept 2015)

Alamillo, Rudy and Loren Collingwood. Chameleon Politics: Social Identity and Racial Cross-Over Appeals. Western Political Science Association Conference, Las Vegas (April 2015)

Barreto, Matt and Loren Collingwood. Confirming Electoral Change: The 2012 U.S. Presidential Election OSU Conference (October, 2013). "Earning and Learning the Latino Vote in 2008 and 2012: How the Obama Campaign Tried, Refined, Learned, and Made Big Steps in Cross-Racial Mobilization to Latinos.

Collingwood, Loren and Ashley Jochim. 2012 Midwest Political Science Association Annual Conference (April) Chicago, IL. "Electoral Competition and Latino Representation: The Partisan Politics of Immigration Policy in the 104th Congress."

Collingwood, Loren. 2012 Western Political Science Association Annual Conference (March) Portland, OR. "The Development and Use of Cross-Racial Mobilization as Campaign Strategy in U.S. Elections: The Case of Texas 1948-2010."

Collingwood, Loren. 2012 Institute for Pragmatic Practice Annual Conference (March) Seattle, WA. "Changing Demographics, Rural Electorates, and the Future of American Politics."

Collingwood, Loren. 2012 Politics of Race, Immigration, and Ethnicity Consortium (January) Riverside, CA. "The Development of Cross-Racial Mobilization: The Case of Texas 1948-2010."

Collingwood, Loren. 2011 American Political Science Association Annual Conference (September) Seattle, WA. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization."

Forman, Adam and Loren Collingwood. 2011 American Political Science Association Annual Conference (September) Seattle, WA. "Measuring Power via Presidential Phone Records." (Poster)

Collingwood, Loren with (Tim Jurka, Wouter Van Atteveldt, Amber Boydstun, and Emiliano Grossman). UseR! 2011 Conference. (August) Coventry, United Kingdom. "RTextTools: A Supervised Learning Package for Text Classification in R."

Jurka, Tim, Loren Collingwood, Wouter Van Atteveldt, Amber Boydstun, and Emiliano Grossman. 2011 Comparative Agendas Project Conference. (June) Catania, Italy. "RTextTools: A Supervised Learning Package for Text Classification in R."

Collingwood, Loren and John Wilkerson. 2011 Journal of Information Technology & Politics Conference. (May) Seattle, WA. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren. 2011 Politics of Race, Immigration, and Ethnicity Consortium (May) Davis, CA. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization"

Collingwood, Loren. 2011 Western Political Science Conference (April) San Antonio, TX. "Race-Matching as Targeted Mobilization."

Collingwood, Loren. 2011 Western Political Science Conference (April) San Antonio, TX. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization"

Collingwood, Loren (with John Wilkerson). Invited Talk: Texas A&M University. (April, 2011) "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren (with John Wilkerson). Invited Talk: Rice University. (April, 2011) "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren. 2011 Midwest Political Science Association Annual Conference (April) Chicago, IL. "Race-Matching as Targeted Mobilization."

Collingwood, Loren and John Wilkerson. 2011 Text as Data Conference. (March) Evanston, IL. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."



Collingwood, Loren and John Wilkerson. 2011 Southern Political Science Conference. (January) New Orleans, LA. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren (with Ben Gonzalez). 2010 American Political Science Association Annual Conference. (September) Washington, DC. "The Political Process in Florida: Modeling African American Registration Rates Post *Smith v. Allwright*, 1944-1964."

Wilkerson, John, Steve Purpura, and Loren Collingwood. 2010 NSF Funded Tools for Text Workshop. (June) Seattle, WA. "Rtexttools: A Supervised Machine Learning Package in an R-Wrapper."

Collingwood, Loren and Marcela Garcia-Castanon. 2010 Western Political Science Association Annual Conference. (April) San Francisco, CA. "Negativity as a Tool: candidate poll standing and attack politics."

Collingwood, Loren. 2010 Politics of Race, Immigration, and Ethnicity Consortium. (January) Riverside, CA. "White Outreach: A spatial approach to modeling black incorporation in Florida post *Smith v. Allwright*, 1944-1965."

Collingwood, Loren. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Levels of Education, Political Knowledge and Support for Direct Democracy."

Collingwood, Loren. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "The Negativity Effect: Psychological underpinnings of advertising recall in modern political campaigns."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Negativity as a Tool: predicting negative responses and their effectiveness in the 2008 campaign season."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Switching codes: analyzing Obama's strategy for addressing Latinos in the 2008 presidential campaign."

Collingwood, Loren, (with Matt Barreto and Sylvia Manzano) 2009 Shambaugh Conference. (March) University of Iowa, IA. "More than one way to shuck a tamale: Latino influence in the 2008 general election."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Switching codes: analyzing Obama's strategy for addressing Latinos in the 2008 presidential campaign."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Pacific Northwest Political Science Conference. (October) Victoria, BC. "Negativity as a Tool: predicting negative responses and their effectiveness in the 2008 campaign season."

Collingwood, Loren and Francisco Pedraza (with Matt Barreto and Chris Parker). 2009 Center for Statistics and the Social Sciences 10th Anniversary Conference. (May) Seattle, WA. "Race of interviewer effects: perceived versus actual."

Collingwood, Loren (with Matt Barreto, Chris Parker, and Francisco Pedraza). 2009 Pacific Northwest Political Science Conference. (October) Victoria, BC. "Race of interviewer effects: perceived versus actual."

Barreto, Matt, Loren Collingwood and Todd Donovan. 2008 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Early Presidential Primaries, Viability, and Vote Switching in 2008."



Collingwood, Loren. 2008 Midwest Political Science Association Annual Conference. (April) Chicago, IL. “Levels of Education and Support for Direct Democracy: A Survey Experiment.”

Collingwood, Loren. 2008 American Political Science Association Annual Conference. (September) Boston, MA. “Levels of Education and Support for Direct Democracy: A Survey Experiment.” (Poster)

Collingwood, Loren. 2008 American Political Science Association Annual Conference. (September) Boston, MA. “Response Effects in Multi-Candidate Primary Vote Questions.” (Poster)

## Computer Skills

R, Stata, Python, WinBugs/JAGS, L<sup>A</sup>T<sub>E</sub>X, SPSS, MySQL, Access, ArcGIS, Some C++ when interacting with R.

## Reports

Collingwood, Loren. (2008). *The Washington Poll: pre-election analysis*. www.washingtonpoll.org.

Collingwood, Loren. (2008). *Democratic underperformance in the 2004 gubernatorial election: explaining 2004 voting patterns with an eye towards 2008*. www.washingtonpoll.org.

Barreto, Matt, Loren Collingwood, Francisco Pedraza, and Barry Pump. (2009). *Online voter registration in Washington State and Arizona*. Commissioned by Pew Research Center.

Collingwood, Loren, Todd Donovan, and Matt Barreto. (2009). *An assessment of ranked choice voting in Pierce County, WA*.

Collingwood, Loren. (2009). *An assessment of the fiscal impact of ranked choice voting in Pierce County, WA*. Commissioned by the League of Women Voters.

Barreto, Matt, and Loren Collingwood. (2009). *Latino candidates and racial block voting in primary and judicial elections: An analysis of voting in Los Angeles County board districts*. Commissioned by the Los Angeles County Chicano Employees Association.

Barreto, Matt, and Loren Collingwood. (2011). *A Review of Racially Polarized Voting For and Against Latino Candidates in Los Angeles County 1994-2010*. Commissioned by Los Angeles County Supervisor Gloria Molina. August 4.

Collingwood, Loren. (2012). *Recent Political History of Washington State: A Political Map*. Commissioned by the Korean Consulate.

Collingwood, Loren. (2012). *Analysis of Polling on Marijuana Initiatives*. Commissioned by Greenberg Quinlan Rosner.

Collingwood, Loren, Sean Long, and Francisco Pedraza. (2019). *Evaluating AltaMed Voter Mobilization in Southern California, November 2018*. Commissioned by AltaMed.

## Relevant Work Experience

### *Collingwood Research, LLC*

Statistical Consulting and Analysis

January 2008 - Present

Conducted over 200 projects involving political research, polling, statistical modeling, redistricting analysis and mapping, data analysis, micro-targeting, and R software development for political and non-profit clients. Clients include: Greenberg Quinlan Rosner, Latino Decisions, Pacific Market Research, Beck Research, Squier Knapp Dunn Communications, Anzalone-Lizst Research, League of Women Voters, Shelia Smoot for Congress, pollster.com, Comparative Agendas Project, Amplified Strategies, Gerstein Bocian & Agne, Strategies 360, the Korean Consulate, the California Redistricting Commission, Monterey County Redistricting Commission, ClearPath Strategies, Los Angeles County Council, Demchak & Baller Legal, Arnold & Porter LLP, JPM Strategic Solutions, National Democratic Institute (NDI) – on site in Iraq, Latham & Watkins, New York ACLU, United States Department of Justice (Demography), Inland Empire Funder's Alliance (Demography), Perkins & Coie, Elias Law Group; Santa Clara County (RPV Analysis); Native American Rights Fund (NARF); West Contra Costa Unified School District (Demography); Lawyers' Committee for Civil Rights Under Law; LatinoJustice PRLDEF

## Expert Witness Work

Expert Witness: *East St. Louis Branch NAACP vs. Illinois State Board of Elections*, 2021

Expert Witness: *LULAC of Iowa vs. Pate*, 2021

Expert Witness: *United States Department of Justice vs. City of Hesperia*, 2021

Expert Witness: *NAACP vs. East Ramapo Central School District*, New York, 2018-2019

Riverside County, Corona and Eastvale, 2015

Los Angeles County Redistricting Commission, 2011

Racially Polarized Voting analysis of Latino and Asian candidates in San Mateo County and alternative map creation, 2010-2011

State of California, Citizens Redistricting Commission, including Blythe, CA, in Riverside County, 2011

Monterey County, CA Redistricting, alternative map creation, 2011

### *Greenberg Quinlan Rosner*

Assistant Analyst, Anna Greenberg

June 2005 - May 2007

Assisted in the development of questionnaires, focus group guidelines, memos, and survey reports for political, non-profit, and corporate clients. Moderated in-depth interviews and focus groups.

Loren Collingwood

17

*Greenberg Quinlan Rosner*

Field Associate

December 2003 - June 2005

Managed qualitative and quantitative data collection process in the U.S. and internationally. Provided methodological advice, including sample stratification, sampling Latino populations, and modal sampling strategies.

*Congressman Adam Schiff*

Database Manager

March 2003 - June 2003

Managed constituent mail and survey databases; updated and maintained Member's Congressional voting record.

*Strategic Consulting Group*

Field Organizer, Carol Roberts for Congress

July 2002 - November 2002

Recruited and coordinated over 100 volunteers for mailings, canvassing, phone banking, and GOTV operations. Developed internship program and managed 15 interns from local colleges and high schools.

*Institute for Policy Studies*

Intern, John Cavanagh

May 2001 - August 2001

Provided research assistance for projects advocating reform of the WTO, World Bank, and IMF. Worked on reports and op-ed pieces on global economic issues advocating fair trade.

# EXHIBIT 4

## Expert Report of Dr. Loren Collingwood

*Pendergrass v. Raffensperger* (N.D. Ga. 2021)

January 3, 2022

Loren Collingwood \_\_\_\_\_

DEFENDANTS'

8

A.A.B.

2/28/2023

## Background and Qualifications

I am an associate professor of political science at the University of New Mexico. Previously, I was an associate professor of political science and co-director of civic engagement at the Center for Social Innovation at the University of California, Riverside. I have published two books with Oxford University Press, 39 peer-reviewed journal articles, and nearly a dozen book chapters focusing on sanctuary cities, race/ethnic politics, election administration, and racially-polarized voting. I received a Ph.D. in political science with a concentration in political methodology and applied statistics from the University of Washington in 2012 and a B.A. in psychology from California State University, Chico, in 2002. I have attached my curriculum vitae, which includes an up-to-date list of publications.

In between my B.A. and Ph.D., I spent 3-4 years working in private consulting for the survey research firm Greenberg Quinlan Rosner Research in Washington, D.C. I also founded the research firm Collingwood Research, which focuses primarily on the statistical and demographic analysis of political data for a wide array of clients, and led redistricting and map-drawing and demographic analysis for the Inland Empire Funding Alliance in Southern California. I am the redistricting consultant for the West Contra Costa Unified School District, CA, independent redistricting commission in which I am charged with drawing court-ordered single member districts.

I served as a testifying expert for the plaintiff in the Voting Rights Act Section 2 case *NAACP v. East Ramapo Central School District*, No. 17 Civ. 8943 (S.D.N.Y. 2020), in which I participated from 2018 to 2020. In that case, I used the statistical software eiCompare and WRU to implement Bayesian Improved Surname Geocoding (BISG) to identify the racial/ethnic demographics of voters and estimate candidate preference by race using ecological data. I am the quantitative expert in *LULAC v. Pate*, Case No. CVC056403 (D. Iowa 2021), and have filed an expert report in that case. I am the racially-polarized voting expert for plaintiff in *East St. Louis Branch NAACP, et al. vs. Illinois State Board of Elections, et al.*, Case No. 1:21-CV-03091 (N.D. Ill. 2021), having filed two reports in that case. I am the racially-polarized voting expert for the plaintiff in *Johnson, et al., v. WEC, et al.*, No. 2021AP1450-OA (Wis. 2021), having filed a report in that case. I am compensated at a rate of \$400/hour.



## Executive Summary

- On every metric, Black Georgians are disadvantaged socioeconomically relative to non-Hispanic White Georgians. Blacks are worse off than whites on the following measures— income, unemployment, poverty, health, and educational attainment.
- These socioeconomic disparities have an adverse effect on the ability of Black Georgians to participate in the political process, as measured by voter turnout and other forms of political participation.
- Black Georgians vote at significantly lower rates than White Georgians. That is true at the statewide, county, and precinct levels, including in the Atlanta-Sandy Springs-Alpharetta Metropolitan area.
- The data show a significant relationship between turnout and disparities in health, employment, and education; as health, education, and employment outcomes increase, so does voter turnout in a material way.
- Black Georgians also lag behind White Georgians in other forms of political participation, such as making campaign contributions, engaging local officials, and running for office.
- The academic literature overwhelmingly shows that these low levels of political participation are attributable to the socioeconomic disparities discussed above.

My opinions are based on the following data sources: the American Community Survey (ACS) across time, 2020 statewide, county-level, and precinct-level voter registration and turnout aggregate data from the Georgia Secretary of State, 2010-2020 statewide voter turnout from Georgia Secretary of State, 2014-2020 county-level voter turnout data from the Georgia Secretary of State, and the 2020 Cooperative Election Study.

## Analysis

### A. Senate Factor 5

I have been asked to examine item 5 of what has come to be known as the Senate Factors (United States Senate 1982, 27). In the 1982 Voting Rights Act extension, the Senate Judiciary Committee listed out factors that could be considered (alongside the *Gingles* Test) in evaluating a Section 2 claim under the Voting Rights Act. These factors allow experts to inform the court regarding the extent that minorities “are denied equal access to the political process.”

Senate Factor 5 examines the extent that minority group members (here, Black individuals) in a political jurisdiction (in this case, the state of Georgia) bear the effects of discrimination in education, employment, and health which hinder said group’s political participation. Without a doubt, my analysis demonstrates that Black Georgians face clear and significant disadvantages in the above areas that reduce their ability to participate in the political process.

## B. Socioeconomic Disparities

From the 2015-2019 ACS, I constructed the following metrics for both the Black and White populations in Georgia: household median income; total households reporting income above \$100,000; total households reporting income above \$125,000; households receiving Supplemental Nutrition Assistance Program (“SNAP” or “food stamps”) benefits in the past 12 months; percent of the population living below the poverty line in the last 12 months; percent of children living below the poverty line; percent of adults living below the poverty line; percent of the population over the age of 25 with a high-school diploma; percent of the population over the age of 25 with a college degree; unemployment rate; percent of the population reporting a disability; and percent of the population reporting health insurance. These metrics reflect broad racial disparities in education, employment, income, and health.

As shown in Table 1, there are clear racial disparities in employment. The unemployment rate among Black Georgians (8.7%) is nearly double that of White Georgians (4.4%). And disparities persist even among those *with* employment: White households are twice as likely as Black households to report an annual income above \$100,000. Black Georgians, meanwhile, were more than twice as likely—and Black children in particular more than three times as likely—to live below the poverty line over the past year. And Black Georgians were nearly three times more likely than White Georgians to receive SNAP benefits.

On education, Black adults over the age of 25 are more likely than their White peers to lack a high school diploma (13.3% compared to 9.4%). These disparities fare no better in higher education. 35% of White adults over the age of 25 have obtained a bachelor’s degree or higher compared to 24% of their Black counterparts.

Finally, on health, the Black population in Georgia is slightly more likely to report a disability (11.8% compared to 10.9% for whites), and is more likely to lack health insurance (18.9% compared to 14.2% among 19–64-year-olds). All told, the numbers convey consistent racial disparities across economics, health, employment, and education.



	Black	White	White - Black
Median Household Income	\$44670	\$67955	\$23285
Pct. HH Income > \$100K	0.165	0.322	0.157
Pct. HH Income > \$125K	0.096	0.224	0.128
Pct. HH receiving SNAP	0.227	0.077	-0.15
Pct. below poverty line	0.215	0.101	-0.114
Pct. below poverty line, children	0.313	0.115	-0.198
Pct. below poverty line, VAP	0.18	0.098	-0.082
Pct. w/ Less than HS Diploma	0.133	0.094	-0.039
Pct. w/ Bachelor's Degree or higher	0.24	0.351	0.111
Pct. Unemployed	0.087	0.044	-0.043
Pct Disabled, ages 19-64	0.118	0.109	-0.009
Pct. Uninsured, ages 19-64	0.189	0.142	-0.047

Table 1. Socio-economic indicators across Black and White individuals in Georgia, 2015-2019 American Community Survey (ACS).

These patterns hold across nearly every county in the state. I gathered the same metrics at the county level, and only considered counties with at least 1,000 White and Black residents, respectively. Georgia has 159 counties; of these, 141 meet this threshold. Whites have a higher median household income than Blacks in 136 of 141 of these counties.<sup>1</sup> Just two counties—Habersham and Paulding—feature a higher Black median household income (Habersham: \$64,286 vs. \$50,418; Paulding: \$68,843 vs. \$50,418). Among households making more than \$100,000 per year, Whites have an advantage over Blacks in 140 of the 141 counties.

Turning to SNAP, a higher percentage of Blacks have relied on SNAP in the past 12 months than Whites in 140 of the 141 counties. In 136 of the 141 counties, Blacks are more likely to live below the poverty line than Whites. And in 130 of the 141 counties, Whites are more likely than Blacks to have a 4-year college degree or higher.

<sup>1</sup> The ACS does not provide median income for Black households in three counties; these counties are treated as missing for this median household income comparison.

Finally, the county distribution is not as extreme with respect to unemployment and uninsured status—but is still heavily weighted strongly towards Black disadvantage. Blacks have a higher unemployment rate than Whites in 118 of the 141 counties (84%), and the share of the population that is uninsured is higher for Blacks than for Whites in 92 of the 141 counties (65%).

## **C. Effect on Political Participation**

### **1. Academic Literature**

Socioeconomic disparities unquestionably affect political participation. There is vast literature in political science that demonstrates a strong and consistent link between socio-economic status (SES) and voter turnout. In general, voters with higher income and education are disproportionately likely to vote and participate in American politics (Wolfinger and Rosenstone 1980; Leighley and Nagler 2013; Nie et al. 1996; Mayer 2011). Brady, Verba, and Schlozman (1995) argue that resources—conceptualized as time, money, and civic skills (all related to education and income)—drive donation behavior, campaign volunteering, and voting. These broad SES findings hold across a variety of research designs. For example, Henderson (2018) uses a hookworm eradication program haphazardly (i.e., at random) applied to counties in the early 20th century South (the program exogenously covaries with educational attainment) to show a causal relationship between education and political participation.

Other research is in accord. Avery (2015) indicates that states with higher income inequality have greater income bias in turnout. Shah and Wichowsky (2019) show a link between home foreclosures and participation—neighborhoods with a higher share of home foreclosures during the 2008 financial crisis subsequently experienced a drop in voter turnout, and affected individuals were less likely to vote in future elections. Additional findings in Pacheco and Fletcher (2015) indicate an association between self-reported health and voter turnout.

This overwhelming academic literature shows that the socioeconomic disadvantages suffered by Black Georgians will affect their ability to participate in the political process.

### **2. Voter Turnout**

When Georgians register to vote, they indicate their race. The Georgia Secretary of State maintains yearly state, county, and precinct-level voter registration and turnout by race. I gathered this data for the 2020 general election.<sup>2</sup> To calculate voter turnout, for both Black and White, respectively, I divide the total number of people who voted by the total number of registered voters.

#### **a. Statewide Analysis**

For the years 2010-2020, I gathered statewide turnout by race data. The 2010-2012 turnout data is only available on the Secretary of State's website at the statewide level. Table 2 displays even-year statewide voter turnout by race across the 2010-2020 period. For each election cycle, registered White voters turned out at higher rates than did registered Black voters. For instance, in

---

<sup>2</sup> General Election Turnout by Demographics November 2020, Georgia Sec. of State (Nov. 3, 2020), [https://sos.ga.gov/index.php/elections/general\\_election\\_turnout\\_by\\_demographics\\_november\\_2020](https://sos.ga.gov/index.php/elections/general_election_turnout_by_demographics_november_2020) (last accessed Dec. 23, 2021).



2020, Whites turned out at 72.6%, whereas Blacks turned out at 60%. The gap is most narrow during Obama’s 2012 re-election—at 3.1%—but in every single case, Whites vote at a higher rate than Blacks.

Year	Black TO	White TO	Gap	Total Turnout
2020	60	72.6	-12.6	65.7
2018	53.9	62.2	-8.3	56.4
2016	56.2	67.9	-11.6	62
2014	40.6	47.5	-6.9	42.9
2012	72.6	75.7	-3.1	72.9
2010	50.4	55.9	-5.5	52.1

Table 2. Voter turnout by race, statewide between 2010-2020, taken from Georgia Secretary of State website.

*b. Countywide Analysis*

Next, I compare the share of a county’s White registrants who voted in 2020 against the share of a county’s Black registrants who voted in 2020. Figure 1 visually compares turnout (denominator is registration) between Whites and Blacks across the state’s counties. In almost every single county, White registrants voted at higher rates than did Black registrants. This is visually demonstrated by the fact that almost all dots (counties) fall below the identity line, as opposed to above. Only in Chattahoochee and Liberty Counties did Black registrants cast ballots at higher rates than White registrants.

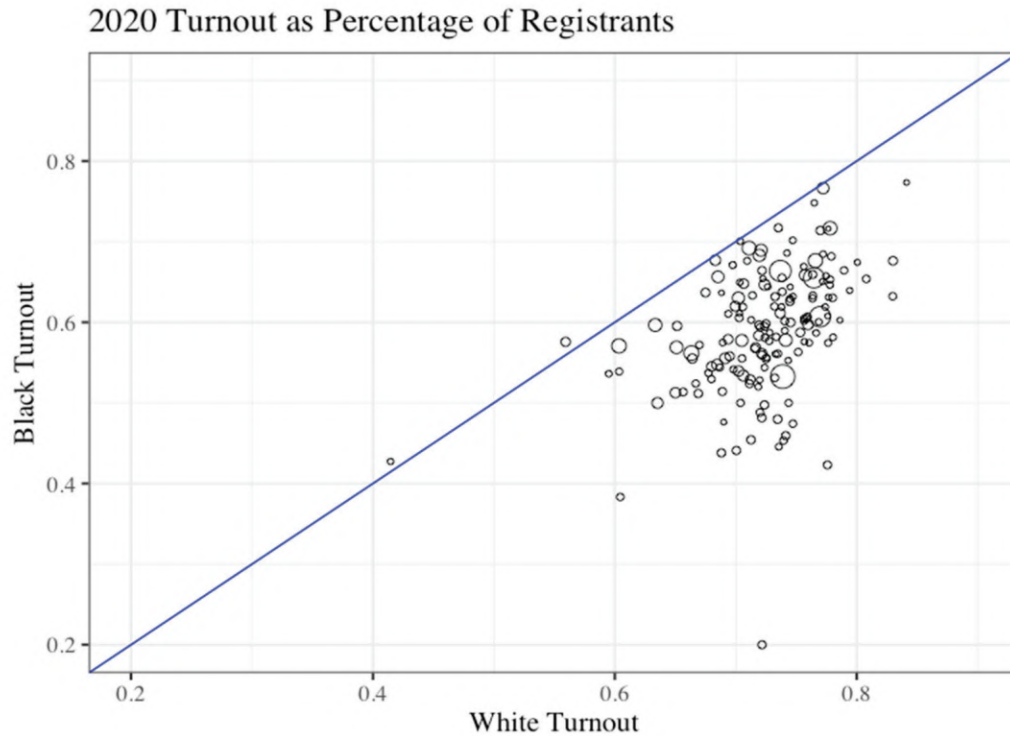


Figure 1. 2020 Turnout White-Black differential by County, registered voters.

Below, Figure 2 plots out the same relationship, but swaps out registration for voting age population (VAP) in the denominator. The relationship is very similar. The substantive findings do not change regarding which denominator is selected; Whites vote at higher rates than do Blacks.

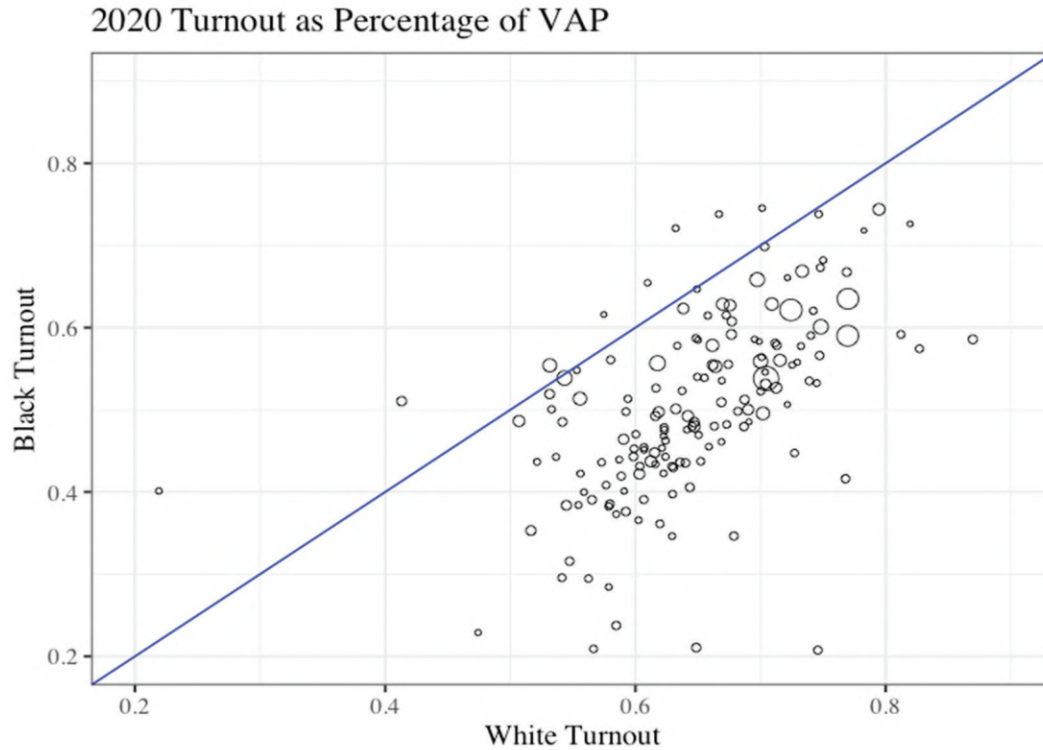


Figure 2. 2020 Turnout White-Black differential by County, voting age population.

I replicate this analysis for 2014-2018 because this data is readily available from the Georgia Secretary of State. Figure 3 plots out the 2018 White vs. Black turnout gap and demonstrates substantially the same trends discussed above. The next set of figures present the same analyses for 2016 and 2014.

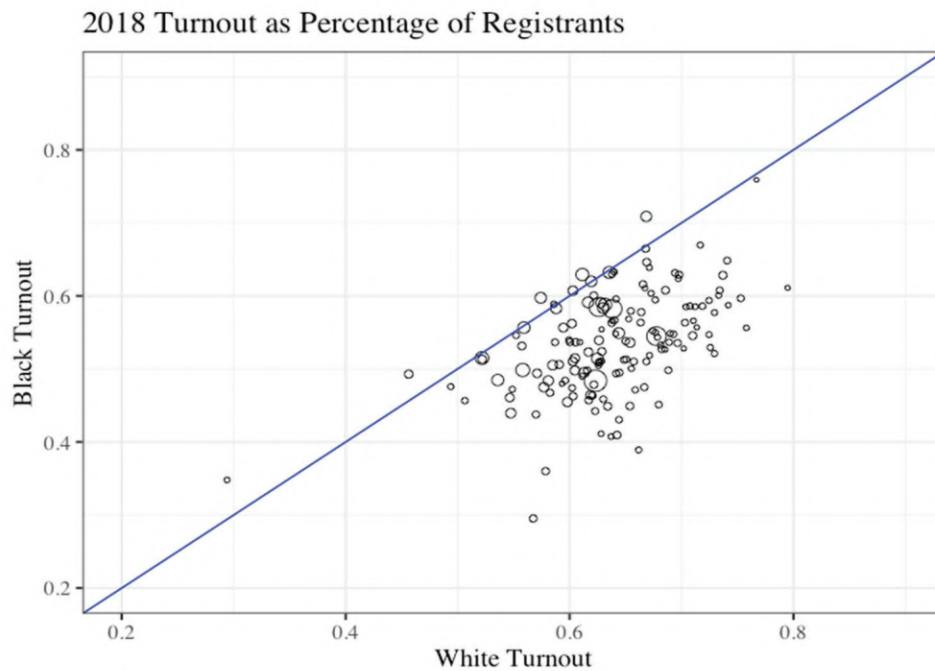


Figure 3. 2018 Turnout White-Black differential by County.

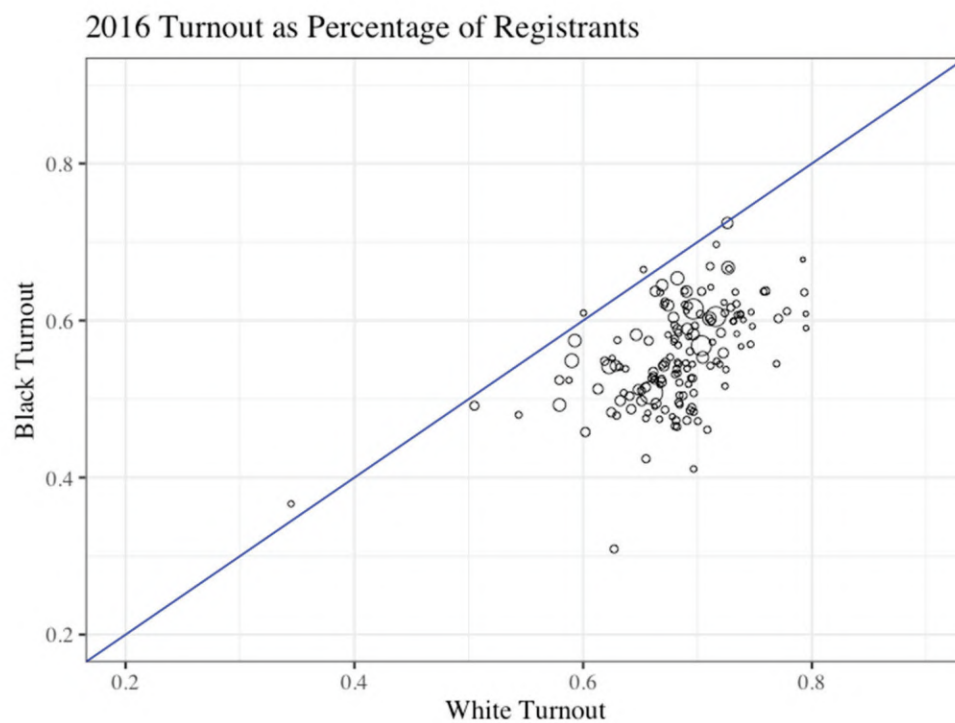


Figure 4. 2016 Turnout White-Black differential by County.

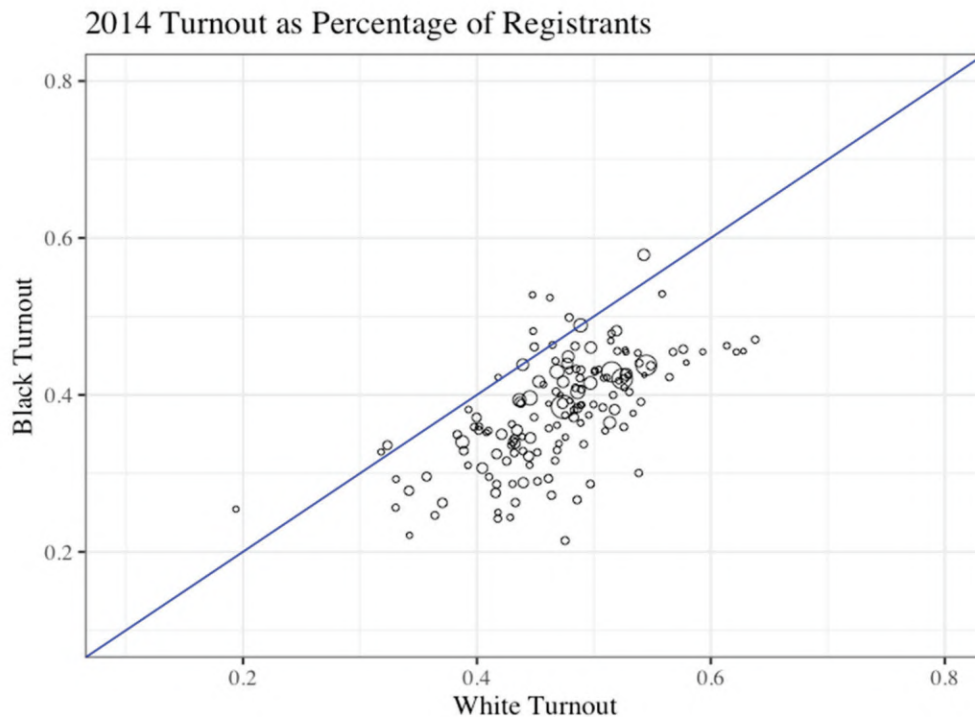


Figure 5. 2014 Turnout White-Black differential by County.

*c.* Precinct-Level Analysis

I replicated the above county analysis with Georgia precincts gathered from the Secretary of State's website.<sup>3</sup> The 2020 precinct file contains 2,784 precincts across the state and includes both registration and votes cast for Whites and Blacks. I subset the data to precincts with more than 100 Blacks and 100 Whites, reducing the dataset to 1,957 precincts., in order to reduce the influence of outliers. The analysis of all precincts does not change the core substance of the findings. Of the 1,957 precincts, Whites have a higher turnout in 1,549 (79.2%) precincts, Blacks in 408 (20.8%) precincts. Figure 6 visually displays the results, which are consistent with both the statewide and county analyses. The clear majority of precincts dots fall below the blue identity line.

---

<sup>3</sup> General Election Turnout, *supra* note 2.



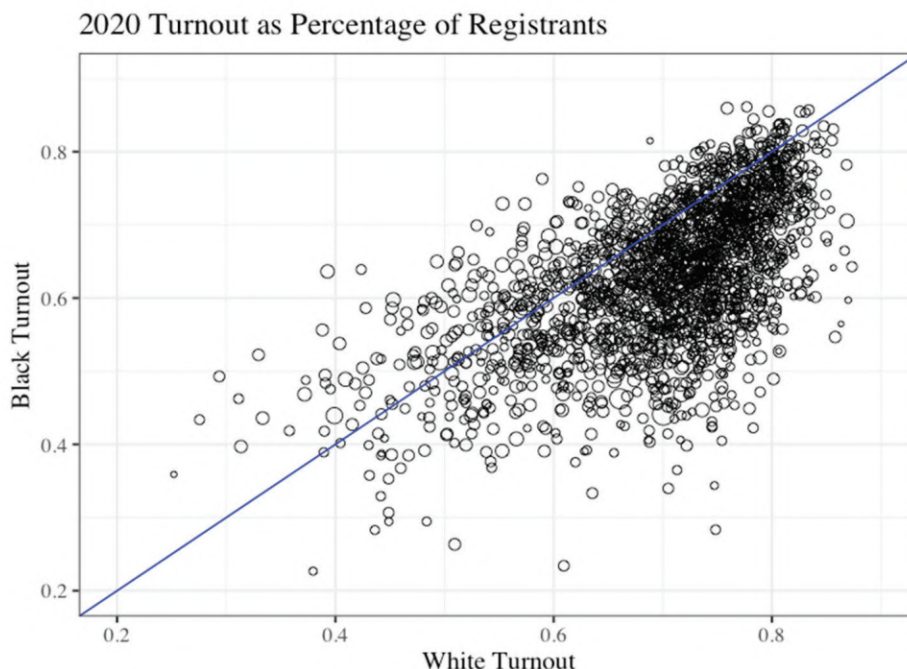


Figure 6. 2020 Turnout White-Black differential by precinct.

d. Analysis of Atlanta-Sandy Springs-Alpharetta Metropolitan Area

I also examined Black vs. White voter turnout rates in the study area. The geographic area under legal review is located in the Atlanta metropolitan region. I therefore subset Georgia's counties to just those in the Atlanta–Sandy Springs–Alpharetta, GA Metropolitan Statistical Area.<sup>4</sup> Figures 7 and 8 plot out the White vs. Black turnout gap based on both registration and voting age population. The trend is very similar to the overall Georgia trend.

<sup>4</sup> The counties include Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton.



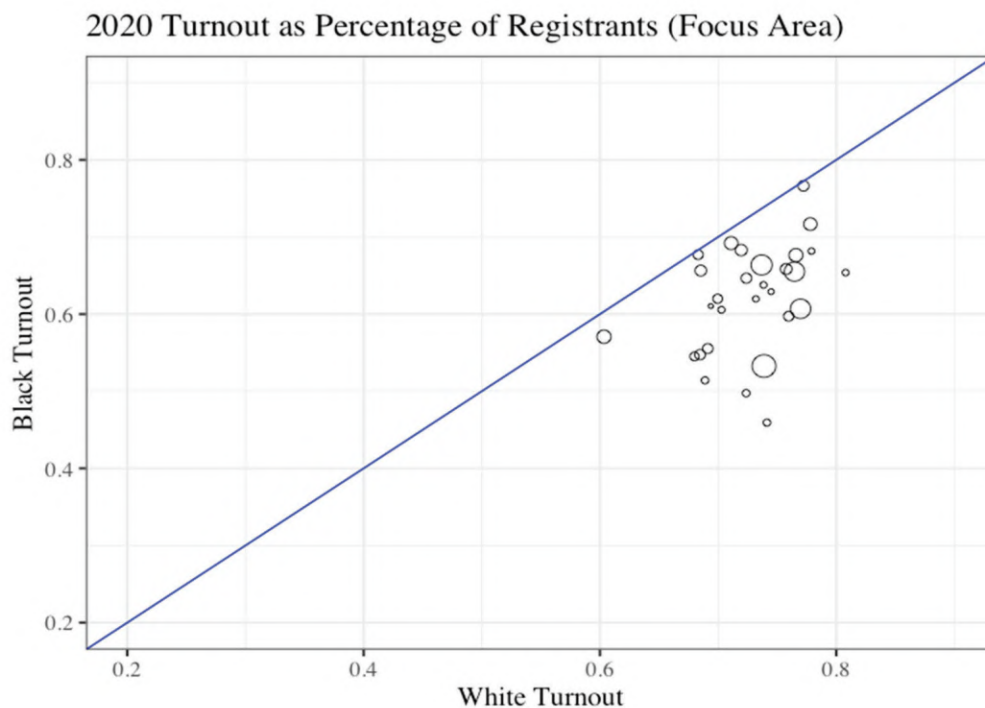


Figure 6. 2020 Turnout White-Black differential by county in Focus Area.

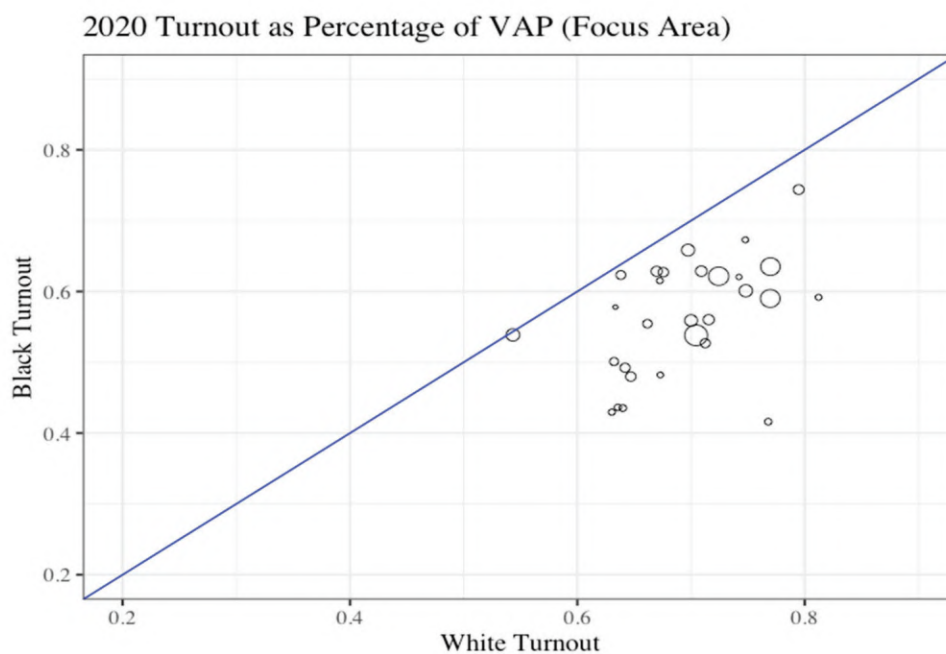


Figure 7. 2020 Turnout White-Black differential by county in Focus Area, Voting Age Population.

Finally, I conduct the same analysis among precincts falling into the same set of counties. Again, in the overwhelming majority of precincts, Whites vote at higher rates than Blacks.

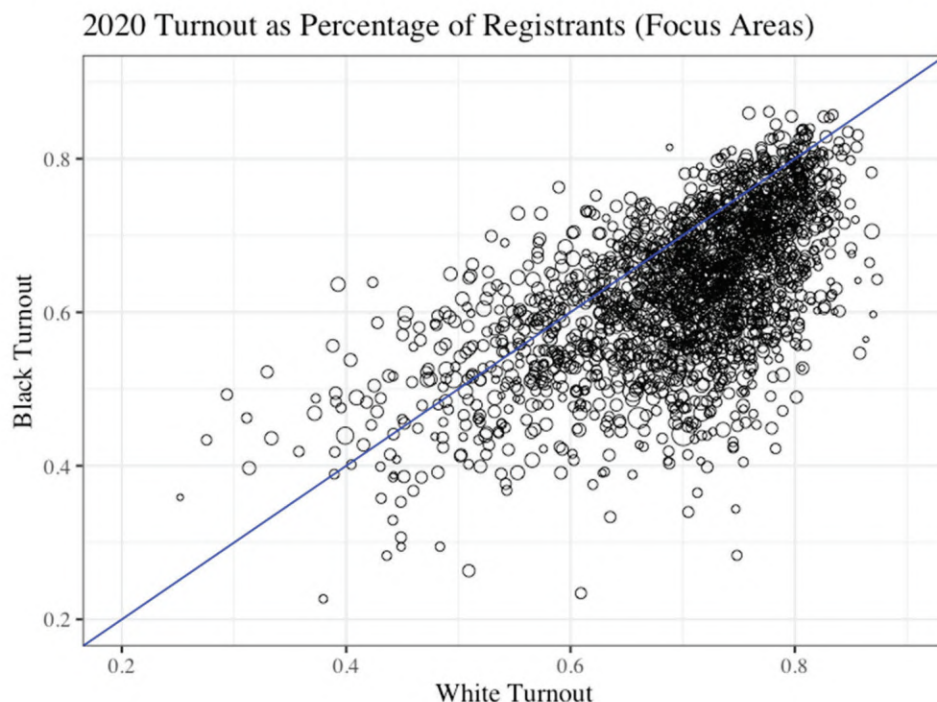


Figure 8. 2020 Turnout White-Black differential by precinct in Focus Area.

e. Relationship Between Turnout and Socioeconomic Disparities

This section examines how these turnout differences are related to the socio-economic disparities discussed at the outset of this report, like education and income. Specifically, I examine the county-level relationship between different measures of Black educational attainment and Black voter turnout. Figure 9 plots out the relationship between percent Black with less than a high school education and Black voter turnout.<sup>5</sup> The blue line is the bivariate regression line ( $\beta = -0.35$ ,  $p < 0.001$ ), which shows that each 10 percentage-point increase in the size of the Black population without a high school degree decreases Black turnout by 3.5 percentage points.

<sup>5</sup> For each analysis, I subset the data to counties with more than 1,000 registered Black voters. I do this to avoid outlier issues that can emerge with smaller counties. However, this subset does not change in any substantive way the results compared to a full data analysis. All regression analyses are weighted by total Black registration in the county.

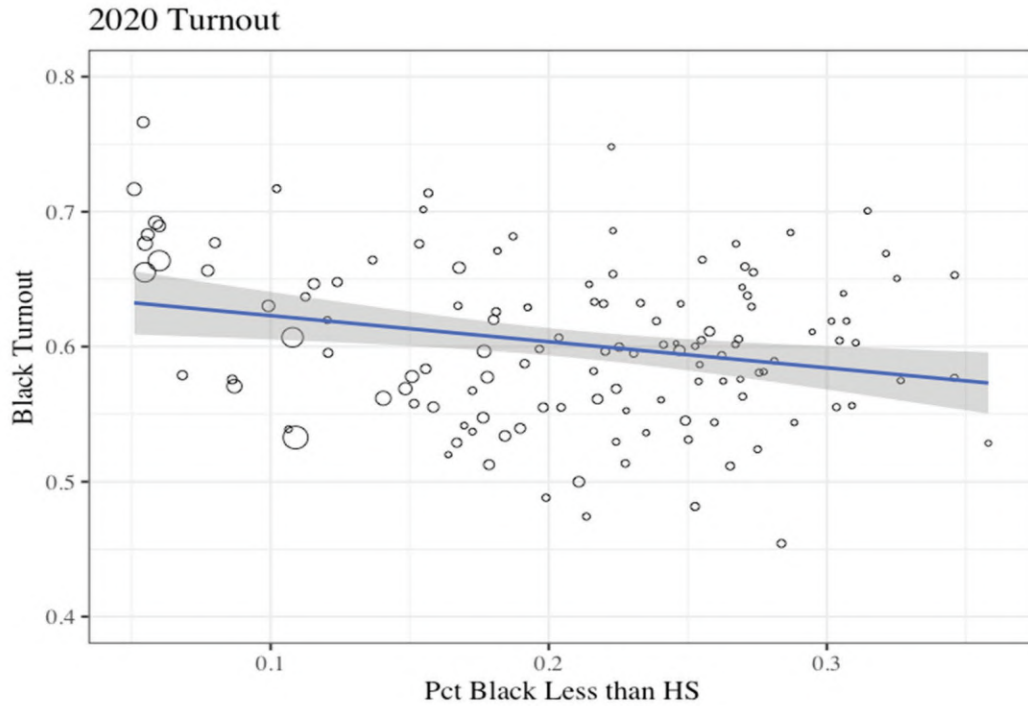


Figure 9. Association between Pct. Black Less than High School education and Black turnout.

Figure 10 plots out the relationship between the share of Blacks with a 4-year college degree and the share of Black registrants who voted by county. The relationship paints an inverse picture to the previous plot. As a county's Black education rises, so does the turnout rate. A bivariate regression reveals a statistically significant relationship ( $\beta = 0.23$ ,  $p < 0.001$ ), indicating that Black turnout rises 2.3 percentage points for each 10 percentage-point increase in percent Black 4-year degree.

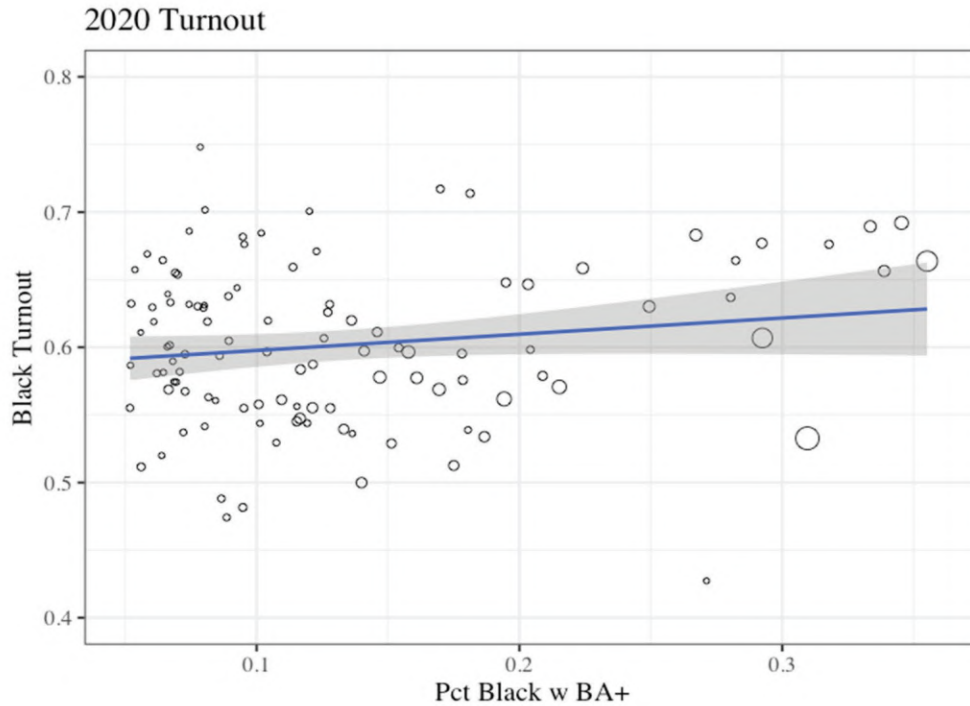


Figure 10. Association between Pct. 4-year degree and Black turnout.

Turning to income-related measures, Figure 11 plots out the relationship between the share of Blacks below the poverty line and the share of Black registrants who voted by county. As a county's Black poverty rises, the turnout rate declines. A bivariate regression reveals a statistically significant relationship ( $\beta = -0.49$ ,  $p < 0.001$ ), indicating that Black turnout falls 4.9 percentage points for each 10 percentage-point increase in percent Black below the poverty line.

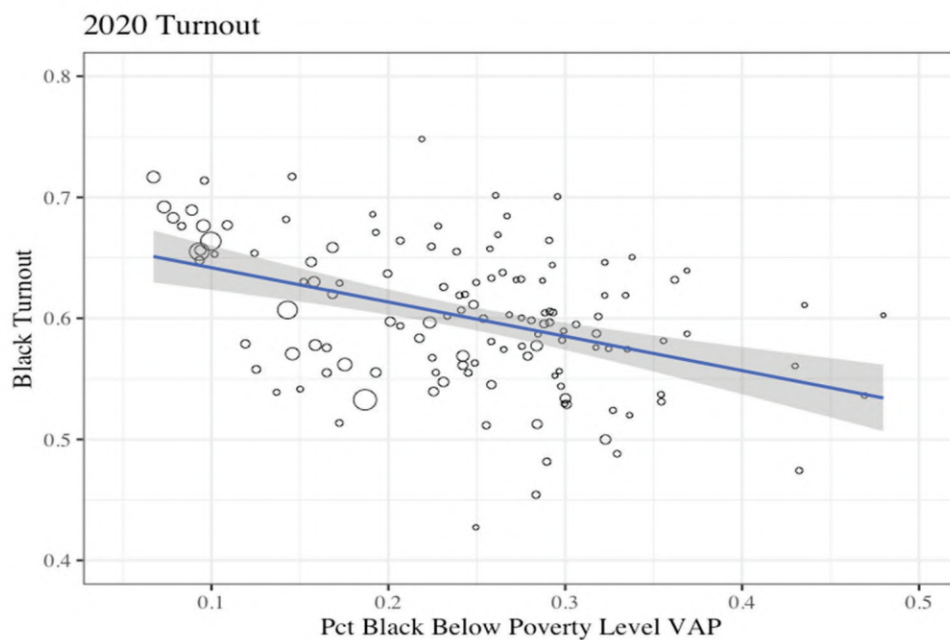


Figure 11. Association between Percent Black below the poverty line and Black turnout.



Figure 12 plots out the relationship between the logged Black median household income and the share of Black registrants who voted by county. As a county's Black household income rises, the turnout rate rises. A bivariate regression reveals a statistically significant relationship ( $\beta = 0.117$ ,  $p < 0.001$ ).

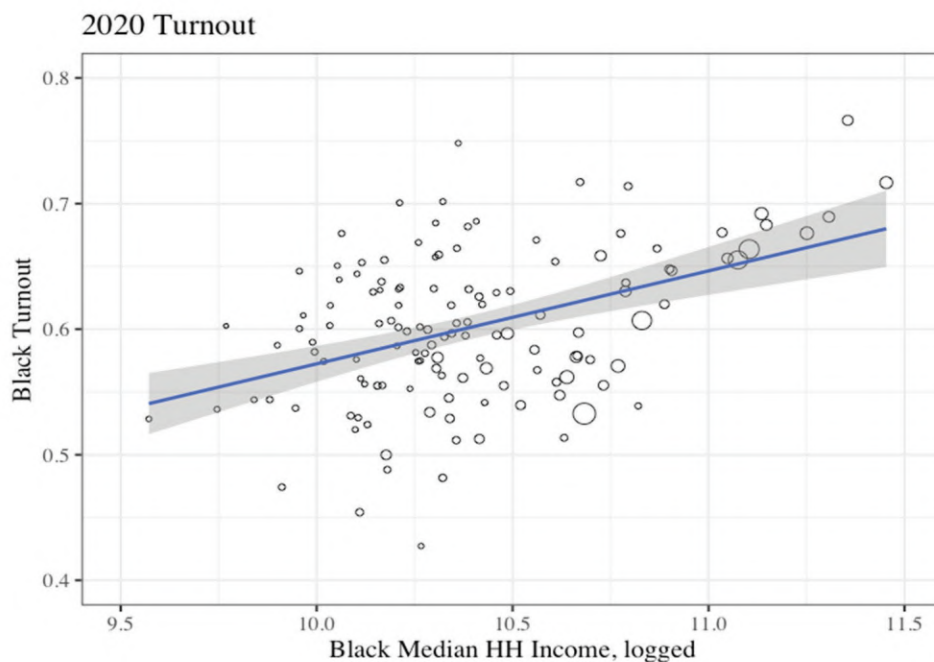


Figure 12. Association between Percent Black median household income and Black turnout.

### 3. Other Forms of Voter Participation

This next section examines disparities between Blacks and Whites among other modes of voter participation. I downloaded the 2020 Cooperative Election Study (CES) common form post-election survey.<sup>6</sup> The CCES is a widely-used, publicly-available survey dataset that political scientists use to write academic papers and inform our scientific knowledge of the American voter. The full dataset contains 61,000 interviews. I subset the data to Georgia respondents, of which there are 2,002. To compare White vs. Black political participation, I further subset the data to only non-Hispanic White and Black respondents. This yields a dataset of  $n=1,753$ . Finally, 339 individuals who CCES initially interviewed in the pre-election survey did not ultimately take the post-election survey; thus, the final dataset is  $n=1,414$ . All tabulations presented below include survey weights to ensure that the analysis is representative of the target audience.<sup>7</sup>

<sup>6</sup> 2020 Cooperative Election Study, Harvard University, available online at: <https://cces.gov.harvard.edu/> (last accessed Dec. 23, 2021).

<sup>7</sup> Weighting data here has the effect of growing the sample size of the dataset to  $n=1,557$  respondents.

The survey asks a battery of political participation questions where respondents indicate they have (1) or have not (0) participated in such an act.

1. Attend local political meetings (such as school board or city council)
2. Put up a political sign (such as a lawn sign or bumper sticker)
3. Work for a candidate or campaign
4. Attend a political protest, march or demonstration
5. Contact a public official
6. Donate money to a candidate, campaign, or political organization

I also analyze two other yes (1) / no (0) questions related to political participation:

1. Did a candidate or political campaign organization contact you during the 2020 election?
2. Have you ever run for elective office at any level of government (local, state or federal)?

Below, I present cross-tabulations between each item and race (White/Black), along with a chi-square statistical test. The cross-tabulation shows, for instance, the share of Whites that participate in a particular activity vs. the share of Whites that do not participate in such activity. The analysis is designed to assess whether Blacks and Whites engage in political participation at different rates. If the chi-square p-value is .10 then we can say that we have 90% confidence that this relationship has not occurred by chance. In short, the lower the p-value, the more statistical confidence we have that Whites and Blacks behave differently politically.

Overall, the results strongly point to relative Black disparity in political participation. In five of the eight survey items, a statistically significant relationship exists between race and political participation (at either  $p < .10$  or  $p < .05$ ). That is, Whites are more likely to say that they engaged in the political activity than Blacks.

For instance, 5.9% of Whites say they attended a political meeting, whereas 3.5% of Blacks said they did ( $p < 0.05$ ). On political signs, 17.9% of Whites put one up vs. 6.5% of Blacks ( $p < 0.001$ ). Whites are also more likely to report having worked for a candidate or campaign (3.6% vs. 1.8%,  $p < 0.05$ ). One of the larger differences emerges on the question regarding contacting a public official. Twenty-one percent (21%) of Whites say they contact an official, whereas 8.8% of Blacks report doing so ( $p < 0.001$ ). Differences emerge across donation behavior too: 24.4% vs. 13.6% ( $p < 0.001$ ).

There are three questions where significant statistical differences do not emerge, although Whites nonetheless engage in the political activity to a greater degree than Blacks: political protest (Whites = 6.2% vs Blacks = 4.4%,  $p = 0.142$ ); being contacted by a political campaign organization (61.3% vs. 61.3%,  $p = 0.995$ ), and running for office (White = 1.7% vs. Black = 0.7%,  $p = 0.12$ ).

**Attend local political meetings (such as school board or city council)**

<i>Race</i>	<i>No</i>	<i>PctNo</i>	<i>Yes</i>	<i>PctYes</i>
White	954	94.08%	60	5.92%
Black	523	96.49%	19	3.51%
<i>Chi-2 = 4.262 DF = 1 P-Value = 0.039</i>				

Table 3. Attend local political meetings (such as school board or city council)**Put up a political sign (such as a lawn sign or bumper sticker)**

<i>Race</i>	<i>No</i>	<i>PctNo</i>	<i>Yes</i>	<i>PctYes</i>
White	832	82.05%	182	17.95%
Black	507	93.54%	35	6.46%
<i>Chi-2 = 38.863 DF = 1 P-Value = 0</i>				

Table 4. Put up a political sign (such as a lawn sign or bumper sticker)**Work for a candidate or campaign**

<i>Race</i>	<i>No</i>	<i>PctNo</i>	<i>Yes</i>	<i>PctYes</i>
White	978	96.35%	37	3.65%
Black	533	98.16%	10	1.84%
<i>Chi-2 = 3.934 DF = 1 P-Value = 0.0473</i>				

Table 5. Work for a candidate or campaign



**Attend a political protest, march or demonstration**

<i>Race</i>	<i>No</i>	<i>PctNo</i>	<i>Yes</i>	<i>PctYes</i>
White	951	93.79%	63	6.21%
Black	519	95.58%	24	4.42%
$Chi-2 = 2.155$ $DF = 1$ $P-Value = 0.1421$				

Table 6. Attend a political protest, march or demonstration**Contact a public official**

<i>Race</i>	<i>No</i>	<i>PctNo</i>	<i>Yes</i>	<i>PctYes</i>
White	801	78.99%	213	21.01%
Black	495	91.16%	48	8.84%
$Chi-2 = 37.513$ $DF = 1$ $P-Value = 0$				

Table 7. Contact a public official**Donate money to a candidate, campaign, or political organization**

<i>Race</i>	<i>No</i>	<i>PctNo</i>	<i>Yes</i>	<i>PctYes</i>
White	767	75.64%	247	24.36%
Black	469	86.37%	74	13.63%
$Chi-2 = 24.882$ $DF = 1$ $P-Value = 0$				

Table 8. Donate money to a candidate, campaign, or political organization



**Did a candidate or political campaign organization contact you during the 2020 election?**

<i>Race</i>	<i>No</i>	<i>PctNo</i>	<i>Yes</i>	<i>PctYes</i>
White	392	38.66%	622	61.34%
Black	210	38.67%	333	61.33%
<i>Chi-2 = 0 DF = 1 P-Value = 0.9953</i>				

Table 9. Did a candidate or political campaign organization contact you during the 2020 election?**Have you ever run for elective office at any level of government (local, state or federal)?**

<i>Race</i>	<i>No</i>	<i>PctNo</i>	<i>Yes</i>	<i>PctYes</i>
White	986	98.31%	17	1.69%
Black	539	99.26%	4	0.74%
<i>Chi-2 = 2.414 DF = 1 P-Value = 0.1202</i>				

Table 10. Have you ever run for elective office at any level of government (local, state or federal)?

All told, the results are compelling: Georgia Whites engage in a wide range of political activity at higher rates than Black Georgians, including activities like donating to campaigns, contacting public officials, and posting political signs like a yard sign. And as the academic literature discussed earlier in this report shows, these differences are directly attributable to socioeconomic disparities in health, education, and income.

**Conclusion**

The picture that this data paints is straightforward: Black Georgians experience significant disparities in income, education, and health compared to non-Hispanic Whites. And these disparities cause Black Georgians to be less likely to participate effectively in the political process, as measured by voter turnout and other forms of voter participation like making political donations, engaging elected officials, and even running for office. These trends are in accord with overwhelming academic literature showing that Blacks suffer socio-economic disparities and are therefore less likely than Whites to participate in the political process. As a result, these findings provide strong evidence for the presence of Senate Factor 5 in the state of Georgia.

## References

- Avery, James M. 2015. “Does Who Votes Matter? Income Bias in Voter Turnout and Economic Inequality in the American States from 1980 to 2010.” *Political Behavior* 37 (4): 955–76.
- Brady, Henry E, Sidney Verba, and Kay Lehman Schlozman. 1995. “Beyond Ses: A Resource Model of Political Participation.” *American Political Science Review* 89 (2): 271–94.
- Henderson, John A. 2018. “Hookworm Eradication as a Natural Experiment for Schooling and Voting in the American South.” *Political Behavior* 40 (2): 467–94.
- Leighley, Jan E, and Jonathan Nagler. 2013. *Who Votes Now?* Princeton University Press.
- Mayer, Alexander K. 2011. “Does Education Increase Political Participation?” *The Journal of Politics* 73 (3): 633–45.
- Nie, Norman H, Jane Junn, Kenneth Stehlik-Barry, and others. 1996. *Education and Democratic Citizenship in America*. University of Chicago Press.
- Pacheco, Julianna, and Jason Fletcher. 2015. “Incorporating Health into Studies of Political Behavior: Evidence for Turnout and Partisanship.” *Political Research Quarterly* 68 (1): 104–16.
- Shah, Paru, and Amber Wichowsky. 2019. “Foreclosure’s Fallout: Economic Adversity and Voter Turnout.” *Political Behavior* 41 (4): 1099–1115.
- Wolfinger, Raymond E, and Steven J Rosenstone. 1980. *Who Votes?* Yale University Press.

# Loren Collingwood

University of New Mexico  
Department of Political Science  
1 University of New Mexico  
Albuquerque, NM 87131

Office: (951) 827-5590  
Email: [lcollingwood@unm.edu](mailto:lcollingwood@unm.edu)  
website: <http://www.collingwoodresearch.com>

---

## Employment

Associate Professor, University of New Mexico, 2020 - Present  
Associate Professor, University of California, Riverside 2019 - 2020  
Assistant Professor, University of California, Riverside 2012 - 2019  
Assistant Analyst, Greenberg Quinlan Rosner, Washington DC 2005-2007  
Field Associate, Greenberg Quinlan Rosner, Washington DC 2003-2005

---

## Education

Ph.D., Political Science, University of Washington 2007 - 2012  
Committee: Matt Barreto (chair), Chris Parker, Luis Fraga, Chris Adolph, Peter Hoff  
M.A., Political Science, University of Washington, 2009  
B.A., Psychology, California State University, Chico, 1998 - 2002  
Minor: Political Science  
Honors: *Cum Laude*, NCAA Scholar-Athlete in soccer

---

## Research Fields

American Politics, Political Behavior, Methods, Race and Ethnic Politics, Immigration

---

## Books

2. **Collingwood, Loren.** *Campaigning in a Racially Diversifying America: When and How Cross-Racial Electoral Mobilization Works.* 2020. Oxford University Press.

Featured in *Veja*, Brazil

1. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. *Sanctuary Cities: The Politics of Refuge.* 2019. Oxford University Press.

Featured in *Teen Vogue*, *Seattle Times*; *Phoenix New Times*

---



## Articles

39. **Collingwood, Loren**, Gabriel Martinez, and Kassra Oskooii. “Undermining Sanctuary? When Local and National Partisan Cues Diverge.” *Urban Affairs Review*. (Forthcoming).
38. **Collingwood, Loren** and Benjamin Gonzalez O’Brien. “Is Distance to Drop Box an Appropriate Proxy for Drop Box Treatment? A Case Study of Washington State.” *American Politics Research*. (Forthcoming)
37. Morín, Jason L., Rachel Torres, and **Loren Collingwood**. “Cosponsoring and Cashing in: U.S. House Members’ support for punitive immigration policy and financial payoffs from the private prison industry.” *Business and Politics*. (Forthcoming).

Featured in KOAT-ABQ news

36. Barreto, Matt, Michael Cohen, **Loren Collingwood**, Chad Dunn, and Sonni Waknin. “A Novel Method for Showing Racially Polarized Voting: The Promise of Bayesian Improved Surname Geocoding.” *New York University Review of Law and Social Change*. 46(1). (Forthcoming)
35. Hickel, Flavio, Rudy Alamillo, Kassra Oskooii, and **Loren Collingwood**. “When American Identity Trumps Latinx Identity: Explaining Support for Restrictive Immigration Policies.” *Public Opinion Quarterly* (Forthcoming)

Featured in Academic Times

34. Walker, Hannah, **Loren Collingwood**, and Tehama Lopez Bunyasi. “White Response to Black Death: A Racialized Theory of White Attitudes About Gun Control.” *DuBois Review*. (Forthcoming).
33. Barreto, Matt, **Loren Collingwood**, Sergio Garcia-Rios, and Kassra Oskooii. “Estimating Candidate Support: Comparing Iterative EI & EI-RxC Methods.” *Sociological Methods & Research*. (Forthcoming).
32. Newman, Benjamin; Merolla, Jennifer; Shah, Sono; Lemi, Danielle; **Collingwood, Loren**; Ramakrishnan, Karthick. “The Trump Effect: An Experimental Investigation of the Emboldening Effect of Racially Inflammatory Elite Communication.” *British Journal of Political Science*. (Forthcoming).

Featured in New York Times; Washington Post; The Times of India; Washington Post; NBC News; New York Times; Forbes; NBC News

31. **Collingwood, Loren** and Sean Long. 2021. “Can States Promote Minority Representation? Assessing the Effects of the California Voting Rights Act.” *Urban Affairs Review*. 57(3): 731-762.

Featured in NPR; Modesto Bee, IVN News San Diego; Woodland Daily Democrat; Silicon Valley Voice; Spectrum 1

30. Oskooii, Kassra, Nazita Lajevardi, and **Loren Collingwood**. 2021. “Opinion Shift and Stability: Enduring Individual-Level Opposition to Trump’s ‘Muslim Ban’.” *Political Behavior*. 43: 301-337.

Featured in Washington Post

29. Filindra, Alexandra, **Loren Collingwood**, and Noah Kaplan. 2020. "Anxiety and Social Violence: The Emotional Underpinnings of Support for Gun Control." *Social Science Quarterly*. 101: 2101-2120.
28. McGuire, William, Benjamin Gonzalez O'Brien, Katherine Baird, Benjamin Corbett, and **Loren Collingwood**. 2020. "Does Distance Matter? Evaluating the Impact of Drop Boxes on Voter Turnout." *Social Science Quarterly*. 101: 1789-1809.
27. Reny, Tyler, Ali Valenzuela, and **Loren Collingwood**. 2020. "'No, You're Playing the Race Card': Testing the Effects of Anti-Black, Anti-Latino, and Anti-Immigrant Appeals in the Post-Obama Era." *Political Psychology*. 41(2): 283-302.

Featured in VOX The Weeds Podcast

26. **Collingwood, Loren**, Benjamin Gonzalez O'Brien, and Joe Tafoya. 2020. "Partisan Learning or Racial Learning: Opinion Change on Sanctuary City Policy Preferences in California and Texas." *Journal of Race and Ethnic Politics*. 5(1): 92-129.
25. **Collingwood, Loren** and Benjamin Gonzalez. 2019. "Covert Cross-Racial Mobilization, Black Activism, and Political Participation Pre-Voting Rights Act." *Florida Historical Quarterly* 97(4) Spring.
24. Gonzalez O'Brien, Ben, Elizabeth Hurst, Justin Reedy, and **Loren Collingwood**. 2019. "Framing Refuge: Media, Framing, and Sanctuary Cities." *Mass Communication and Society*. 22(6), 756-778.
23. DeMora, Stephanie, **Loren Collingwood**, and Adriana Ninci. 2019. "The Role of Super Interest Groups in Public Policy Diffusion." *Policy and Politics*. 47(4): 513-541.
22. **Collingwood, Loren**, Stephen Omar El-Khatib, Ben Gonzalez O'Brien. 2019. "Sustained Organizational Influence: American Legislative Exchange Council and the Diffusion of Anti-Sanctuary Policy." *Policy Studies Journal*. 47(3): 735-773.
21. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. 2019. "Public Opposition to Sanctuary Cities in Texas: Criminal Threat or Immigration Threat?" *Social Science Quarterly*. 100(4): 1182-1196.
20. Reny, Tyler, **Loren Collingwood**, and Ali Valenzuela. 2019. "Vote Switching in the 2016 Election: Racial and Immigration Attitudes, Not Economics, Explains Shifts in White Voting." *Public Opinion Quarterly*. 83(1): 91-113.

Featured in VOX; The Week; The Economist; New York Times; The Economist

19. Gonzalez-O'Brien, Benjamin, **Loren Collingwood**, and Stephen Omar El-Khatib. 2019. "The Politics of Refuge: Sanctuary Cities, Crime, and Undocumented Immigration." *Urban Affairs Review*. 55(1): 3-40.

Featured in WaPo Monkey Cage I; and Monkey Cage II; WaPo Fact Check; InsideHigherEd; PolitiFact; The Hill; Christian Science Monitor; Pacific Standard; NBC News; Huffington Post; Seattle Times; The Denver Post; San Jose Mercury News; Chicago Tribune; San Diego Union Tribune; VOX

18. Oskooii, Kassra, Sarah Dreier, and **Loren Collingwood**. 2018. "Partisan Attitudes Toward Sanctuary Cities: The Asymmetrical Effects of Political Knowledge." *Politics and Policy* 46(6): 951-984.



17. **Collingwood, Loren**, Jason Morín, and Stephen Omar El-Khatib. 2018. “Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy.” *Race and Social Problems*. 10(4): 275-292.  
  
Featured in CityLab; The Guardian; Mother Jones; NPR
16. **Collingwood, Loren**, Benjamin Gonzalez O’Brien, and Sarah K. Dreier. 2018. “Evaluating Public Support for Legalized Marijuana: The Case of Washington.” *International Journal of Drug Policy*. 56: 6-20.
15. **Collingwood, Loren**, McGuire, Will, Gonzalez O’Brien, Ben, Baird, Katie, and Hampson, Sarah. 2018. “Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington.” *Election Law Journal*. 17:1.  
  
Featured in Seattle Times; CBS News
14. **Collingwood, Loren**, Nazita Lajevardi, and Kassra Oskooii. 2018. “A Change of Heart? How Demonstrations Shifted Individual-Level Public Opinion on Trump’s Muslim Ban.” *Political Behavior*. 40(4): 1035-1072.  
  
Featured in VOX; ThinkProgress; LSE Blog; Al Jazeera; San Francisco Chronicle; NPR; Business Insider; Washington Post
13. **Collingwood, Loren**, Ashley Jochim, and Kassra Oskooii. 2018. “The Politics of Choice Reconsidered: Partisanship and Minority Politics in Washington’s Charter School Initiative.” *State Politics & Policy Quarterly* 18(1): 61-92.
12. Newman, Ben, Sono Shah, and **Loren Collingwood**. 2018. “Race, Place, and Building a Base: Ethnic Change, Perceived Threat, and the Nascent Trump Campaign for President.” *Public Opinion Quarterly*. 82(1): 122-134.  
  
Featured in Pacific Standard; LSE Blog; Newsweek
11. Skulley, Carrie, Andrea Silva, Marcus J. Long, **Loren Collingwood**, and Ben Bishin, “Majority Rule vs. Minority Rights: Immigrant Representation Despite Public Opposition on the 1986 Immigration Reform and Control Act.” 2018. *Politics of Groups and Identities*. 6(4): 593-611.
10. Alamillo, Rudy and **Loren Collingwood**. 2017. “Chameleon Politics: Social Identity and Racial Cross-Over Appeals.” *Politics of Groups and Identities*. 5(4): 533-650.  
  
Featured in WaPo’s Monkey Cage; NBC News; Los Angeles Times
9. **Collingwood, Loren**, Kassra Oskooii, Sergio Garcia-Rios, and Matt Barreto. 2016. “eiCompare: Comparing ecological inference estimates across EI and EI:RxC.” *The R Journal*. 8(2): 92-101.  
  
Featured in Investigate West
8. Barreto, Matt, **Loren Collingwood**, Christopher Parker, and Francisco Pedraza. 2015. “Racial Attitudes and Race of Interviewer Item Non-Response.” *Survey Practice*. 8:5.
7. Barreto, Matt and **Loren Collingwood**. 2015. “Group-based Appeals and the Latino Vote in 2012: How Immigration Became a Mobilizing Issue.” *Electoral Studies*. 40:490-499.  
  
Featured in Latino Decisions blog

6. **Collingwood, Loren**, Matt Barreto, and Sergio Garcia-Rios. 2014. "Revisiting Latino Voting: Cross-Racial Mobilization in the 2012 Election." *Political Research Quarterly*. 67(3): 632-645.

Featured in LSE Blog

5. Jurka, Tim, **Loren Collingwood**, Amber Boydston, Emiliano Grossman, and Wouter van Atteveldt. 2013. "RTextTools: A Supervised Learning Package for Text Classification in R" *The R Journal*. 5(1).
4. **Collingwood, Loren**. 2012. "Education Levels and Support for Direct Democracy." *American Politics Research*, 40(4): 571-602.
3. **Collingwood, Loren** and John Wilkerson. 2012. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods." *Journal of Information Technology and Politics*, 9(3).
2. **Collingwood, Loren**, Matt Barreto and Todd Donovan. 2012. "Early Primaries, Viability, and Changing Preferences for Presidential Candidates." *Presidential Studies Quarterly*, 42(2).
1. Barreto, Matt, **Loren Collingwood**, and Sylvia Manzano. 2010. "A New Measure of Group Influence in Presidential Elections: Assessing Latino Influence in 2008." *Political Research Quarterly*. 63(4).

Featured in Latino Decisions blog

---

## Book Chapters

11. **Collingwood, Loren**, Stephanie DeMora , and Sean Long. "Demographic Change, White Decline, and the Changing Nature of Racial Politics in Election Campaigns." In *Cambridge Handbook in Political Psychology*. Edited by Danny Osborne and Chris Sibley. [Forthcoming].
10. Morín, Jason L. and **Loren Collingwood**. "Contractor Politics: How Political Events Influence Private Prison Company Stock Shares in the Pre and Post Trump Era." In *Anti-immigrant Rhetoric, Actions, and Policies during the Trump Era (2017-2019)*. [Forthcoming]
9. Parker, Christopher S., Christopher C. Towler, **Loren Collingwood**, and Kassra Oskooii. 2020. "Race and Racism in Campaigns." In Oxford Encyclopedia of Persuasion in Political Campaigns. Edited by Elizabeth Suhay, Bernard Grofman, and Alexander H. Trechsel. DOI: 10.1093/oxfordhb/9780190860806.013.38
8. **Collingwood, Loren**, and DeMora, Stephanie. 2019. "Latinos and Obama." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.
7. DeMora, Stephanie, and **Collingwood, Loren**. 2019. "George P. Bush." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.
6. El-Khatib, Stephen Omar, and **Collingwood, Loren**. 2019. "Ted Cruz." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.



5. **Collingwood, Loren**, Sylvia Manzano and Ali Valenzuela. 2014. "November 2008: The Latino vote in Obama's general election landslide." In *Latino America: How America's Most Dynamic Population Is Poised to Transform the Politics of the Nation*. By Matt Barreto and Gary Segura. New York: Public Affairs Press. (co-authored chapter with Matt Barreto and Gary Segura)
  4. **Collingwood, Loren**, Justin Gross and Francisco Pedraza. 2014. "A 'decisive voting bloc' in 2012." In *Latino America: How America's Most Dynamic Population Is Poised to Transform the Politics of the Nation*. By Matt Barreto and Gary Segura. New York: Public Affairs Press. (co-authored chapter with Matt Barreto and Gary Segura)
  3. Barreto, Matt, **Loren Collingwood**, Ben Gonzalez, and Chris Parker. 2011. "Tea Party Politics in a Blue State: Dino Rossi and the 2010 Washington Senate Election." In William Miller and Jeremy Walling (eds.) *Stuck in the Middle to Lose: Tea Party Effects on 2010 U.S. Senate Elections*. Rowan and Littlefield Publishing Group.
  2. **Collingwood, Loren** and Justin Reedy. "Criticisms of Deliberative Democracy." In Nabatchi, Tina, Michael Weiksner, John Gastil, and Matt Leighninger, eds., *Democracy in motion: Evaluating the practice and impact of deliberative civic engagement*. New York: Oxford University Press, 2010.
  1. **Collingwood, Loren**. "Initiatives." In Haider-Markel, Donald P., and Michael A. Card. *Political Encyclopedia of U.S. States and Regions*. Washington, DC: CQ Press, 2009.
- 

## Software

R package: **RTextTools**. This package uses supervised learning methods to automate text classification. Coauthors include Jurka, Boydston, Grossman, and van Atteveldt. Available on CRAN.

R package: **eiCompare**. This package compares outcomes between ecological inference (EI) estimates and EI:Rows by Columns (RxC) estimates. Primary purpose is employed in racially polarized voting analysis. Development Version available here: [eiCompare](#) or on CRAN. Coauthors include Barreto, Oskooii, Garcia-Rios, Burke, Decter-Frain, Murayama, Sachdeva, Henderson, Wood, and Gross.

R package: **Rvoterdistance**. Calculates distance between voters and multiple polling locations and/or ballot drop boxes. Ports C++ code for high speed efficiency. Available on CRAN.

R package: **Rweights**. Creates survey weights via iterative variable raking. Survey design object and weights vector are produced for use with R, Stata, and other programs. Currently in alpha form with unix tarball available here: [Rweights](#).

R package: **Rmturkcheck**. Functions for cleaning and analyzing two-wave MTurk (or other) panel studies. Available: [Rmturkcheck](#)

R package: **RCopyFind**. Functions for extracting data frames then plotting results from WCopyFind plagiarism text program. Co-authored with and Maintained by Steph DeMora. Available: [RCopyFind](#)

---



## Under Review / Working Papers

Barreto, Matt, Michael Cohen, **Loren Collingwood**, Chad Dunn, and Sonni Waknin. “Using Bayesian Improved Surname Geocoding (BISG) to Assess Racially Polarized Voting in Voting Rights Act Challenges.” [Revise & Resubmit]

Collingwood, Loren, Juandalyn Burke, Ari Decter-Frain, Hikari Murayama, Pratik Sachdeva, Matt Barreto, Scott Henderson, Spencer Wood, and Joshua Zingher. “Comparing BISG to CVAP Estimates in Racially Polarized Voting Analyses.” [Under Review]

Collingwood, Loren, Jason Morín, and Edward Vargas. “Protesting Detention: How Protests Activated Group Empathy and Party ID to Shift Attitudes on Child Detention.” [Working Paper]

Paarlberg, Michael A. and Loren Collingwood. “Fact or Fiction: Testing the link between local immigration policy and the MS-13 ‘Threat’.” [Working Paper]

---

## Awards, Grants, and Fellowships

Matt Barreto and Loren Collingwood. Detection of Vote Dilution: New tools and methods for protecting voting rights. Data Science for Social Good project selection, University of Washington. 2020

Loren Collingwood. Measuring Cross-Racial Voter Preferences. UCR Faculty Senate. \$3,500. 2019.

Francisco Pedraza and Loren Collingwood. Evaluating AltaMed’s 2018 GOTV Efforts in Los Angeles. \$12,000. 2018-2019.

Allan Colbern, Loren Collingwood, Marcel Roman. A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement. Center for American Progress. \$7,100. 2018.

Karthick Ramakrishnan, Mindy Romero, Loren Collingwood, Francisco Pedraza, Evaluating California’s Voter’s Choice Act. Irvine Foundation. \$150,000, 2018-2019.

William McGuire, Loren Collingwood, Ben Gonzalez O’Brien, and Katie Baird, “Evaluating the Impact of Drop Boxes and Get-Out-The-Vote Advertising on Voter Turnout in Pierce County, WA.” MIT Election Data and Science Lab, \$16,365, 2017

Justin Freebourn and Loren Collingwood, Blum Initiative \$4,000, 2017

Hellman Fellowship Grant, UC Riverside, \$30,000, 2014-2015

Best Dissertation Award, 2013 Western Political Science Association

UC Riverside Harrison & Ethel Silver Fund, \$2,000, 2013

Best Graduate Student Paper Award State Politics section, 2012 American Political Science Association

Texas A&M Experimental Methods Winter Institute, \$800, January, 2011

UseR! 2011 Conference travel grant, \$1000, August, 2011

Center for Statistics and the Social Sciences travel grant, \$870, January, 2011

David J. Olson Research Grant, University of Washington Political Science, \$2,000, January, 2011

Warren Miller Scholarship Award, Inter-University Consortium for Political and Social Research, Summer 2009

Matthews Fellowship, University of Washington, Winter 2008 - Spring 2009

Brennan Center for Justice, New York University [with Matt Barreto]

Indiana Voter Identification Study, \$40,000 – Oct. 2007, 6 months

## Teaching Experience

POSC 10 (American Politics); POSC 146 (Mass Media & Public Opinion); POSC 171 (State Politics); POSC 104S (Race and Ethnic Politics Special Topics); POSC 108 (Race and Ethnic Politics)

POLS 300: Immigration Politics with Focus on Latino Politics

POLS 300: The Voting Rights Act: Causes and Effects

POSC 202A: Introduction to Quantitative Methods (Graduate)

POSC 207: Statistical Programming and Data Science for the Social Sciences (Graduate)

POSC 207: Quantitative Text Analysis (Graduate)

POSC 220: Graduate Seminar in Race and Ethnic Politics in the U.S.

POSC 256: Graduate Seminar in Public Opinion

POSC 253: Graduate Seminar in Electoral Politics

Text Classification with R using the `RTextTools` package, UNC-Chapel Hill Workshop

Text Analysis with Political Data, Claremont Graduate School, 2019

CSSS Intermediate R Workshop 2011, Instructor (Summer)

POLS 501: Advanced Research Design and Analysis, Teaching Assistant (2 quarters)

ICPSR Summer Course: Methodological Issues in Quantitative Research on Race and Ethnicity, Teaching Assistant

POLS 202: Introduction to American Politics, Teaching Assistant

CSSS Math Camp 2011, Teaching Assistant

POLS 499D: Center for American Politics and Public Policy Undergraduate Honors Seminar (2 quarters)



## Professional Service

Co-editor, *Politics of Groups and Identities*, 2020-2021

Reviewer, Political Behavior, Journal of Information Technology and Politics, American Politics Research, Social Sciences Quarterly, Journal of Politics, Politics of Groups and Identities, American Journal of Political Science, Political Research Quarterly, State Politics and Public Policy, American Political Science Review, British Journal of Political Science, Journal of Race and Ethnic Politics, Urban Studies, Urban Affairs Review; many other journals

---

## Conference Papers and Presentations

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk California Lutheran University. (October 2020).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk California State University, Chico. (March 2020).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk Humboldt State University. (March 2020).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk Oregon State University. (February 2020).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of San Diego. (November 2019).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk University of Massachusetts. (January 2020).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk University of New Mexico. (December 2019).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk California State University, Northridge, Los Angeles. (November 2019).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk Occidental College, Los Angeles. (November 2019).

Collingwood, Loren (with Sean Long). "Can States Promote Minority Representation? Assessing the Effects of the California Voting Rights Act." UC Irvine Critical Observations on Race and Ethnicity Conference. (November 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Geneva, Switzerland. (November 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Bern, Switzerland. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk ETH Zurich, Switzerland. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk London School of Economics, U.K. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Leeds, U.K. (October 2019).

Valenzuela, Ali, Kassra Oskooi, and Loren Collingwood. "Threat or Reassurance? Framing Midterms Results among Latinos and Whites." American Political Science Association, Washington, DC. (August 2019).

Paarlberg, Michael A. and Loren Collingwood. "Much Ado about Nothing: Local Immigration Policy and the MS-13 'Threat' ." American Political Science Association, Washington, DC. (August 2019).

Collingwood, Loren. "A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement." International Center for Local Democracy (ICLD) Conference on Local Democracy. Umea, Sweden (June 2019).

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk University of California, Irvine (May 2019).

Collingwood, Loren. "Text Analysis with R." Invited talk and presentation. Claremont Graduate University (May 2019)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." PRIEC. UC Davis (May 2019).

Collingwood, Loren. "Data Analysis with R." Invited presentation and training Cal Poly Pomona (May 2019)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk Northern Arizona University (May 2019)

Collingwood, Loren (with Jason Morín). "Contractor Politics: How Political Events Influence Private Prison Company Stock Shares in the Pre and Post Trump Era." Invited Talk Universidad Nacional Autonoma de Mexico, Distrito Federal, Mexico (February 2019).

Roman, Marcel, Allan Colbern, and Loren Collingwood. "A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement." PRIEC Consortium. University of Houston (December 2018)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk University of Illinois Chicago (November 2018)

Collingwood, Loren. "Ongoing Research in Sanctuary Cities and Immigration Politics." Invited Talk University of Pennsylvania Perry World House (November 2018)

Collingwood, Loren. "Unfair Detention: How Protests Activated Racial Group Empathy to Shift Attitudes on Child Detention." Invited Talk Rutgers University (October 2018)

Collingwood, Loren. "Unfair Detention: How Protests Activated Racial Group Empathy to Shift Attitudes on Child Detention." UCR Alumni Research Presentation Washington and Philadelphia (October 2018)

Collingwood, Loren, Jason Morin. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." Invited Talk UCLA (October 2018).



Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "Opinion Shift and Stability: Enduring Opposition to Trump's "Muslim Ban". APSA (September 2018).

Collingwood, Loren, Jason Morin, and Stephen Omar El-Khatib. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." American Political Science Association Conference (August 2018).

Collingwood, Loren, Sergio Garcia-Rios, and Hannah Walker. "The Impact of Exposure to Police Brutality on Political Attitudes Among Black and White Americans." Cooperative Comparative Post-Election Survey (CMPS) Conference. (August, 2018).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "Opinion Shift and Stability: Enduring Opposition to Trump's "Muslim Ban". Politics of Race Immigration and Ethnicity Consortium (August 2018).

Collingwood, Loren, Jason Morin, and Stephen Omar El-Khatib. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." Politics of Race Immigration and Ethnicity Consortium, Michigan State University (April 2018)

Collingwood, Loren, Benjamin Gonzalez O'Brien, and Joe Tafoya. "Partisan Learning or Racial Learning: Opinion Change on Sanctuary City Policy Preferences in California and Texas." Midwest Political Science Association Conference (April 2018).

El-Khatib, Stephen Omar and Loren Collingwood. "State Policy Responses to Sanctuary Cities: Explaining the Rise of Sanctuary City Legislative Proposals." Midwest Political Science Association Conference (April 2018).

Hannah Walker, Loren Collingwood, and Tehama Lopez Bunyasi. "Under the Gun: Black Responsiveness and White Ambivalence to Racialized Black Death." Midwest Political Science Association Conference (April 2018).

Hannah Walker, Loren Collingwood, and Tehama Lopez Bunyasi. "Under the Gun: Black Responsiveness and White Ambivalence to Racialized Black Death." Western Political Science Association Conference (April 2018).

DeMora, Stephanie, Adriana Ninci, and Loren Collingwood. "Shoot First in ALEC's Castle: The Diffusion of Stand Your Ground Laws." Politics of Race Immigration and Ethnicity Consortium, ASU (February 2018).

El-Khatib, Stephen Omar and Loren Collingwood. "State Policy Responses to Sanctuary Cities: Explaining the Rise of Sanctuary City Legislative Proposals." Politics of Race Immigration and Ethnicity Consortium, UCR (September 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." APSA (September 2017).

Collingwood, Loren, McGuire, Will, Gonzalez O'Brien Ben, Hampson, Sarah, and Baird, Katie. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." APSA (September 2017).

Collingwood, Loren, Reny, Tyler, Valenzuela, Ali. "Flipping for Trump: In 2016, Immigration and Not Economic Anxiety Explains White Working Class Vote Switching." UCLA (May 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." UCLA (May 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." Politics of Race Immigration and Ethnicity Consortium, UCSB (May 2017).

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." Vancouver, Western Political Science Association Conference (April. 2017).

Collingwood, Loren, McGuire, Will, Gonzalez-O'Brien Ben, Hampson, Sarah, and Baird, Katie. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." WPSA (April 2017).

Gonzalez-O'Brien, Benjamin, Loren Collingwood, and Stephen El-Khatib. "Gimme Shelter: The Myth and Reality of the American Sanctuary City". Vancouver, Western Political Science Association Conference WPSA (April 2017).

Rush, Tye, Pedraza, Francisco, Collingwood, Loren. "Relieving the Conscience: White Guilt and Candidate Evaluation." Politics of Race Immigration and Ethnicity Consortium, UCI (March 2017).

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." Philadelphia, American Political Science Association Conference (Sept. 2016)

Barreto, Matt, Loren Collingwood, Sergio Garcia-Rios, and Kassra Oskooii. "Estimating Candidate Support: Comparing EI & EI-RxC." Chicago, Midwest Political Science Association Conference (April 2016)

Bishin, Benjamin, Loren Collingwood, and Erinn Lauterbach. "Cross-Racial Mobilization in a Rapidly Diversifying Polity: Latino Candidates and Anglo Voters" Chicago, Midwest Political Science Association Conference (April 2016)

Gonzalez-O'Brien, Benjamin, Loren Collingwood, and Stephen El-Khatib. "Gimme Shelter: The Myth and Reality of the American Sanctuary City". San Diego, Western Political Science Association Conference (April 2016)

Collingwood, Loren and Antoine Yoshinaka. The new carpetbaggers? Analyzing the effects of migration on Southern politics. The Citadel Conference on Southern Politics, Charleston, SC (Mar 2016)

Alamillo, Rudy and Loren Collingwood. Chameleon Politics: Social Identity and Racial Cross-Over Appeals. American Political Science Association Conference, San Francisco (Sept 2015)

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." San Francisco, American Political Science Association Conference (Sept 2015)

Alamillo, Rudy and Loren Collingwood. Chameleon Politics: Social Identity and Racial Cross-Over Appeals. Western Political Science Association Conference, Las Vegas (April 2015)

Barreto, Matt and Loren Collingwood. Confirming Electoral Change: The 2012 U.S. Presidential Election OSU Conference (October, 2013). "Earning and Learning the Latino Vote in 2008 and 2012: How the Obama Campaign Tried, Refined, Learned, and Made Big Steps in Cross-Racial Mobilization to Latinos.



Collingwood, Loren and Ashley Jochim. 2012 Midwest Political Science Association Annual Conference (April) Chicago, IL. "Electoral Competition and Latino Representation: The Partisan Politics of Immigration Policy in the 104th Congress."

Collingwood, Loren. 2012 Western Political Science Association Annual Conference (March) Portland, OR. "The Development and Use of Cross-Racial Mobilization as Campaign Strategy in U.S. Elections: The Case of Texas 1948-2010."

Collingwood, Loren. 2012 Institute for Pragmatic Practice Annual Conference (March) Seattle, WA. "Changing Demographics, Rural Electorates, and the Future of American Politics."

Collingwood, Loren. 2012 Politics of Race, Immigration, and Ethnicity Consortium (January) Riverside, CA. "The Development of Cross-Racial Mobilization: The Case of Texas 1948-2010."

Collingwood, Loren. 2011 American Political Science Association Annual Conference (September) Seattle, WA. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization."

Forman, Adam and Loren Collingwood. 2011 American Political Science Association Annual Conference (September) Seattle, WA. "Measuring Power via Presidential Phone Records." (Poster)

Collingwood, Loren with (Tim Jurka, Wouter Van Atteveldt, Amber Boydston, and Emiliano Grossman). UseR! 2011 Conference. (August) Coventry, United Kingdom. "RTextTools: A Supervised Learning Package for Text Classification in R."

Jurka, Tim, Loren Collingwood, Wouter Van Atteveldt, Amber Boydston, and Emiliano Grossman. 2011 Comparative Agendas Project Conference. (June) Catania, Italy. "RTextTools: A Supervised Learning Package for Text Classification in R."

Collingwood, Loren and John Wilkerson. 2011 Journal of Information Technology & Politics Conference. (May) Seattle, WA. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren. 2011 Politics of Race, Immigration, and Ethnicity Consortium (May) Davis, CA. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization"

Collingwood, Loren. 2011 Western Political Science Conference (April) San Antonio, TX. "Race-Matching as Targeted Mobilization."

Collingwood, Loren. 2011 Western Political Science Conference (April) San Antonio, TX. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization"

Collingwood, Loren (with John Wilkerson). Invited Talk: Texas A&M University. (April, 2011) "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren (with John Wilkerson). Invited Talk: Rice University. (April, 2011) "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren. 2011 Midwest Political Science Association Annual Conference (April) Chicago, IL. "Race-Matching as Targeted Mobilization."

Collingwood, Loren and John Wilkerson. 2011 Text as Data Conference. (March) Evanston, IL. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."



Collingwood, Loren and John Wilkerson. 2011 Southern Political Science Conference. (January) New Orleans, LA. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren (with Ben Gonzalez). 2010 American Political Science Association Annual Conference. (September) Washington, DC. "The Political Process in Florida: Modeling African American Registration Rates Post *Smith v. Allwright*, 1944-1964."

Wilkerson, John, Steve Purpura, and Loren Collingwood. 2010 NSF Funded Tools for Text Workshop. (June) Seattle, WA. "Rtexttools: A Supervised Machine Learning Package in an R-Wrapper."

Collingwood, Loren and Marcela Garcia-Castanon. 2010 Western Political Science Association Annual Conference. (April) San Francisco, CA. "Negativity as a Tool: candidate poll standing and attack politics."

Collingwood, Loren. 2010 Politics of Race, Immigration, and Ethnicity Consortium. (January) Riverside, CA. "White Outreach: A spatial approach to modeling black incorporation in Florida post *Smith v. Allwright*, 1944-1965."

Collingwood, Loren. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Levels of Education, Political Knowledge and Support for Direct Democracy."

Collingwood, Loren. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "The Negativity Effect: Psychological underpinnings of advertising recall in modern political campaigns."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Negativity as a Tool: predicting negative responses and their effectiveness in the 2008 campaign season."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Switching codes: analyzing Obama's strategy for addressing Latinos in the 2008 presidential campaign."

Collingwood, Loren, (with Matt Barreto and Sylvia Manzano) 2009 Shambaugh Conference. (March) University of Iowa, IA. "More than one way to shuck a tamale: Latino influence in the 2008 general election."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Switching codes: analyzing Obama's strategy for addressing Latinos in the 2008 presidential campaign."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Pacific Northwest Political Science Conference. (October) Victoria, BC. "Negativity as a Tool: predicting negative responses and their effectiveness in the 2008 campaign season."

Collingwood, Loren and Francisco Pedraza (with Matt Barreto and Chris Parker). 2009 Center for Statistics and the Social Sciences 10th Anniversary Conference. (May) Seattle, WA. "Race of interviewer effects: perceived versus actual."

Collingwood, Loren (with Matt Barreto, Chris Parker, and Francisco Pedraza). 2009 Pacific Northwest Political Science Conference. (October) Victoria, BC. "Race of interviewer effects: perceived versus actual."

Barreto, Matt, Loren Collingwood and Todd Donovan. 2008 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Early Presidential Primaries, Viability, and Vote Switching in 2008."

Collingwood, Loren. 2008 Midwest Political Science Association Annual Conference. (April) Chicago, IL. “Levels of Education and Support for Direct Democracy: A Survey Experiment.”

Collingwood, Loren. 2008 American Political Science Association Annual Conference. (September) Boston, MA. “Levels of Education and Support for Direct Democracy: A Survey Experiment.” (Poster)

Collingwood, Loren. 2008 American Political Science Association Annual Conference. (September) Boston, MA. “Response Effects in Multi-Candidate Primary Vote Questions.” (Poster)

## Computer Skills

R, Stata, Python, WinBugs/JAGS, L<sup>A</sup>T<sub>E</sub>X, SPSS, MySQL, Access, ArcGIS, Some C++ when interacting with R.

## Reports

Collingwood, Loren. (2008). *The Washington Poll: pre-election analysis*. www.washingtonpoll.org.

Collingwood, Loren. (2008). *Democratic underperformance in the 2004 gubernatorial election: explaining 2004 voting patterns with an eye towards 2008*. www.washingtonpoll.org.

Barreto, Matt, Loren Collingwood, Francisco Pedraza, and Barry Pump. (2009). *Online voter registration in Washington State and Arizona*. Commissioned by Pew Research Center.

Collingwood, Loren, Todd Donovan, and Matt Barreto. (2009). *An assessment of ranked choice voting in Pierce County, WA*.

Collingwood, Loren. (2009). *An assessment of the fiscal impact of ranked choice voting in Pierce County, WA*. Commissioned by the League of Women Voters.

Barreto, Matt, and Loren Collingwood. (2009). *Latino candidates and racial block voting in primary and judicial elections: An analysis of voting in Los Angeles County board districts*. Commissioned by the Los Angeles County Chicano Employees Association.

Barreto, Matt, and Loren Collingwood. (2011). *A Review of Racially Polarized Voting For and Against Latino Candidates in Los Angeles County 1994-2010*. Commissioned by Los Angeles County Supervisor Gloria Molina. August 4.

Collingwood, Loren. (2012). *Recent Political History of Washington State: A Political Map*. Commissioned by the Korean Consulate.

Collingwood, Loren. (2012). *Analysis of Polling on Marijuana Initiatives*. Commissioned by Greenberg Quinlan Rosner.

Collingwood, Loren, Sean Long, and Francisco Pedraza. (2019). *Evaluating AltaMed Voter Mobilization in Southern California, November 2018*. Commissioned by AltaMed.



## Relevant Work Experience

### *Collingwood Research, LLC*

Statistical Consulting and Analysis

January 2008 - Present

Conducted over 200 projects involving political research, polling, statistical modeling, redistricting analysis and mapping, data analysis, micro-targeting, and R software development for political and non-profit clients. Clients include: Greenberg Quinlan Rosner, Latino Decisions, Pacific Market Research, Beck Research, Squier Knapp Dunn Communications, Anzalone-Lizst Research, League of Women Voters, Shelia Smoot for Congress, pollster.com, Comparative Agendas Project, Amplified Strategies, Gerstein Bocian & Agne, Strategies 360, the Korean Consulate, the California Redistricting Commission, Monterey County Redistricting Commission, ClearPath Strategies, Los Angeles County Council, Demchak & Baller Legal, Arnold & Porter LLP, JPM Strategic Solutions, National Democratic Institute (NDI) – on site in Iraq, Latham & Watkins, New York ACLU, United States Department of Justice (Demography), Inland Empire Funder's Alliance (Demography), Perkins & Coie, Elias Law Group; Santa Clara County (RPV Analysis); Native American Rights Fund (NARF); West Contra Costa Unified School District (Demography); Lawyers' Committee for Civil Rights Under Law; LatinoJustice PRLDEF

## Expert Witness Work

Expert Witness: *East St. Louis Branch NAACP vs. Illinois State Board of Elections*, 2021

Expert Witness: *LULAC of Iowa vs. Pate*, 2021

Expert Witness: *United States Department of Justice vs. City of Hesperia*, 2021

Expert Witness: *NAACP vs. East Ramapo Central School District*, New York, 2018-2019

Riverside County, Corona and Eastvale, 2015

Los Angeles County Redistricting Commission, 2011

Racially Polarized Voting analysis of Latino and Asian candidates in San Mateo County and alternative map creation, 2010-2011

State of California, Citizens Redistricting Commission, including Blythe, CA, in Riverside County, 2011

Monterey County, CA Redistricting, alternative map creation, 2011

### *Greenberg Quinlan Rosner*

Assistant Analyst, Anna Greenberg

June 2005 - May 2007

Assisted in the development of questionnaires, focus group guidelines, memos, and survey reports for political, non-profit, and corporate clients. Moderated in-depth interviews and focus groups.

Loren Collingwood

17

*Greenberg Quinlan Rosner*

Field Associate

December 2003 - June 2005

Managed qualitative and quantitative data collection process in the U.S. and internationally. Provided methodological advice, including sample stratification, sampling Latino populations, and modal sampling strategies.

*Congressman Adam Schiff*

Database Manager

March 2003 - June 2003

Managed constituent mail and survey databases; updated and maintained Member's Congressional voting record.

*Strategic Consulting Group*

Field Organizer, Carol Roberts for Congress

July 2002 - November 2002

Recruited and coordinated over 100 volunteers for mailings, canvassing, phone banking, and GOTV operations. Developed internship program and managed 15 interns from local colleges and high schools.

*Institute for Policy Studies*

Intern, John Cavanagh

May 2001 - August 2001

Provided research assistance for projects advocating reform of the WTO, World Bank, and IMF. Worked on reports and op-ed pieces on global economic issues advocating fair trade.


[Who We Are](#)
[What We Do](#)
[In the News](#)
[Contact](#)
[More](#)


Collingwood Research provides redistricting, demography, data analysis, survey research, and other contract-based research to local governments, federal and state government agencies, non-profit organizations, campaigns, and civil-rights organizations.

[+ Find out more](#)

## Our Services

### Demography

We analyze racial demographic trends: where people live; how populations shift over time; and how demography shapes elections, housing, policing, and local policy outcomes.

[+ Learn More](#)

### Racially Polarized Voting Analysis

We examine whether racially polarized voting (RPV)—when voters from different groups vote differently—is present in a political/governmental jurisdiction. RPV is a key component of demonstrating violations of the U.S. Voting Rights Act.

[+ Learn More](#)

### Redistricting

We develop electoral districts designed to ensure fair elections, equitable representation, and electoral outcomes that comply with the standards outlined by federal and state voting rights laws.

[+ Learn More](#)

**DEFENDANTS'**

**9**

**A.A.B.**

**2/28/2023**

## Expert Testimony

We provide data-driven expert reports and testimony in litigation to empirically evaluate the presence/absence of racially polarized voting or other racially discriminatory policies.

[+ Learn More](#)

## Data Analytics

Our work integrates a range of data analytic techniques, including: conventional statistical analysis, web-scraping, text analysis, machine learning, geocoding, and statistical software development.

[+ Learn More](#)

## Survey Research

We identify the specific factors that will sway voters using methods such as maximum-difference (maxdiff), factor analysis, segmentation analysis, and text classification of open-ended survey responses.

[+ Learn More](#)

### Email

[info@collingwoodresearch.com](mailto:info@collingwoodresearch.com)

### Follow

© 2021 by Collingwood Research LLC.  
Proudly created by doolittle.design

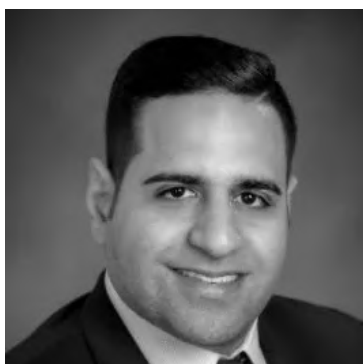
[Who We Are](#)[What We Do](#)[In the News](#)[Contact](#)[More](#)

# Who We Are

Our team of researchers and data scientists bring academic-quality research and real-world expertise to our consultancy work. We are experienced analyzing polling data, providing legal expert testimony, developing software, publishing peer-reviewed research, coordinating with community activists, and presenting analyses to donors and local policymakers.



Loren Collingwood, Ph.D.



Kassra Oskooii, Ph.D.



Rachel Carroll, M.A.



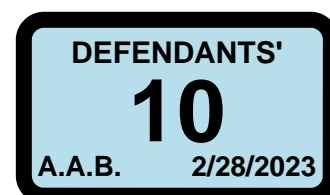
Stephanie ('Steph')  
DeMora, Ph.D.



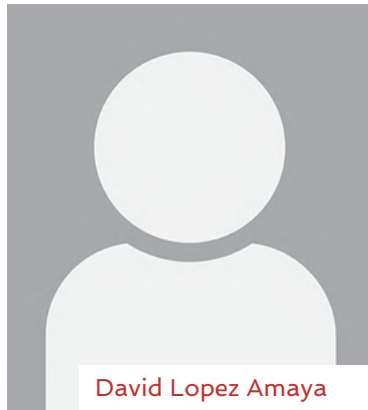
Sean Long, M.A.



Stephen Omar El-Khatib,  
M.A.







David Lopez Amaya

Email

info@collingwoodresearch.com

Follow



© 2021 by Collingwood Research LLC.  
Proudly created by doolittle.design

## Expert Report of Dr. Loren Collingwood

*Grant v. Raffensperger*, No. 1:22-CV-00122-SCJ (N.D. Ga.)

December 12, 2022

*Loren Collingwood*

---

DEFENDANTS'

11

A.A.B.

2/28/2023

## Background and Qualifications

I am an associate professor of political science at the University of New Mexico. Previously, I was an associate professor of political science and co-director of civic engagement at the Center for Social Innovation at the University of California, Riverside. I have published two books with *Oxford University Press*, 39 peer-reviewed journal articles, and nearly a dozen book chapters focusing on sanctuary cities, race/ethnic politics, election administration, and racially polarized voting. I received a Ph.D. in political science with a concentration in political methodology and applied statistics from the University of Washington in 2012 and a B.A. in psychology from the California State University, Chico, in 2002. I have attached my curriculum vitae, which includes an up-to-date list of publications.

In between my B.A. and Ph.D., I spent 3-4 years working in private consulting for the survey research firm Greenberg Quinlan Rosner Research in Washington, D.C. I also founded the research firm Collingwood Research, which focuses primarily on the statistical and demographic analysis of political data for a wide array of clients, and lead redistricting and map-drawing and demographic analysis for the Inland Empire Funding Alliance in Southern California. I am the redistricting consultant for the West Contra Costa Unified School District, California, independent redistricting commission, in which I am charged with drawing court-ordered single-member districts.

I have served as an expert witness in a number of cases related to redistricting. I testified for the plaintiff in the Voting Rights Act (VRA) Section 2 case *NAACP v. East Ramapo Central School District*, No. 17 Civ. 8943 (S.D.N.Y.), on which I worked from 2018 to 2020. In that case, I used the statistical software eiCompare and WRU to implement Bayesian Improved Surname Geocoding (BISG) to identify the racial/ethnic demographics of voters and estimate candidate preference by race using ecological data. I was also the racially polarized voting (RPV) expert in several cases during this redistricting cycle: *East St. Louis Branch NAACP v. Illinois State Board of Elections*, No. 1:21-cv-05512 (N.D. Ill.), having filed two reports and sat for a deposition; *Johnson v. Wisconsin Elections Commission*, No. 2021AP1450-OA (Wis.), having filed three reports; *Rivera v. Schwab*, No. 2022-CV-000089 (Kan. Dist. Ct.), having filed a report, sat for a deposition, and testified at trial; *LULAC v. Abbott*, No. 3:21-CV-00259-DCG-JES-JVB (W.D. Tex.), having filed three reports and sat for a deposition; *Walen v. Burgum*, No. 1:22-cv-00031-PDW-CRH (D.N.D.), having filed a report and testified at trial; and *Soto Palmer v. Hobbs*, No. 3:22-cv-05035-RSL (W.D. Wash.), having filed a report.

I have also served as an expert witness in other cases related to voting rights more generally. I am the quantitative expert in *LULAC of Iowa v. Pate*, No. CVCV061476 (Iowa Dist. Ct.), and have filed an expert report in that case. I am the BISG expert in *LULAC Texas v. Scott*, No. 1:21-cv-00786-XR (W.D. Tex.), and have filed two reports and been deposed in that case. I am also the RPV expert in *Lower Brule Sioux Tribe v. Lyman County*, No. 3:22-CV-03008-RAL (D.S.D.), where I filed a report and testified at trial.

I am being compensated at a rate of \$400/hour. No part of my compensation is dependent upon the conclusions that I reach or the opinions that I offer.

## **Executive Summary**

- On every metric, Black Georgians are disadvantaged socioeconomically relative to non-Hispanic white Georgians. Blacks are worse off than whites on the following measures: income, unemployment, poverty, health, and educational attainment.
- These socioeconomic disparities have an adverse effect on the ability of Black Georgians to participate in the political process, as measured by voter turnout and other forms of political participation.
- This means that the political system does not respond to Black Georgians in the same way it responds to white Georgians. If the system did respond, we would expect to see fewer gaps in both health and economic indicators and a reduction in voter turnout gaps.
- Instead, Black Georgians vote at significantly lower rates than white Georgians. That is true at the statewide, county, and precinct levels—including in the Atlanta-Sandy Springs-Alpharetta Metropolitan area. This is also true in the Black Belt region of Georgia.
- The data show a significant relationship between turnout and disparities in health, employment, and education: as health, education, and employment outcomes increase, so does voter turnout in a material way.
- Black Georgians also lag behind white Georgians in other forms of political participation, like making campaign contributions, engaging local officials, and running for office.
- The academic literature overwhelmingly shows that these low levels of political participation are attributable to the socioeconomic disparities discussed above.

My opinions are based on the following data sources: the American Community Survey (ACS) across time; 2020 and 2022 statewide-, county-, and precinct-level voter registration and aggregate turnout data from the Georgia Secretary of State; 2010-2022 statewide voter turnout from the Georgia Secretary of State; 2014-2022 county-level voter turnout data from the Georgia Secretary of State; and the 2020 Cooperative Election Study.

## **Analysis**

### **A. Senate Factor 5**

I have been asked to examine item 5 of what has come to be known as the Senate Factors. During the 1982 Voting Rights Act extension, the Senate Judiciary Committee listed out factors that could be considered in evaluating a Section 2 VRA claim. These factors allow experts to inform the court as to the extent that minorities “are denied equal access to the political process.”

Senate Factor 5 examines the extent that minority group members (here, Black individuals) in a political jurisdiction (in this case the state of Georgia) bear the effects of discrimination in education, employment, and health that hinder said group’s political participation. Without a doubt, my analysis demonstrates that Black Georgians face clear and significant disadvantages in the above areas that reduce their ability to participate in the political process.

This analysis also speaks to Senator Factor 8: whether elected officials are less responsive to the particularized needs of the members of the minority group. My findings show that clear disparities across health and socioeconomic indicators impede Black Georgians' political participation. It follows that the political system is relatively unresponsive to Black Georgians; otherwise, we would not observe such clear disadvantages in healthcare, economics, and education.

## **B. Socioeconomic Disparities**

Starting with the 2015-2019 ACS, I constructed the following metrics for both the Black and white populations in Georgia: household median income; total households reporting income above \$100,000; total households reporting income above \$125,000; households receiving Supplemental Nutrition Assistance Program (SNAP, or food stamps) benefits in the past 12 months; percent of the population living below the poverty line in the last 12 months; percent of children living below the poverty line; percent of adults living below the poverty line; percent of the population over the age of 25 with a high school diploma; percent of the population over the age of 25 with a college degree; unemployment rate; percent of the population reporting a disability; and percent of the population reporting health insurance. These metrics reflect broad racial disparities in education, employment, and health.

As shown in Table 1, there are clear racial disparities in employment. The unemployment rate among Black Georgians (8.7%) is nearly double that of white Georgians (4.4%). And disparities persist among those *with* employment: white households are twice as likely as Black households to report an annual income above \$100,000. Black Georgians, meanwhile, were more than twice as likely—and Black children in particular more than three times as likely—to live below the poverty line over the past year. Black Georgians were nearly three times more likely than white Georgians to receive SNAP benefits.

On education, Black adults over the age of 25 are more likely than their white peers to lack a high school diploma (13.3% compared to 9.4%). These disparities fare no better in higher education: 35% of white adults over the age of 25 have obtained a bachelor's degree or higher compared to 24% of their Black counterparts.

Finally, on health, the Black population in Georgia is more likely to report a disability (11.8% compared to 10.9% for whites) and is more likely to lack health insurance (18.9% compared to 14.2% among 19-64 year-olds). All told, the numbers convey consistent racial disparities across economics, health, employment, and education.

I also reproduced the same analyses using the 2016-2020 ACS. As shown in Table 2, the racial disparities reported above hold across the different economic, health, employment, and education metrics.

	Black	White	White - Black
Median Household Income	\$44670	\$67955	\$23285
Pct. HH Income > \$100K	0.165	0.322	0.157
Pct. HH Income > \$125K	0.096	0.224	0.128
Pct. HH receiving SNAP	0.227	0.077	-0.15
Pct. below poverty line	0.215	0.101	-0.114
Pct. below poverty line, children	0.313	0.115	-0.198
Pct. below poverty line, VAP	0.18	0.098	-0.082
Pct. w/ Less than HS Diploma	0.133	0.094	-0.039
Pct. w/ Bachelor's Degree or higher	0.24	0.351	0.111
Pct. Unemployed	0.087	0.044	-0.043
Pct Disabled, ages 19-64	0.118	0.109	-0.009
Pct. Uninsured, ages 19-64	0.189	0.142	-0.047

*Table 1. Socioeconomic indicators across Black and white Georgians, 2015-2019 ACS.*

	<b>Black</b>	<b>White</b>	<b>White - Black</b>
Median Household Income	\$46964	\$70784	\$23820
Pct. HH Income > \$100K	0.18	0.34	0.16
Pct. HH Income > \$125K	0.108	0.24	0.132
Pct. HH receiving SNAP	0.222	0.071	-0.151
Pct. below poverty line	0.201	0.098	-0.103
Pct. below poverty line, children	0.293	0.108	-0.185
Pct. below poverty line, VAP	0.169	0.095	-0.074
Pct. w/ Less than HS Diploma	0.124	0.088	-0.036
Pct. w/ Bachelor's Degree or higher	0.251	0.358	0.107
Pct. Unemployed	0.085	0.043	-0.042
Pct Disabled, ages 19-64	0.121	0.109	-0.012
Pct. Uninsured, ages 19-64	0.187	0.141	-0.046

*Table 2. Socioeconomic indicators across Black and white Georgians, 2016-2020 ACS.*

These patterns hold across nearly every county in the state. Using the 2015-2019 ACS, I gathered the same metrics at the county level and considered only counties with at least 1,000 white and 1,000 Black residents. Georgia has 159 counties; of these, 141 meet this threshold. Whites have a higher median household income than Blacks in 136 of 141 of these counties.<sup>1</sup> Just two counties—Habersham and Paulding—feature a higher Black median household income (Habersham: \$64,286 vs. \$50,418; Paulding: \$50,418 vs. \$68,843). Among households making more than \$100,000, whites have an advantage over Blacks in 140 of the 141 counties.

Turning to SNAP, a higher percentage of Blacks have relied on SNAP in the past 12 months than whites in 140 of the 141 counties. In 136 of the 141 counties, Blacks are more likely to live below the poverty line than are whites. And in 130 of the 141 counties, whites are more likely than Blacks to have a 4-year college degree or higher.

---

<sup>1</sup> The ACS does not provide median income for Black households in three counties so these counties are treated as missing for this median household income comparison.



While the county distribution is not as pronounced with respect to unemployment and uninsured status, these disparities are still heavily weighted towards Black disadvantage. Blacks have a higher unemployment rate than whites in 118 of the 141 counties (84%), and the share of the population that is uninsured is higher for Blacks than for whites in 92 of the 141 counties (65%).<sup>2</sup>

## **C. Effect on Political Participation**

### **1. Academic Literature**

Socioeconomic disparities like these unquestionably affect political participation. There is a vast literature in political science that demonstrates a strong and consistent link between socioeconomic status (SES) and voter turnout. In general, voters with higher income and education are disproportionately likely to vote and participate in American politics (Wolfinger and Rosenstone 1980; Leighley and Nagler 2013; Nie et al. 1996; Mayer 2011). Brady, Verba, and Schlozman (1995) argue that resources—conceptualized as time, money, and civic skills (all related to education and income)—drive donation behavior, campaign volunteering, and voting. These broad SES findings hold using a variety of research designs. For example, Henderson (2018) uses a hookworm eradication program haphazardly (i.e., at random) applied to counties in the early 20th century South (the program exogenously covaries with educational attainment) to show a causal relationship between education and political participation.

Other research is in accord. Avery (2015) indicates that states with higher income inequality have greater income bias in turnout. Shah and Wichowsky (2019) show a link between home foreclosures and participation: Neighborhoods with a higher share of home foreclosures during the 2008 financial crisis subsequently experienced a drop in voter turnout, and affected individuals were less likely to vote in future elections. And findings in Pacheco and Fletcher (2015) indicate an association between self-reported health and voter turnout.

This overwhelming academic literature shows that the socioeconomic disadvantages suffered by Black Georgians affect their ability to participate in the political process.

This means that the political system does not respond to Black Georgians in the same way it responds to white Georgians. If the system did respond, we would expect to see fewer gaps in both health and economic indicators and a reduction in voter turnout gaps. A clear and consistent finding in political science research demonstrates that elected officials do not respond to constituent inquiry from minorities as readily as they do to white constituents (Barreto et al. 2004; Costa, 2017; White et al., 2015).

### **2. Voter Turnout**

When Georgians register to vote, they indicate their race. The Georgia Secretary of State maintains yearly statewide-, county-, and precinct-level voter registration and turnout by race. I gathered

---

<sup>2</sup> My conclusions about the reported racial disparities do not change when relying on the 2016-2020 ACS.

these data for the 2020 and 2022 general elections.<sup>3</sup> To calculate voter turnout, for both Black and white Georgians, I divided the total number of Black and white people who voted by the total number of the respective registered voter counts.

**a. Statewide Analysis**

For the years 2010-2022, I gathered statewide turnout data by race. The 2010-2012 turnout data is only available on the Secretary of State's website at the statewide level. Table 3 displays even-year statewide general election voter turnout by race across the 2010-2022 time period. This is a comprehensive list of elections as it covers both midterm and presidential election cycles.

For each election cycle, registered white voters turned out at higher rates than did registered Black voters. For instance, during the 2022 midterm election, whites turned out at 58.3%, whereas Blacks turned out at 45.0%, which translates into a gap of 13.3 percentage points in turnout. A similar gap (12.6%) is visible in the 2020 presidential election cycle. This Black-white gap is most narrow during President Obama's 2012 re-election – at 3.1% -- but in every single case whites vote at a noticeably higher rate than do Blacks.

<b>Year</b>	<b>Black TO</b>	<b>White TO</b>	<b>Gap</b>	<b>Total Turnout</b>
<b>2022</b>	<b>45</b>	<b>58.3</b>	<b>-13.3</b>	<b>50.5</b>
<b>2020</b>	<b>60</b>	<b>72.6</b>	<b>-12.6</b>	<b>65.7</b>
<b>2018</b>	<b>53.9</b>	<b>62.2</b>	<b>-8.3</b>	<b>56.4</b>
<b>2016</b>	<b>56.2</b>	<b>67.9</b>	<b>-11.6</b>	<b>62</b>
<b>2014</b>	<b>40.6</b>	<b>47.5</b>	<b>-6.9</b>	<b>42.9</b>
<b>2012</b>	<b>72.6</b>	<b>75.7</b>	<b>-3.1</b>	<b>72.9</b>
<b>2010</b>	<b>50.4</b>	<b>55.9</b>	<b>-5.5</b>	<b>52.1</b>

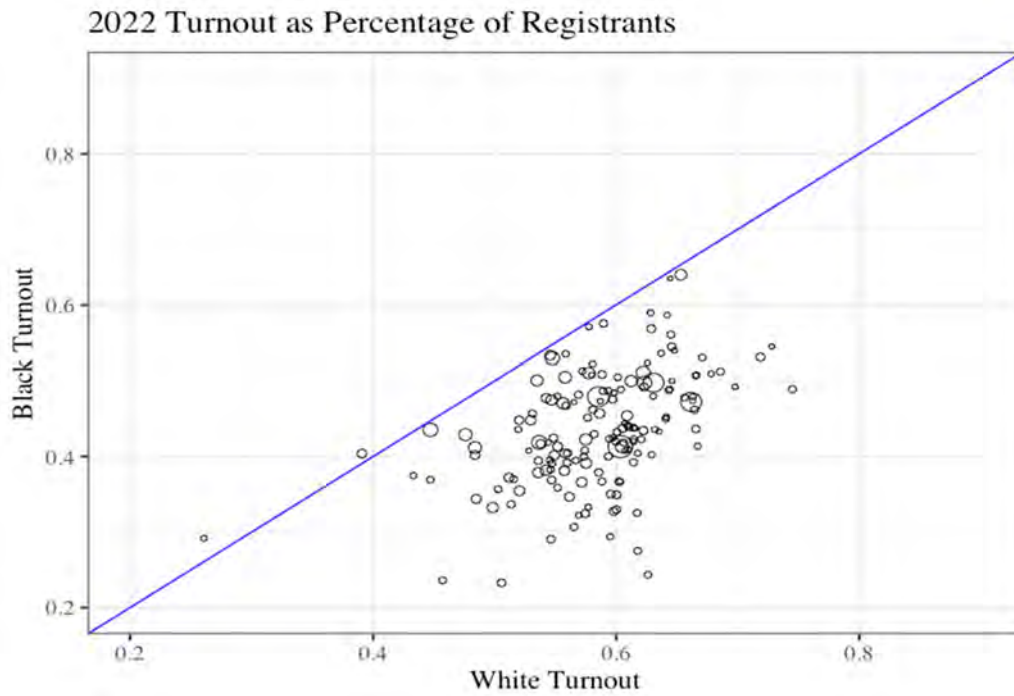
*Table 3. Statewide voter turnout by race, 2010-2022.*

**b. Countywide Analysis**

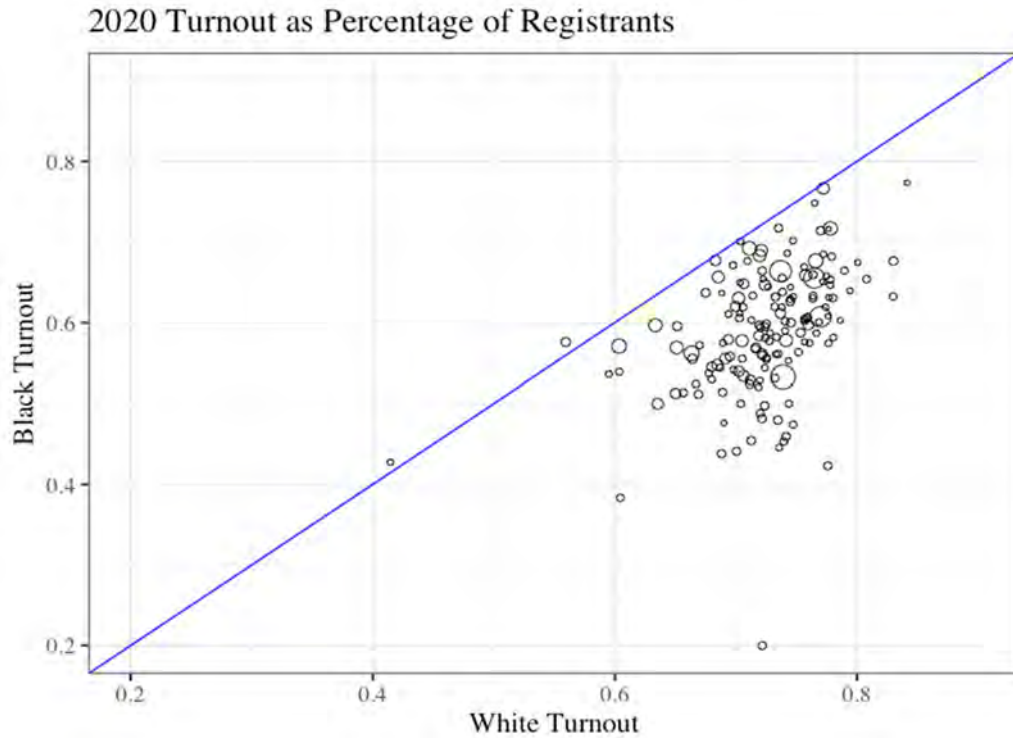
Next, I compared the share of a county's white registrants who voted in 2022 against the share of a county's Black registrants who voted in 2022. Figure 1 visually compares turnout (denominator is registration) between whites and Blacks across the state's counties. In almost every single county, white registrants voted at higher rates than did Black registrants. This is visually demonstrated by the fact that almost all of the dots (counties) fall below the blue identity line, as opposed to above. Only in Chattahoochee and Liberty Counties did Black registrants cast ballots

<sup>3</sup> This data was previously available at: [https://sos.ga.gov/index.php/elections/general\\_election\\_turnout\\_by\\_demographics\\_november\\_2020](https://sos.ga.gov/index.php/elections/general_election_turnout_by_demographics_november_2020).

at (slightly) higher rates than did white registrants. Using 2020 data, I find nearly identical results, as illustrated in Figure 2.

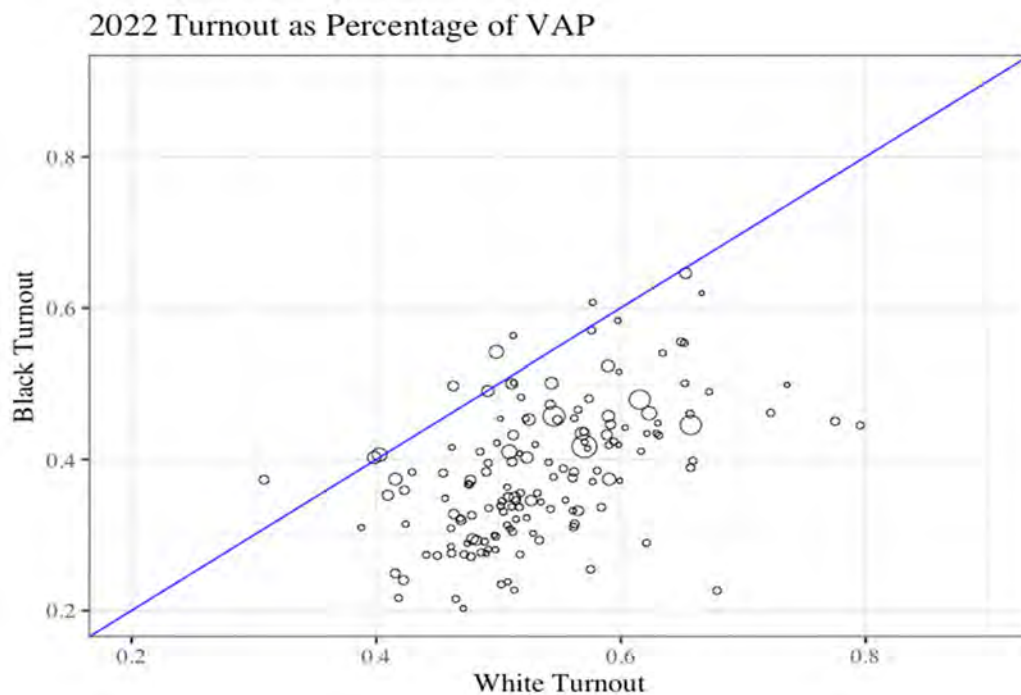


*Figure 1. 2022 turnout by county; white-Black differential based on voter registration.*

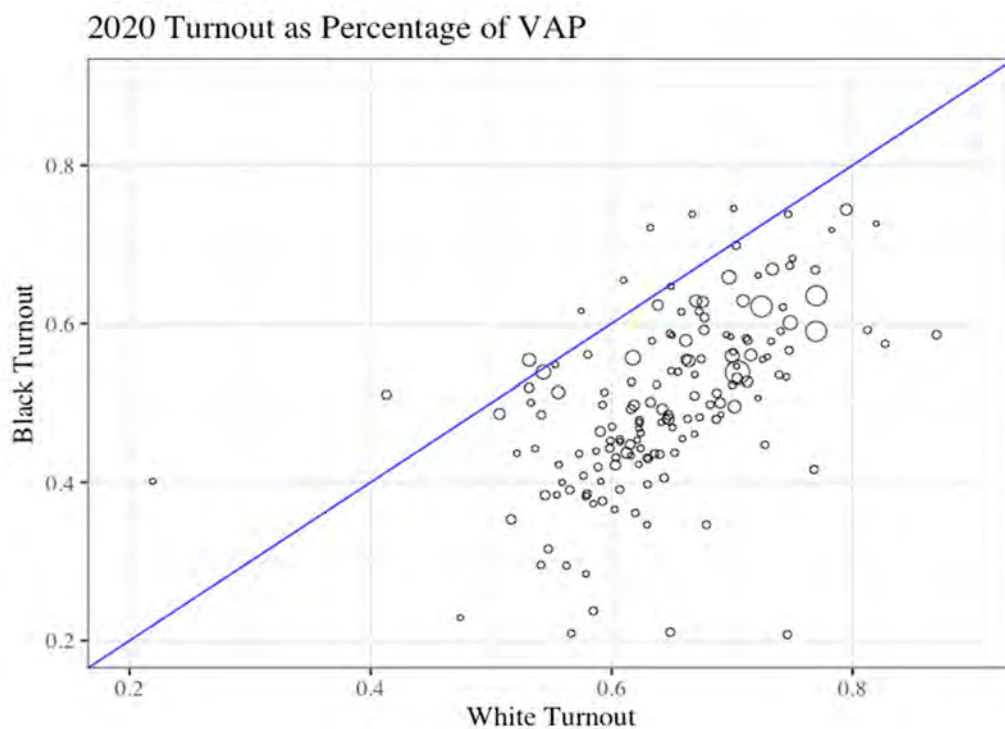


*Figure 2. 2020 turnout by county; white-Black differential based on voter registration.*

Below, Figures 3 and 4 plot out the same relationship but swap out registration for voting age population (VAP) as the denominator. The relationship is very similar using both 2022 and 2020 turnout data. Stated differently, the substantive findings do not change regarding which denominator is selected: white Georgians clearly vote at higher rates than Black Georgians.

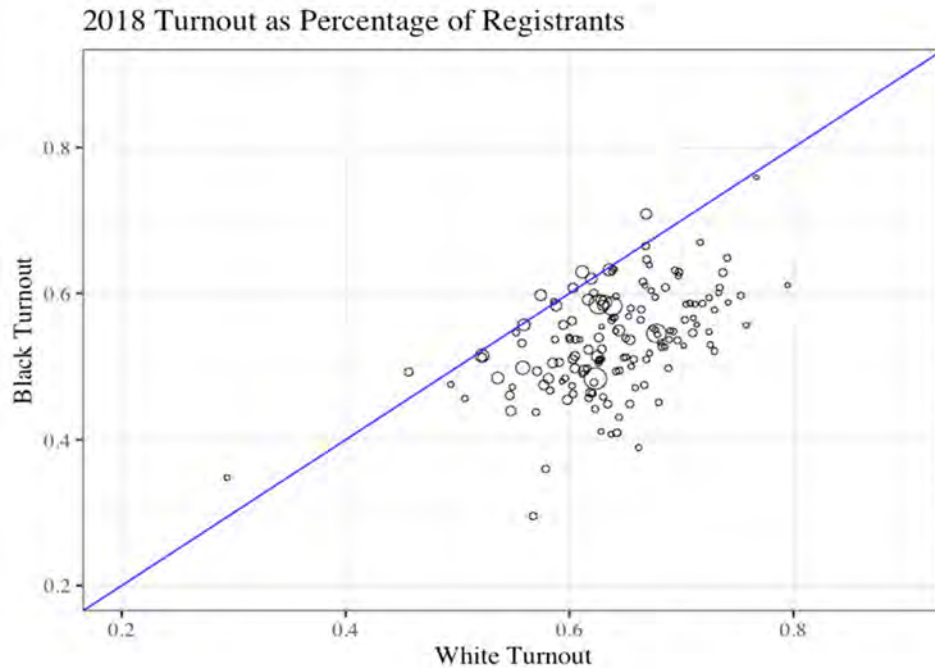


*Figure 3. 2020 turnout by county; white-Black differential based on VAP.*



*Figure 4. 2020 turnout by county; white-Black differential based on VAP.*

I also replicated the white-Black turnout differential analysis for the 2014-2018 elections because such data are readily available from the Georgia Secretary of State. Figure 5 plots out the 2018 white vs. Black turnout gap and demonstrates substantively the same trends discussed above. Figures 6 and 7 present the same analyses for the 2016 and 2014 elections, respectively.



*Figure 5. 2018 turnout by county; white-Black differential based on voter registration.*

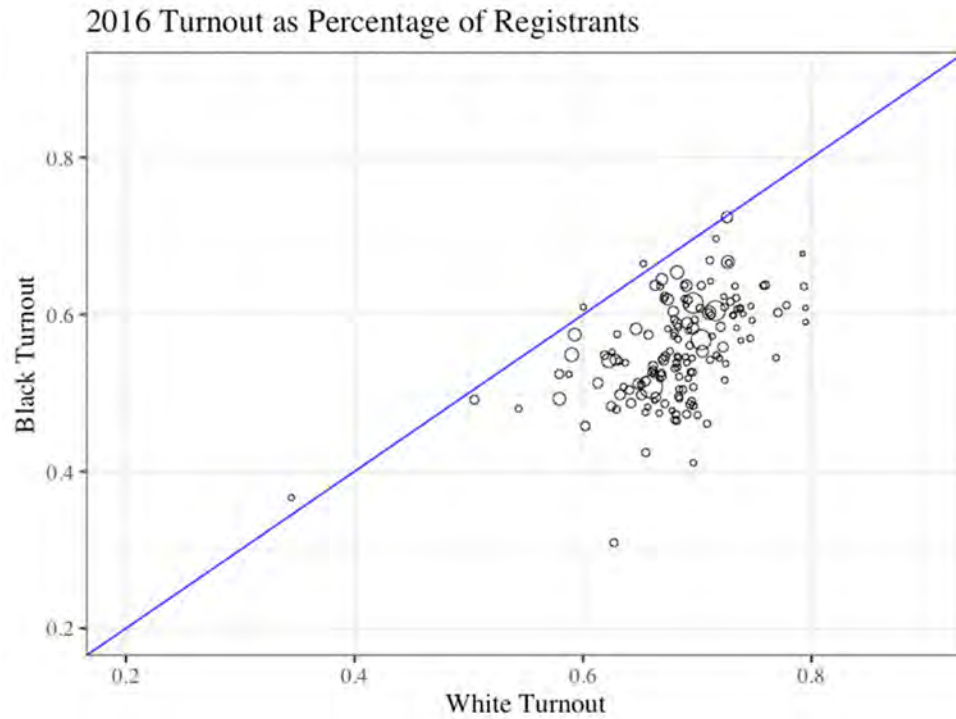


Figure 6. 2016 turnout by county; white-Black differential based on voter registration.

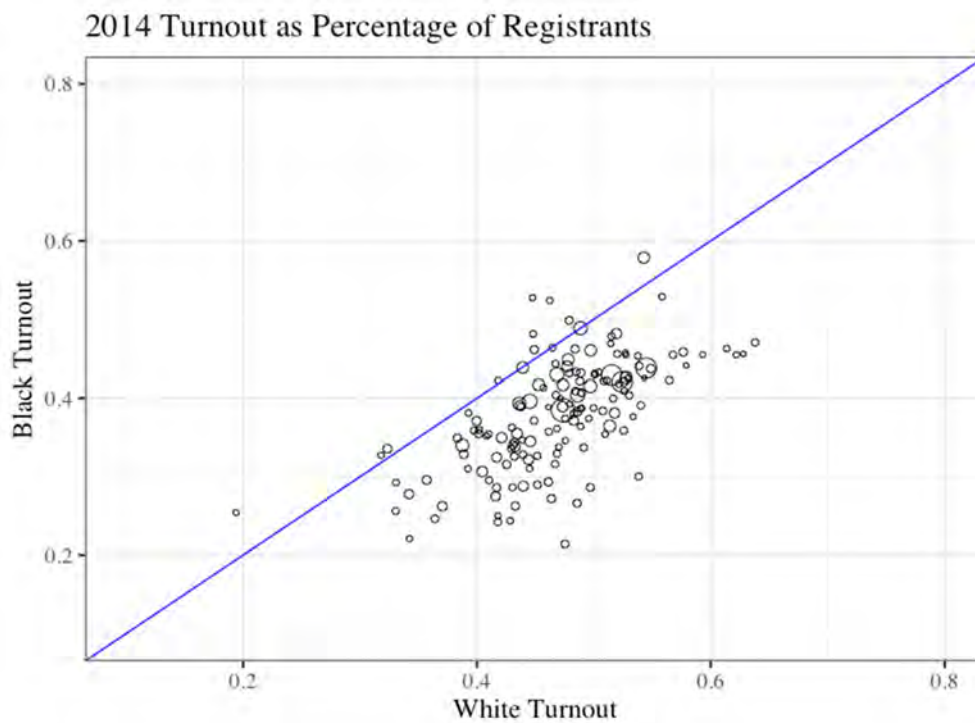


Figure 7. 2014 turnout by county; white-Black differential based on voter registration.



**c. Precinct-Level Analysis**

I replicated the 2020 and 2022 county analysis with Georgia precincts gathered from the Secretary of State's website.<sup>4</sup> The 2020 precinct file contains 2,784 precincts across the state and the 2022 precinct file contains 2,852 precincts. Both files include both registration and votes cast for whites and Blacks. I then subset the datasets to precincts with more than 100 Blacks and 100 whites to reduce the influence of outliers—namely, extremely small precincts. This resulted in a total of 1,957 precincts in the 2020 data and 2,010 precincts in the 2022 data.

The analysis of precinct-level turnout does not change the core substance of the reported findings. Of the 1,957 precincts in 2020, whites have a higher turnout in 1,549 (79.2%) precincts and Blacks in only 408 (20.8%) precincts. In 2022, whites have a higher turnout in 1,629 (81.0%) of the precincts, while Blacks have a turnout advantage in only 381 (19.0%) of the precincts. Figures 8 and 9 visually display the results, which are consistent with both the statewide and county analyses. The clear majority of precinct dots fall below the blue identity line.

---

<sup>4</sup> This data was previously available at: [https://sos.ga.gov/index.php/elections/general\\_election\\_turnout\\_by\\_demographics\\_november\\_2020](https://sos.ga.gov/index.php/elections/general_election_turnout_by_demographics_november_2020).

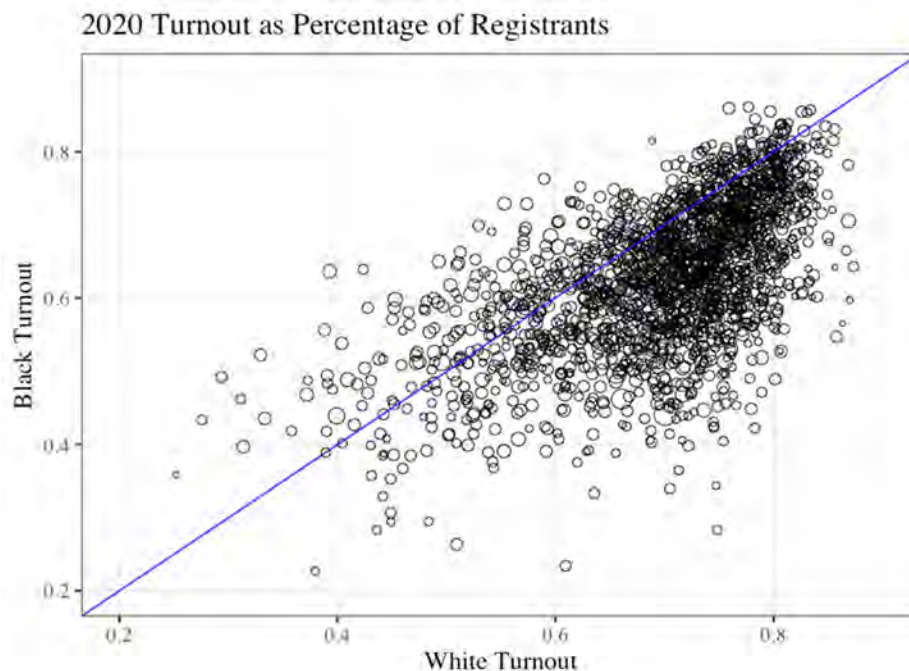


Figure 8. 2020 turnout by precinct; white-Black differential based on voter registration.

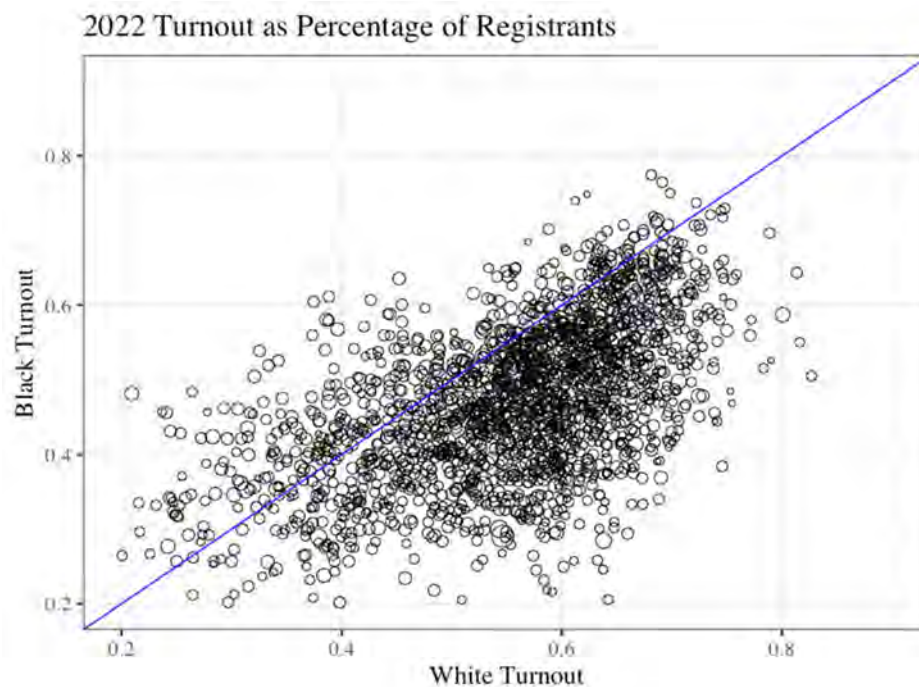


Figure 9. 2020 turnout by precinct; white-Black differential based on voter registration.

**d. Analysis of Atlanta-Sandy Springs-Alpharetta Metropolitan Area**

I also examined Black vs. white voter turnout rates in the Atlanta metropolitan area and Black Belt. For the former, I analyzed a subset Georgia counties: those in the Atlanta-Sandy Springs-Alpharetta Metropolitan Statistical Area.<sup>5</sup> Figures 10 through 13 plot out the white vs. Black turnout gap in the 2020 and 2022 general elections based on both registration and voting age population as the denominators. The trend is very similar to the overall statewide trend. In the 2020 election, Black turnout was not higher than white turnout in any of the counties. This result is consistent with the 2022 election, except that Black turnout very slightly exceeded white turnout in only three counties (Clayton, Henry, and Rockdale) when using voting age population, rather than registration, as the denominator.

---

<sup>5</sup> The counties include: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton.

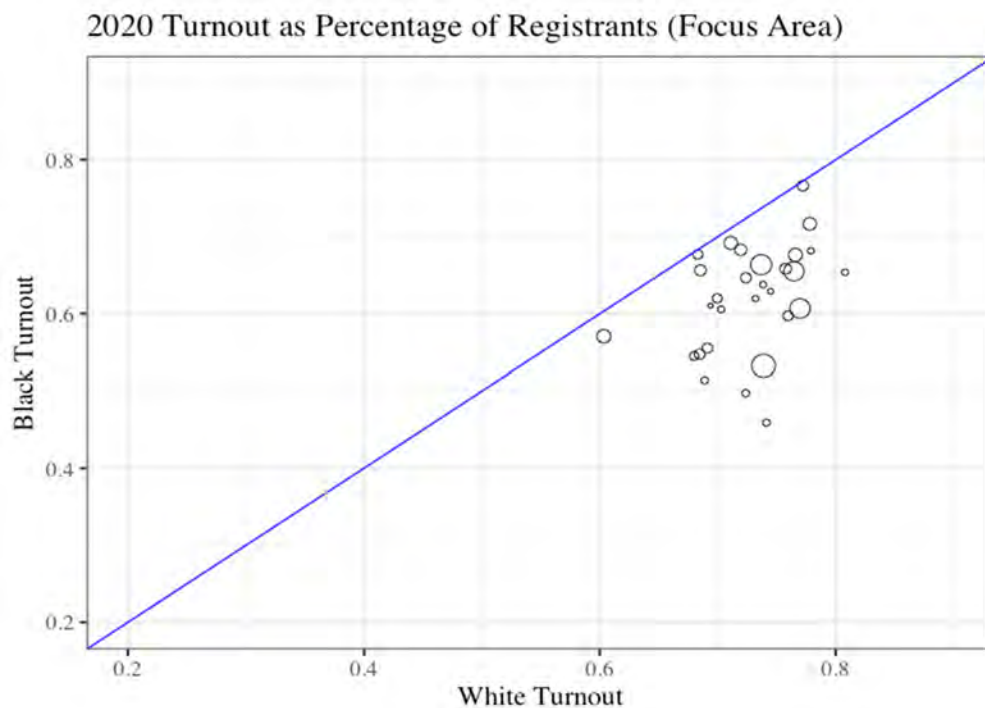


Figure 10. 2020 turnout by county in Atlanta metropolitan area; white-Black differential based on voter registration.

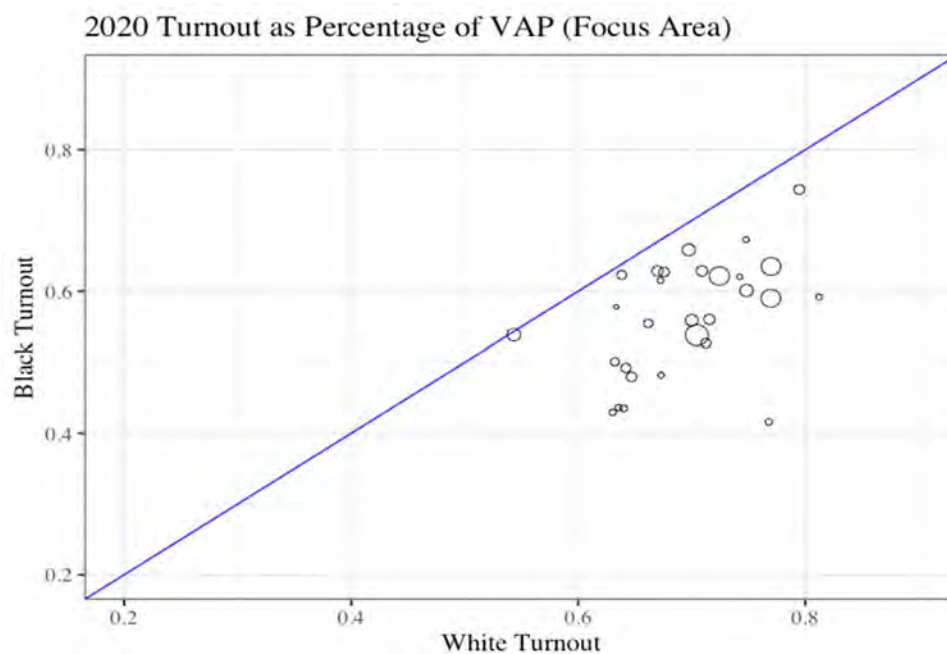
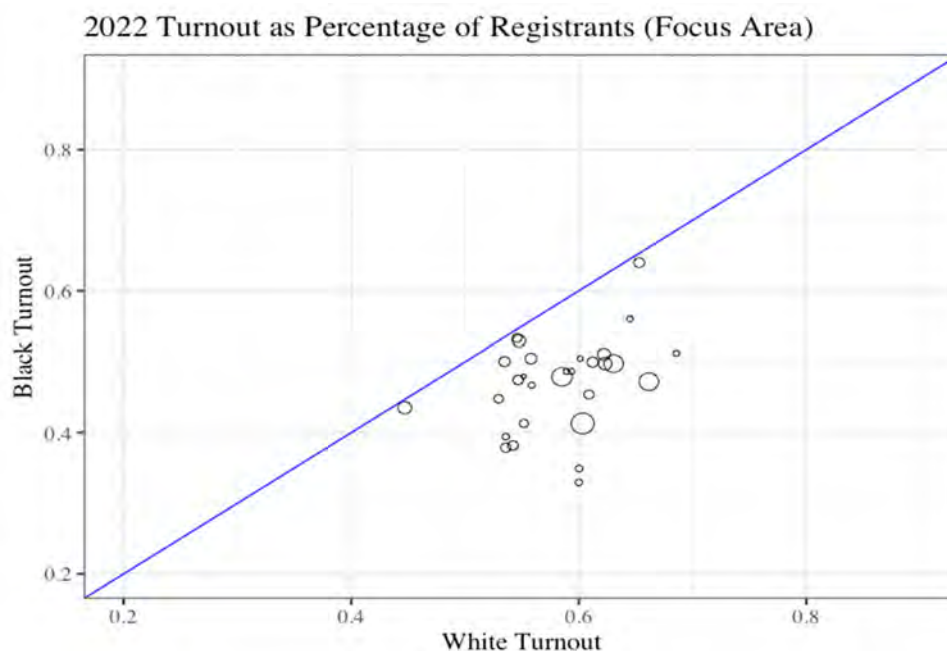
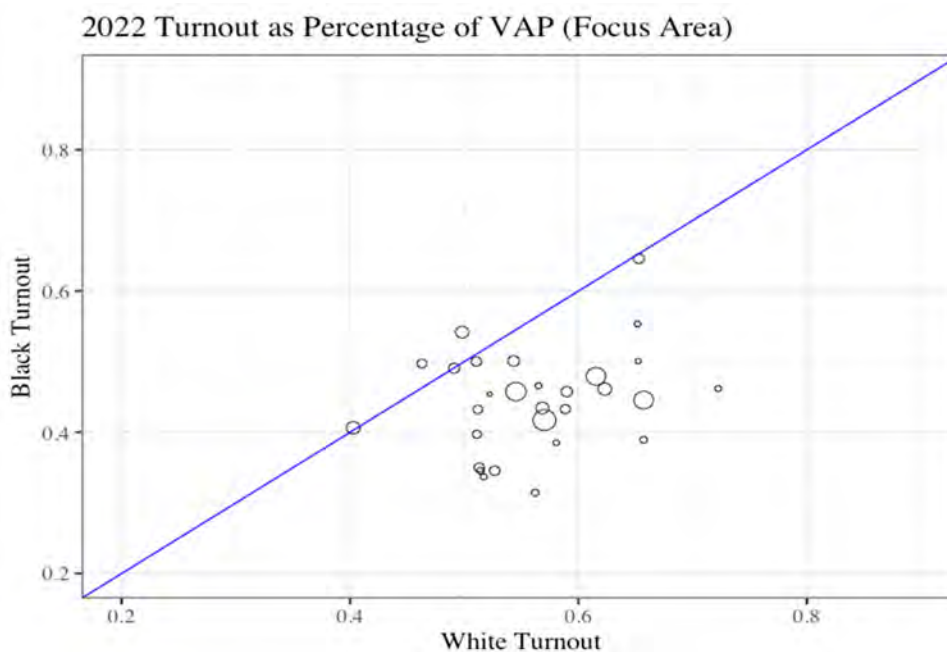


Figure 11. 2020 turnout by county in Atlanta metropolitan area; white-Black differential based on VAP.

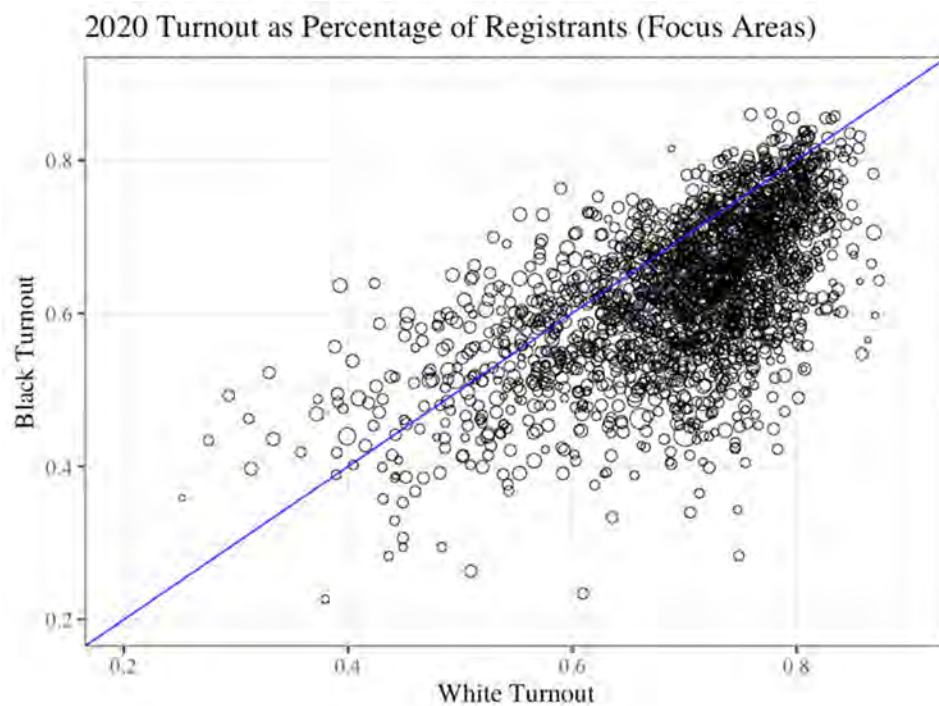


*Figure 12. 2022 turnout by county in Atlanta metropolitan area; white-Black differential based on voter registration.*

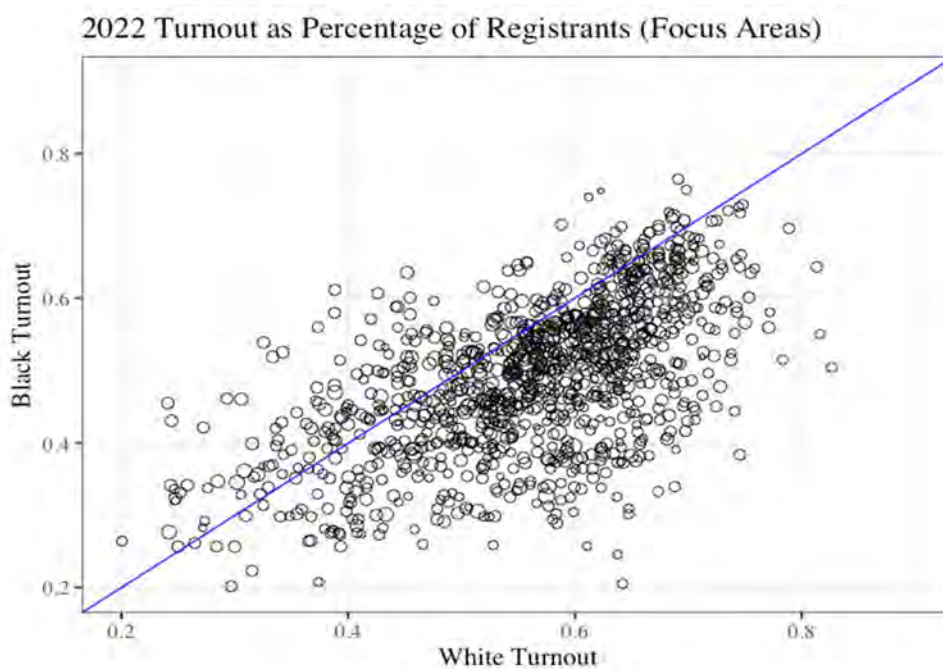


*Figure 13. 2020 turnout by county in Atlanta metropolitan area; white-Black differential based on VAP.*

Finally, I conducted the same analysis among precincts falling in the same set of counties. Again, as shown in Figures 14 and 15, whites vote at higher rates than do Blacks in the overwhelming majority of precincts.



*Figure 14. 2020 turnout by precinct in Atlanta metropolitan area; white-Black differential based on voter registration.*



*Figure 15. 2022 turnout by precinct in Atlanta metropolitan area; white-Black differential based on voter registration.*

**e. Analysis of the Black Belt Area**

As an additional set of analyses, I examined 2020 and 2022 Black vs. white voter turnout rates in the traditional “Black Belt” area of the state. The geographic area includes the following counties, which I subset the data to: Baker, Bibb, Burke, Calhoun, Chattahoochee, Clay, Dooly, Dougherty, Early, Glascock, Hancock, Houston, Jefferson, Lee, Macon, Marion, McDuffie, Miller, Mitchell, Muscogee, Peach, Quitman, Randolph, Richmond, Schley, Stewart, Sumter, Talbot, Taliaferro, Taylor, Terrell, Twiggs, Warren, Washington, Webster, and Wilkinson.

Figures 16 through 19 plot out the Black vs. white turnout gap based on both registration and VAP in this area. The trend is very similar to the overall statewide trend for both the 2020 and 2022 general elections.



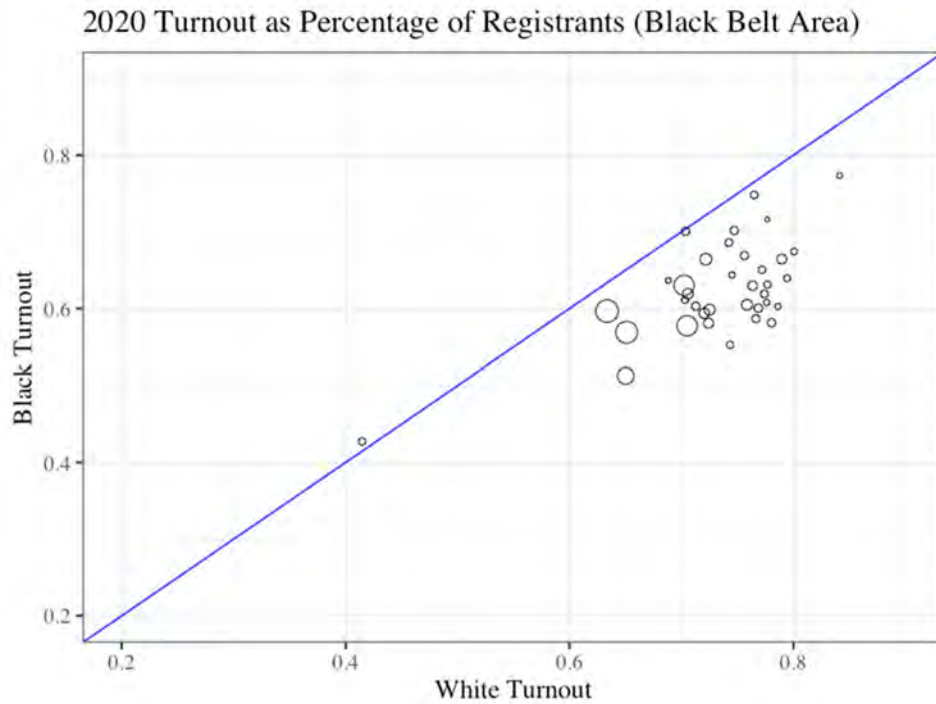


Figure 16. 2020 turnout by county in Black Belt; white-Black differential based on voter registration.

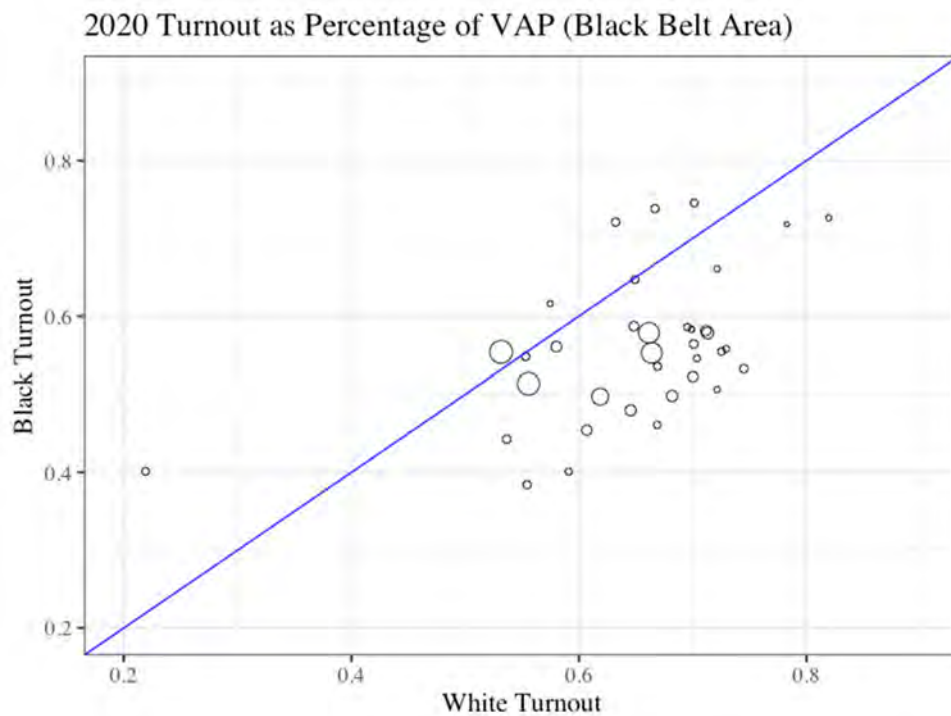
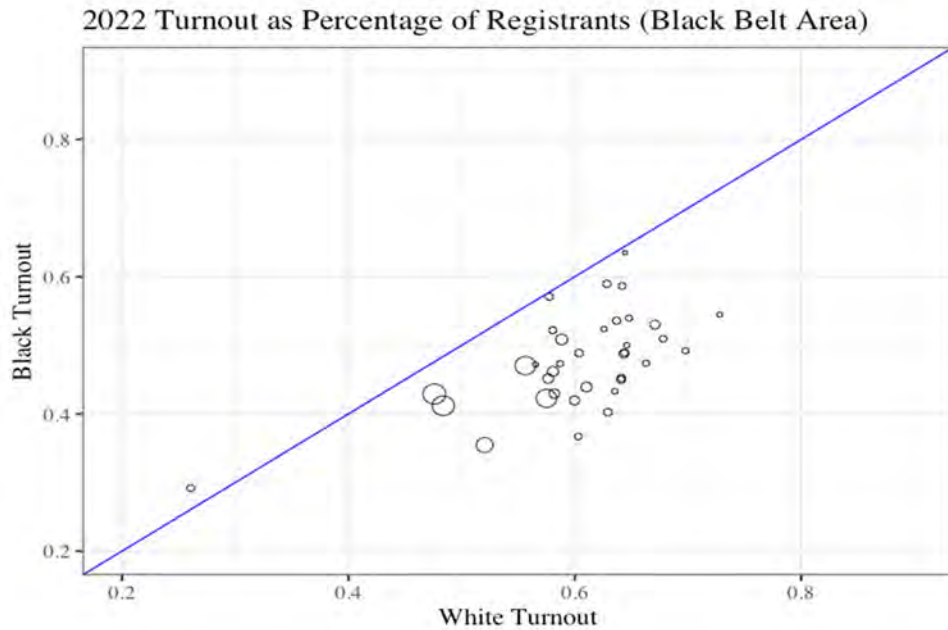
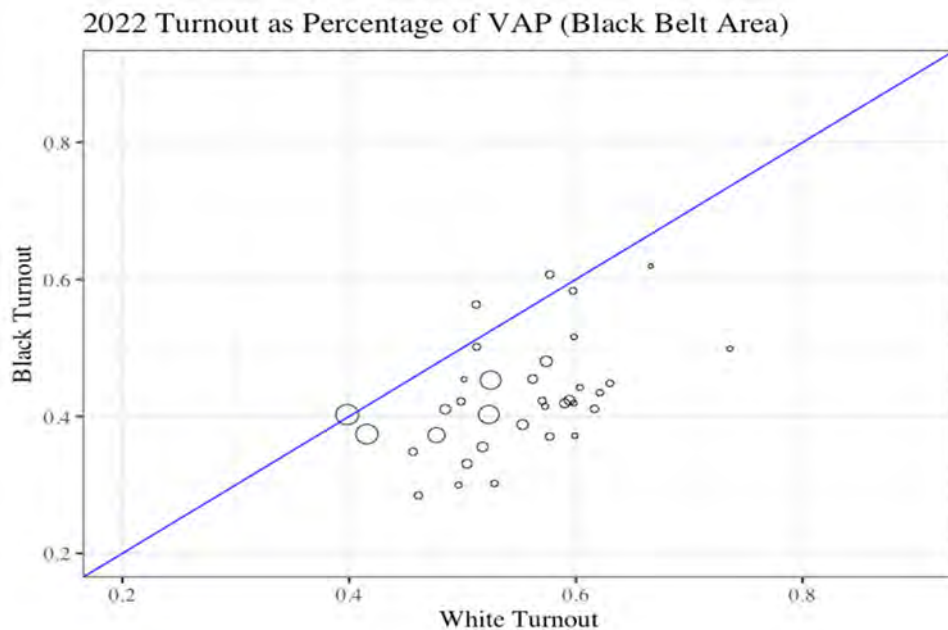


Figure 17. 2020 turnout by county in Black Belt; white-Black differential based on VAP.



*Figure 18. 2022 turnout by county in Black Belt; white-Black differential based on voter registration.*



*Figure 19. 2020 turnout by county in Black Belt; white-Black differential based on VAP.*

Similar to the analysis in the Atlanta metropolitan area, I examined the white-Black turnout differential among precincts falling into the set of Black Belt counties. As depicted in Figures 20 and 21, once again, I find that whites vote at higher rates than do Blacks in the clear majority of the precincts.

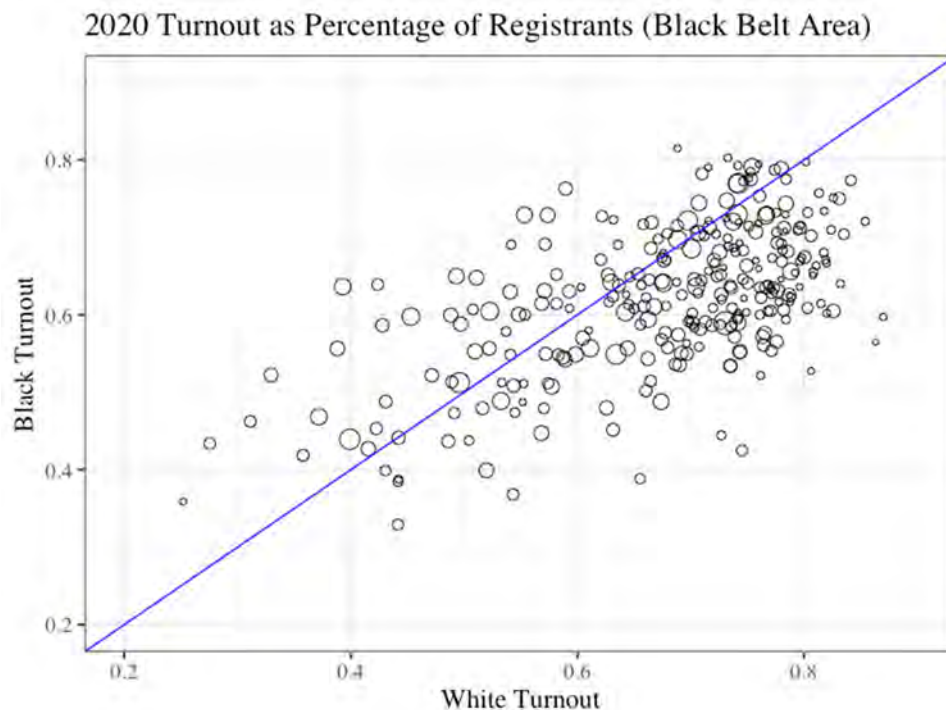


Figure 20. 2020 turnout by precinct in Black Belt; white-Black differential based on voter registration.

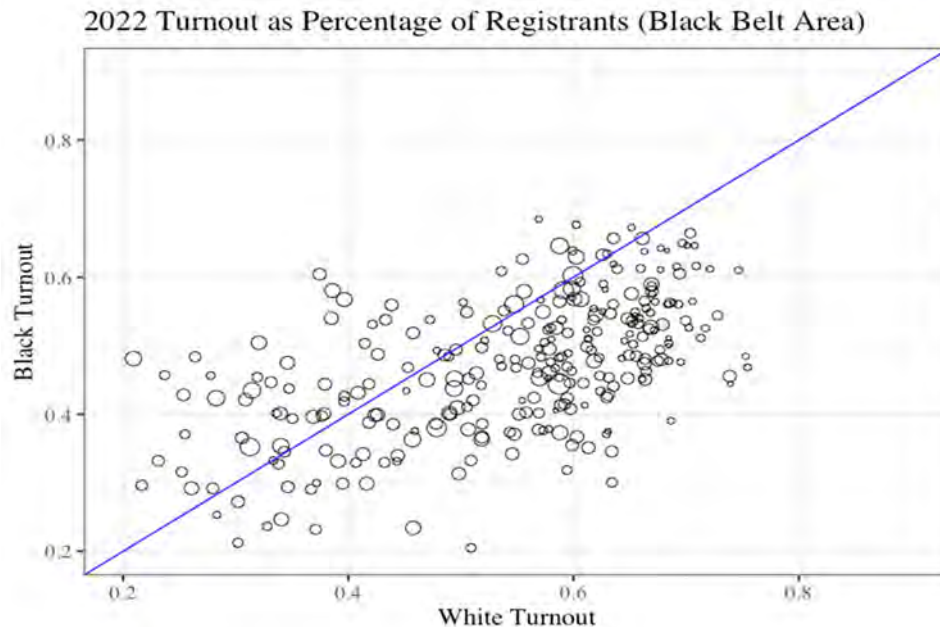


Figure 21. 2022 turnout by precinct in Black Belt; white-Black differential based on voter registration.

**f. Relationship Between Turnout in 2020 and Socioeconomic Disparities**

This section examines how the documented turnout differences are related to the socioeconomic disparities discussed at the outset of this report, like education and income, using both the 2015-2019 and 2016-2020 ACS datasets. Specifically, I examined the county-level relationship between different measures of Black educational attainment and Black voter turnout using the 2020 general election data.<sup>6</sup> Figure 22 plots out the relationship between percent Black with less than a high school education and Black voter turnout using the 2015-2019 ACS.<sup>7</sup> The blue line is the bivariate regression line ( $\beta = -0.35$ ,  $p < 0.001$ ), which shows that each 10-percentage-point increase in the size of the Black population without a high school degree decreases Black turnout by 3.5 percentage points. The difference between counties with the highest percentage of Black population with less than a high school education compared to counties with the lowest percentage of Black population with less than a high school degree (referred to as “min-max effects”)<sup>8</sup> surmounts to a decline of 11.8 [7.0, 16.5] percentage points in the Black turnout.

Figure 23 shows that these relationships hold when relying on the 2016-2020 ACS estimates for educational attainment. Specifically, a 10-percentage-point increase in the size of the Black population without a high school degree corresponds to a statistically significant 3.8 percentage point ( $p < 0.001$ ) decline in the Black turnout. The corresponding min-max decline in turnout is 12.4 [7.5, 17.3] percentage points.

---

<sup>6</sup> I replicated this analysis using 2022 turnout data, as shown in subsection (g).

<sup>7</sup> For each analysis I subset the data to counties with more than 1,000 registered Black voters. I do this to avoid outlier issues that can emerge with smaller counties. However, this subset does not change in any substantive way the results compared to a full data analysis. All regression analyses are weighted by total Black registration in the county.

<sup>8</sup> Min-max effect is the discrete change of moving from minimum to maximum value of the independent variable (for example, percent black population without high school education). Ninety-five percent (95%) confidence intervals for each estimate are reported in brackets.

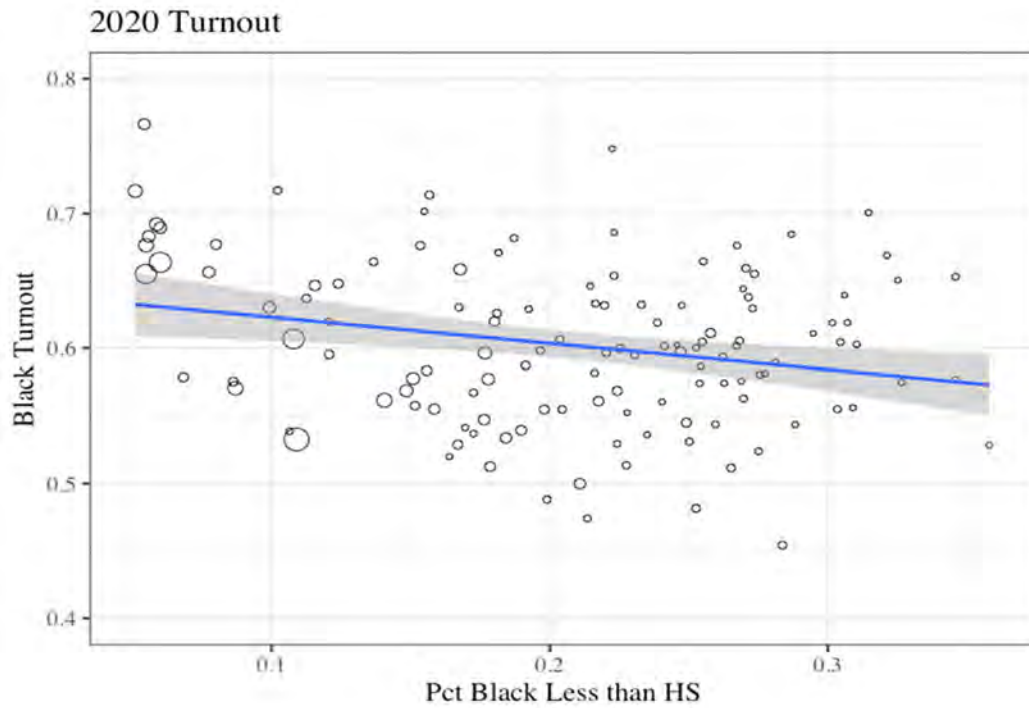


Figure 22. Association between Black less than high school education and 2020 Black turnout (2015-2019 ACS).

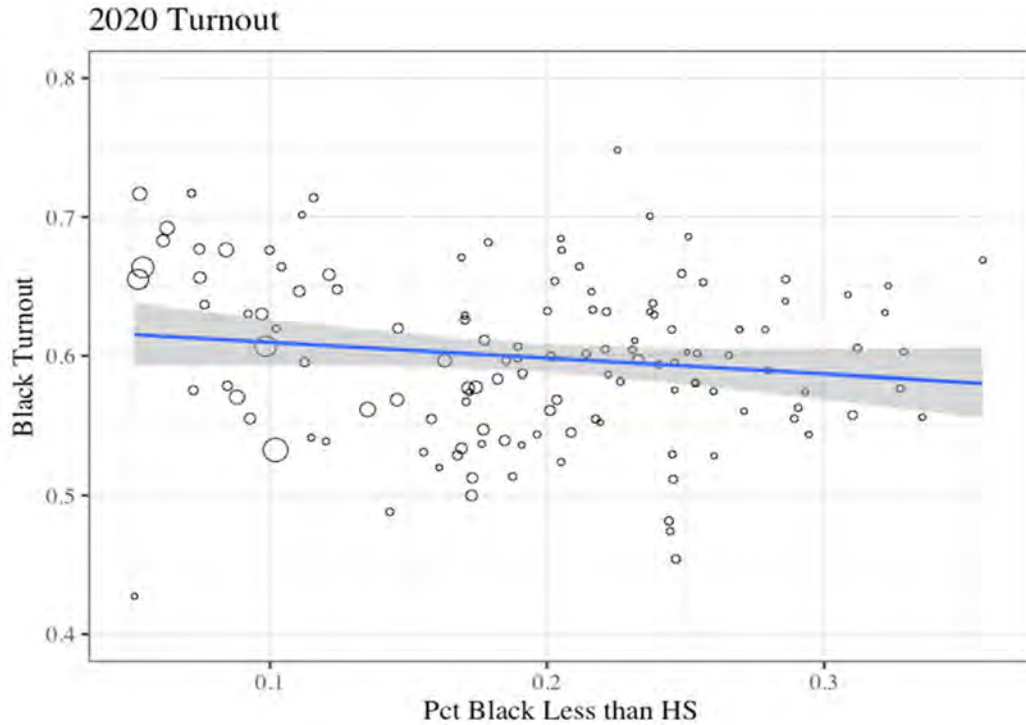


Figure 23. Association between Black less than high school education and 2020 Black turnout (2016-2020 ACS).

Figure 24 plots the relationship between the share of Blacks with a 4-year college degree and the share of Black registrants who voted by county. The relationship paints an inverse picture to the previous plot. As a county's Black education rises, so does the turnout rate. A bivariate regression reveals a statistically significant relationship ( $\beta = 0.23$ ,  $p < 0.001$ ), indicating that Black turnout rises 2.3 percentage points for each 10-percentage-point increase in percent Black 4-year degree, with a min-max effect size of 11.2 [6.9, 15.5] percentage points.

Figure 25 represents the same analysis using the 2016-2020 ACS. As shown, Black turnout increases by 2.1 percentage points for each 10-percentage-point increase in percent Black 4-year degree, with a min-max effect size of 11.8 [7.1, 16.6] percentage points. In both cases, I find statistically and substantively significant relationships between educational attainment and turnout, indicating that counties with lower levels of Black education are less likely than counties with higher levels of education to turnout.

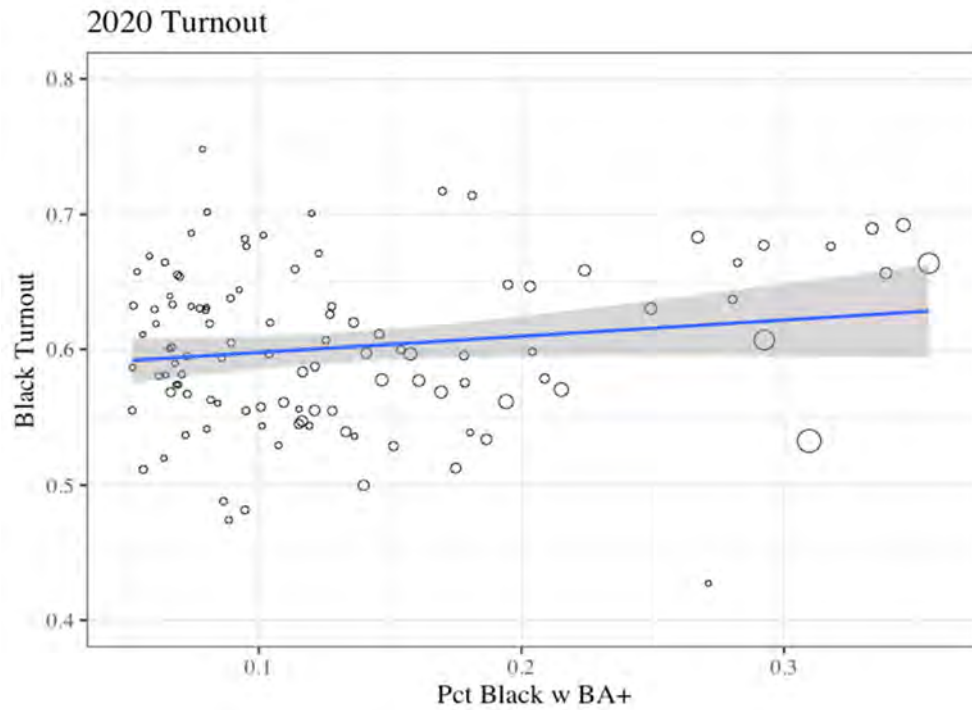


Figure 24. Association between Black 4-year degree and 2020 Black turnout (2015-2019 ACS).

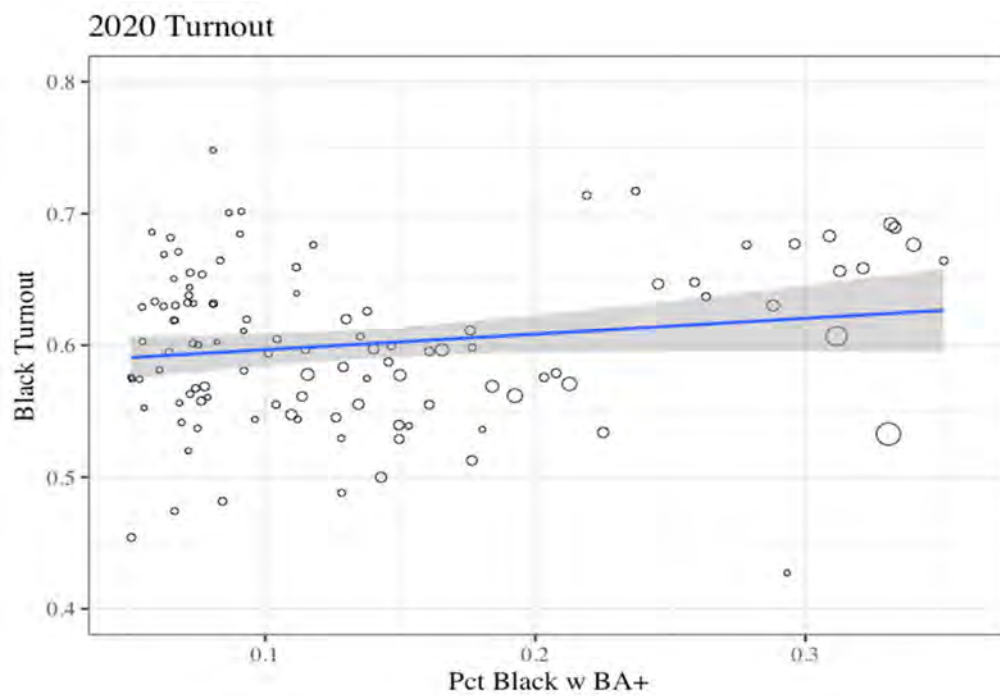


Figure 25. Association between Black 4-year degree and 2020 Black turnout (2016-2020 ACS).



Turning to income-related measures, Figure 26 plots out the relationship between the share of Blacks below the poverty line and the share of Black registrants who voted by county. As a county's Black poverty rises, the turnout rate declines. A bivariate regression reveals a statistically significant relationship ( $\beta = -0.49$ ,  $p < 0.001$ ), indicating that Black turnout falls 4.9 percentage points for each 10-percentage-point increase in percent Black below the poverty line. The min-max effect size is a decline of 25.7 [20.4, 31.1] percentage points in turnout, which is a substantively large gap between counties with the lowest Black poverty levels and those with the highest Black poverty levels.

Figure 27 visually depicts the same associations using the 2016-2020 ACS data. A 10-percentage-point increase in percent Black below the poverty line corresponds to a statistically significant 5.0 percentage point ( $p < 0.001$ ) decline in turnout. The difference in turnout levels between counties with the highest and lowest poverty levels amounts to a 21.1 [16.6, 25.6] percentage point gap.

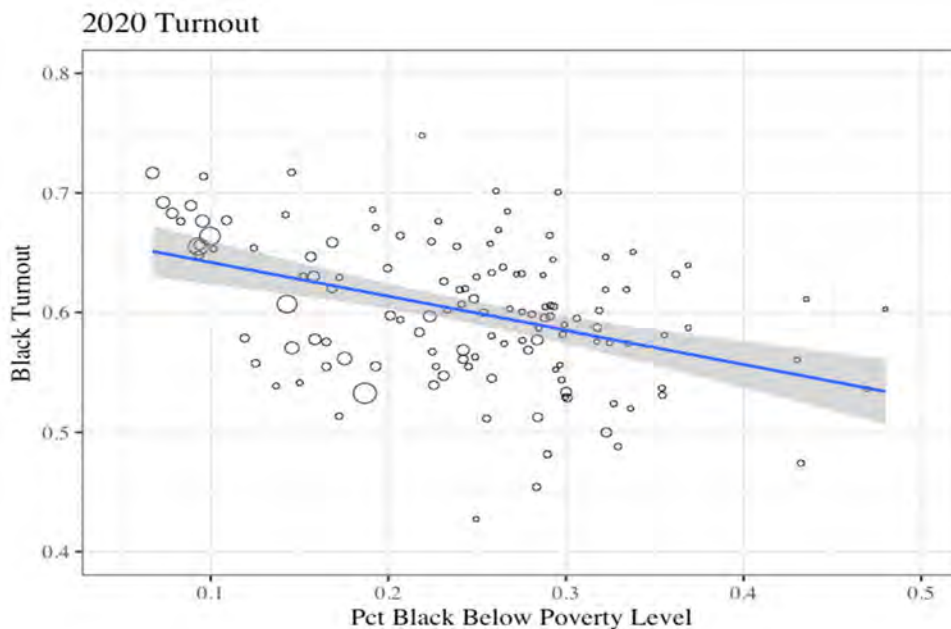


Figure 26. Association between Black poverty rates and 2020 Black turnout (2015-2019 ACS).

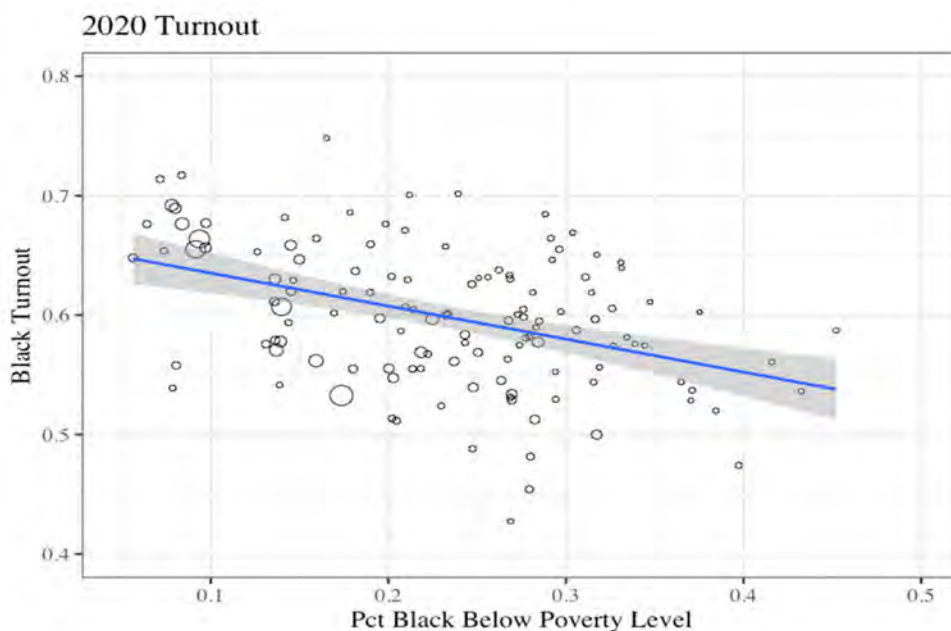


Figure 27. Association between Black poverty rates and 2020 Black turnout (2016-2020 ACS).

Lastly, Figures 28 and 29 plot the relationship between Black median household income and the share of Black registrants who voted by county. As a county's Black household income rises, the turnout rate rises. A bivariate regression with the 2015-2019 ACS data reveals a statistically significant relationship ( $\beta = 0.117$ ,  $p < 0.001$ ), and a min-max effect of 22.1 [17.5, 26.7] percentage points. The results are statistically and substantively similar using the 2016-2020 ACS: Counties with higher levels of Black median household income have a higher black turnout ( $\beta = 0.120$ ,

$p < 0.001$ ). The discrete difference between such counties amounts to a min-max effect size of 20.5 [16.4, 24.7] percentage points in turnout.

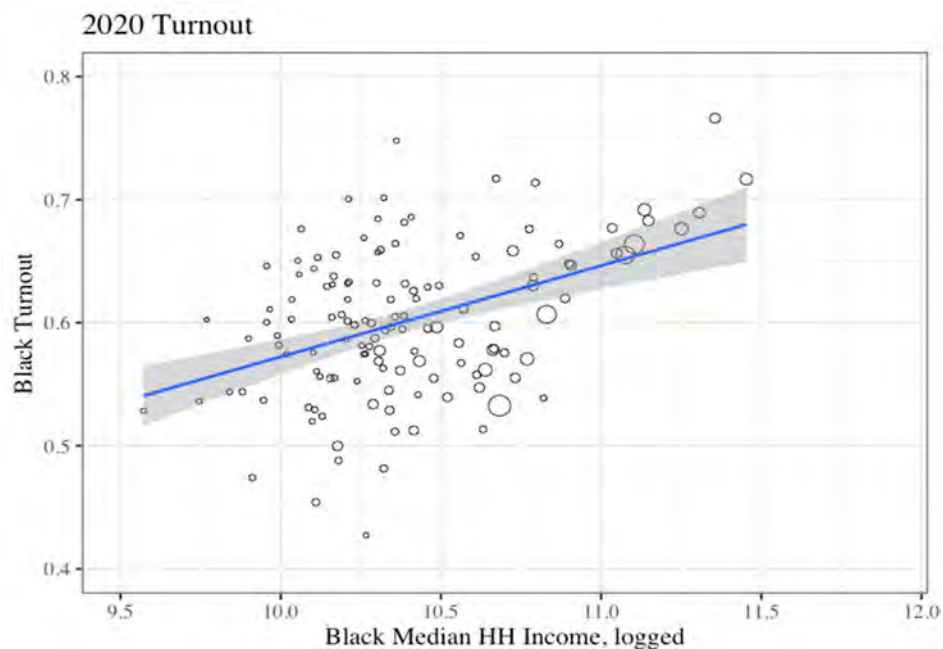


Figure 28. Association between Black median household income and 2020 Black turnout (2015-2019 ACS).

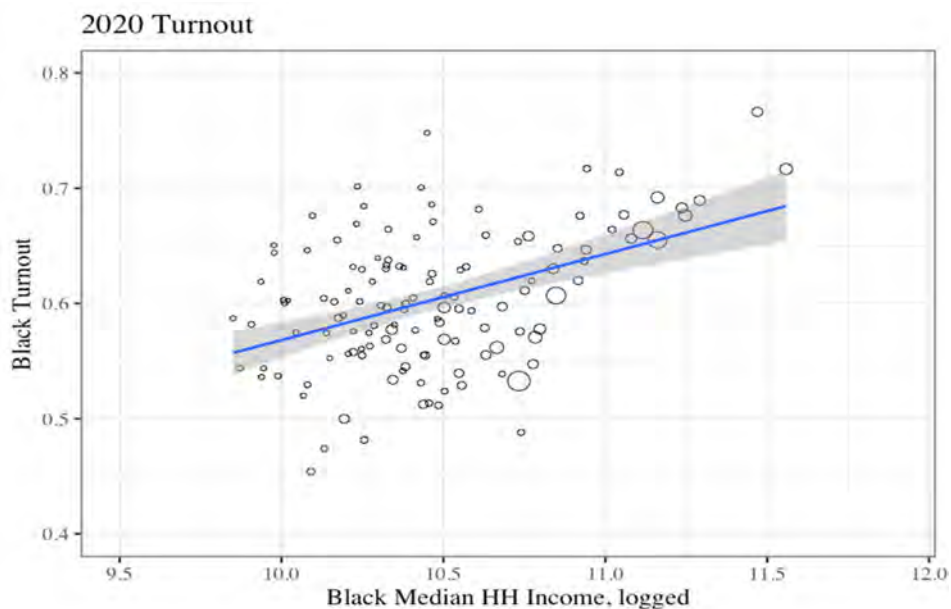


Figure 29. Association between Black median household income and 2020 Black turnout (2016-2020 ACS).

**g. Replication of the Relationship Between Turnout and Socioeconomic Disparities Using 2022 General Election Data**

This section replicates the analysis of Black turnout and socioeconomic disparities, as measured with the 2016-2020 ACS, using the 2022 general election data. This analysis shows that all the four socioeconomic indicators are once again statistically associated with Black turnout levels.

Starting with education, Figures 30 and 31 show that both measures of educational attainments are associated with Black turnout (at  $p < 0.001$ ). The discrete difference between counties with the highest percentage of Black population with less than a high school degree compared to counties with the lowest percentage of Black population with less than a high school degree amount to a 12.5 [8.2, 16.7] percentage point decline in Black turnout. When comparing counties with the highest share of bachelor's degrees to those with the lowest share of a bachelor's degrees, I find a discrete difference of 13.3 [9.3, 17.3] percentage points in turnout. This means that counties with lower levels of Black education attainment have significantly lower levels of Black turnout.

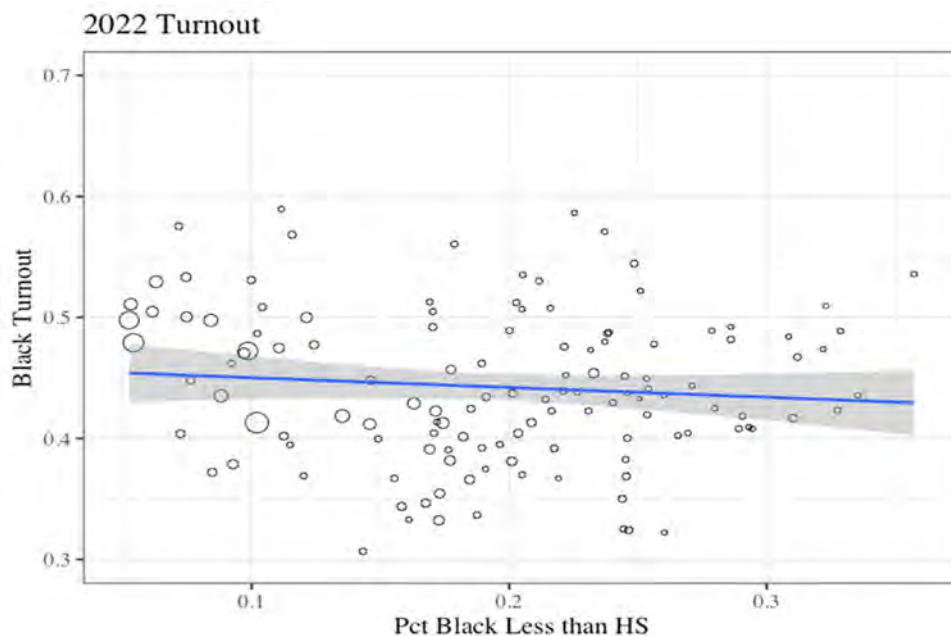


Figure 30. Association between Black less than high school education and 2022 Black turnout (2016-2020 ACS).

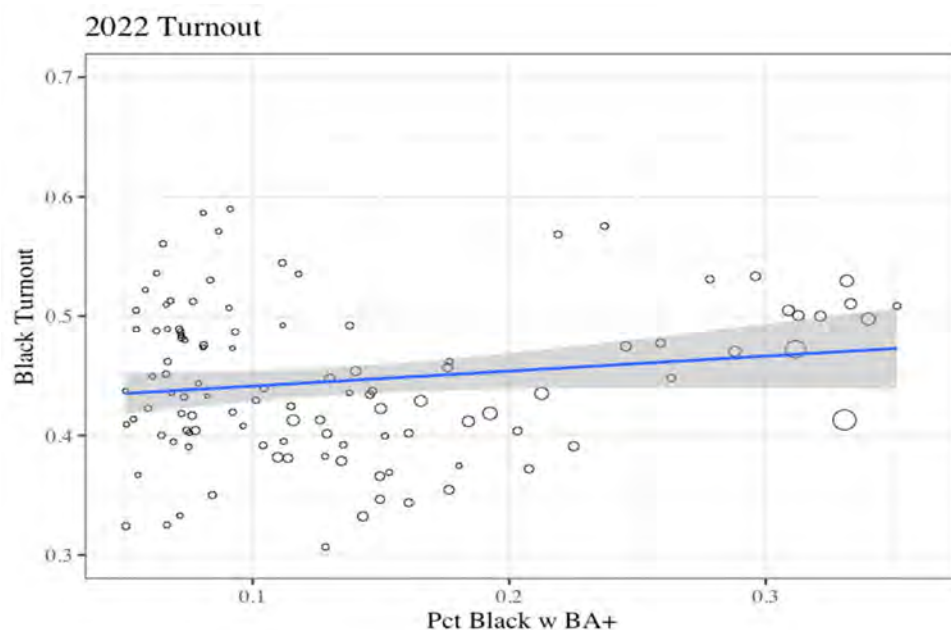
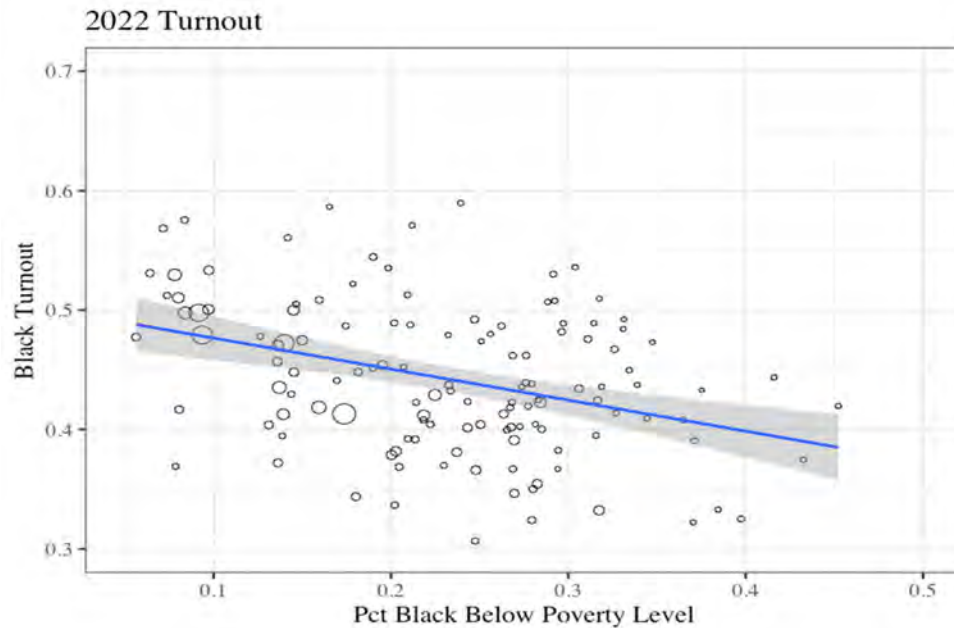


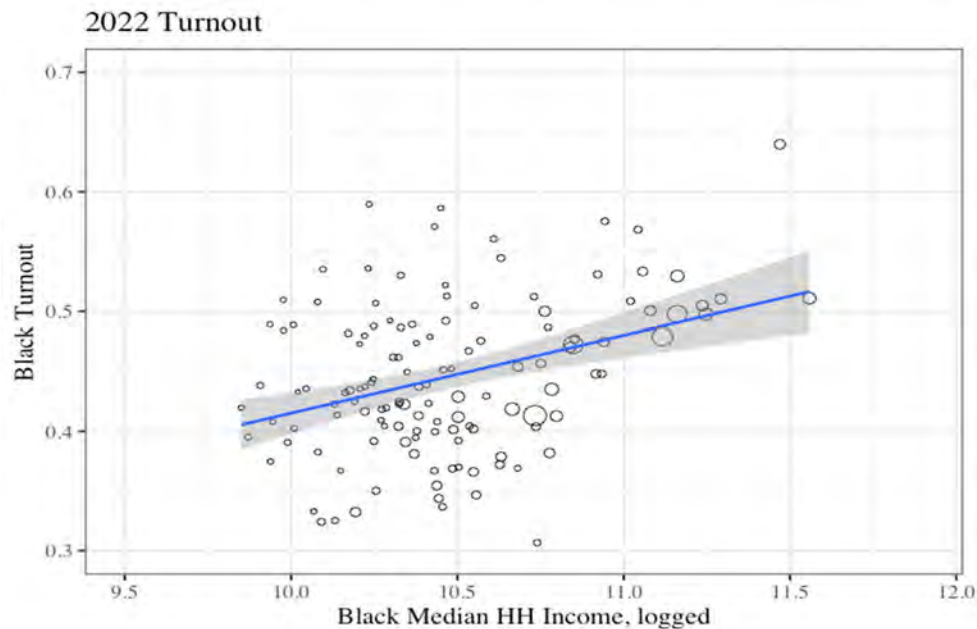
Figure 31. Association between Black 4-year degree and 2022 Black turnout (2016-2020 ACS).

Moving on to indicators of economic disparities, I find that as the percentage of counties with Blacks below the poverty line rises, Black turnout declines (see Figure 32). This relationship is statistically significant (at  $p < 0.001$ ). Substantively, counties with the highest levels of Black poverty have a 20.4 [16.5, 24.2] percentage point *lower* Black turnout than counties with the lowest levels of Black poverty. Replacing poverty levels with median household income leads to the same

conclusion. As Figure 33 shows, logged household income is statistically associated with Black turnout. Specifically, counties with the highest Black median household income report 19.0 [15.4, 22.6] percentage point higher Black turnout than counties with the lowest median household income. In sum, this replication analysis using the 2022 general election data further underscores how socioeconomic disparities are linked to turnout levels.



*Figure 32. Association between Black poverty rates and 2022 Black turnout (2016-2020 ACS).*



*Figure 33. Association between Black median household income and 2022 Black turnout (2016-2020 ACS).*

### 3. Other Forms of Voter Participation

This next section examines disparities between Blacks and whites among other modes of voter participation. I downloaded the 2020 Cooperative Election Study (CES) common form post-election survey.<sup>9</sup> The CES is a widely used publicly available survey dataset political scientists use to write academic papers and inform our scientific knowledge of the American voter. The full dataset contains 61,000 interviews. I subset the data to Georgia respondents, of which there are 2,002. To compare white vs. Black political participation, I further subset the data to only non-Hispanic white and Black respondents. This yields a dataset of  $n=1,753$ . Finally, 339 individuals whom CES initially interviewed in the pre-election survey did not take the post-election survey; thus, the final dataset is  $n=1,414$ . All tabulations presented below include survey weights to ensure that the analysis is representative of the target audience.<sup>10</sup>

The survey asks a battery of political participation questions where respondents indicate they have (1) or have not (0) participated in such an act.

1. Attend local political meetings (such as school board or city council)
2. Put up a political sign (such as a lawn sign or bumper sticker)
3. Work for a candidate or campaign
4. Attend a political protest, march or demonstration
5. Contact a public official
6. Donate money to a candidate, campaign, or political organization

I also analyze two other yes (1) / no (0) questions related to political participation:

1. Did a candidate or political campaign organization contact you during the 2020 election?
2. Have you ever run for elective office at any level of government (local, state or federal)?

Below I present cross-tabulations between each item and race (white/Black), along with a chi-square statistical test. The cross-tabulation shows, for instance, the share of whites that participate in a particular activity vs. the share of whites that do not participate in such activity. The analysis is designed to assess whether Blacks and whites engage in political participation at different rates. If the chi-square p-value is .10, then we can say that we have 90% confidence that this relationship has not occurred by chance. In short, the lower the p-value, the more statistical confidence we have that whites and Blacks behave differently politically.

Overall, the results strongly point to relative Black disparity in political participation. In five of the eight survey items, a statistically significant relationship exists between race and political

---

<sup>9</sup> Available at: <https://cces.gov.harvard.edu>.

<sup>10</sup> Weighting data here has the effect of growing the sample size of the dataset to  $n=1,557$  respondents.



participation (at either  $p < .10$  or  $p < .05$ ). That is, whites are more likely to say they engaged in the political activity than are Blacks.

For instance, 5.9% of whites say they attended a political meeting, whereas 3.5% of Blacks said they did ( $p < 0.05$ ). On political signs, 17.9% of whites put one up vs. 6.5% of Blacks ( $p < 0.001$ ). Whites are also more likely to report having worked for a candidate or campaign (3.6% vs. 1.8%,  $p < 0.05$ ). One of the larger differences emerges on the question regarding contacting a public official. Twenty-one percent (21%) of whites say they contacted an official, whereas 8.8% of Blacks report doing so ( $p < 0.001$ ). Differences emerge across donation behavior too: 24.4% vs. 13.6% ( $p < 0.001$ ).

There are three questions where significant statistical differences do not emerge, although whites nonetheless engage in the political activity to a greater degree than do Blacks: political protest (whites at 6.2% vs. Blacks at 4.4%,  $p = 0.142$ ); being contacted by a political campaign organization (61.3% vs. 61.3%,  $p = 0.995$ ), and running for office (1.7% vs. 0.7%,  $p = 0.12$ ).

**Attend local political meetings (such as school board or city council)?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	954	94.08%	60	5.92%
Black	523	96.49%	19	3.51%
<i>Chi-2 = 4.262 DF = 1 P-Value = 0.039</i>				

*Table 4. Political attendance.***Put up a political sign (such as a lawn sign or bumper sticker)?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	832	82.05%	182	17.95%
Black	507	93.54%	35	6.46%
<i>Chi-2 = 38.863 DF = 1 P-Value = 0</i>				

*Table 5. Political signs.***Work for a candidate or campaign?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	978	96.35%	37	3.65%
Black	533	98.16%	10	1.84%
<i>Chi-2 = 3.934 DF = 1 P-Value = 0.0473</i>				

*Table 6. Campaign work.***Attend a political protest, march, or demonstration?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	951	93.79%	63	6.21%
Black	519	95.58%	24	4.42%
<i>Chi-2 = 2.155 DF = 1 P-Value = 0.1421</i>				

*Table 7. Political protest.*

**Contact a public official?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	801	78.99%	213	21.01%
Black	495	91.16%	48	8.84%
<i>Chi-2 = 37.513 DF = 1 P-Value = 0</i>				

*Table 8. Contacting officials.***Donate money to a candidate, campaign, or political organization?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	767	75.64%	247	24.36%
Black	469	86.37%	74	13.63%
<i>Chi-2 = 24.882 DF = 1 P-Value = 0</i>				

*Table 9. Political donations.***Did a candidate or political campaign organization contact you during the 2020 election?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	392	38.66%	622	61.34%
Black	210	38.67%	333	61.33%
<i>Chi-2 = 0 DF = 1 P-Value = 0.9953</i>				

*Table 10. Campaign contacts.*

**Have you ever run for elective office at any level of government (local, state or federal)?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	986	98.31%	17	1.69%
Black	539	99.26%	4	0.74%
<i>Chi-2 = 2.414 DF = 1 P-Value = 0.1202</i>				

*Table 11. Running for office.*

All told, the results are compelling: White Georgians engage in a wide range of political activity at higher rates than Black Georgians, including activities like donating to campaigns, contacting public officials, and posting political signs. And as the academic literature discussed earlier in this report shows, these differences are directly attributable to socioeconomic disparities in health, education, and income.

**Conclusion**

The picture these data paint is straightforward: Black Georgians experience significant disparities in income, education, and health compared to non-Hispanic white Georgians. And these disparities cause Black Georgians to be less likely to participate effectively in the political process as measured by voter turnout and other forms of voter participation like making political donations, engaging elected officials, and even running for office. These trends are in accord with overwhelming academic literature showing that Blacks suffer socioeconomic disparities and so are therefore less likely than whites to participate in the political process. These findings therefore provide strong evidence for the presence of Senate Factor 5 in the state of Georgia.

**References**

- Avery, James M. 2015. “Does Who Votes Matter? Income Bias in Voter Turnout and Economic Inequality in the American States from 1980 to 2010.” *Political Behavior* 37 (4): 955–76.
- Barreto, M. A., Segura, G. M., & Woods, N. D. (2004). The mobilizing effect of majority–minority districts on Latino turnout. *American Political Science Review*, 98(1), 65-75.
- Brady, Henry E, Sidney Verba, and Kay Lehman Schlozman. 1995. “Beyond Ses: A Resource Model of Political Participation.” *American Political Science Review* 89 (2): 271–94.
- Costa, M. (2017). How Responsive are Political Elites? A Meta-Analysis of Experiments on Public Officials. *Journal of Experimental Political Science*, 4(3), 241-254.
- Henderson, John A. 2018. “Hookworm Eradication as a Natural Experiment for Schooling and Voting in the American South.” *Political Behavior* 40 (2): 467–94.
- Leighley, Jan E, and Jonathan Nagler. 2013. *Who Votes Now?* Princeton University Press.

Mayer, Alexander K. 2011. “Does Education Increase Political Participation?” *The Journal of Politics* 73 (3): 633–45.

Nie, Norman H, Jane Junn, Kenneth Stehlik-Barry, and others. 1996. *Education and Democratic Citizenship in America*. University of Chicago Press.

Pacheco, Julianna, and Jason Fletcher. 2015. “Incorporating Health into Studies of Political Behavior: Evidence for Turnout and Partisanship.” *Political Research Quarterly* 68 (1): 104–16.

Shah, Paru, and Amber Wichowsky. 2019. “Foreclosure’s Fallout: Economic Adversity and Voter Turnout.” *Political Behavior* 41 (4): 1099–1115.

White, A., Nathan, N., & Faller, J. (2015). What Do I Need to Vote? Bureaucratic Discretion and Discrimination by Local Election Officials. *American Political Science Review*, 109(1), 129-142.

Wolfinger, Raymond E, and Steven J Rosenstone. 1980. *Who Votes?* Yale University Press.

# Loren Collingwood

University of New Mexico  
Department of Political Science  
1 University of New Mexico  
Albuquerque, NM 87131

Office: (951) 827-5590  
Email: [1collingwood@unm.edu](mailto:1collingwood@unm.edu)  
website: <http://www.collingwoodresearch.com>

---

## Employment

Associate Professor, University of New Mexico, 2020 - Present  
Associate Professor, University of California, Riverside 2019 - 2020  
Assistant Professor, University of California, Riverside 2012 - 2019  
Assistant Analyst, Greenberg Quinlan Rosner, Washington DC 2005-2007  
Field Associate, Greenberg Quinlan Rosner, Washington DC 2003-2005

---

## Education

Ph.D., Political Science, University of Washington 2007 - 2012  
Committee: Matt Barreto (chair), Chris Parker, Luis Fraga, Chris Adolph, Peter Hoff  
M.A., Political Science, University of Washington, 2009  
B.A., Psychology, California State University, Chico, 1998 - 2002  
Minor: Political Science  
Honors: *Cum Laude*, NCAA Scholar-Athlete in soccer

---

## Research Fields

American Politics, Political Behavior, Methods, Race and Ethnic Politics, Immigration

---

## Books

2. **Collingwood, Loren.** *Campaigning in a Racially Diversifying America: When and How Cross-Racial Electoral Mobilization Works.* 2020. Oxford University Press.

Featured in *Veja*, Brazil

1. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. *Sanctuary Cities: The Politics of Refuge.* 2019. Oxford University Press.

Featured in *Teen Vogue*, *Seattle Times*; *Phoenix New Times*

---

## Articles

40. Gonzalez O'Brien, Ben, **Loren Collingwood**, and Michael A. Paarlberg. "What Leads to Refuge? Sanctuary Policies and the Influence of Local Demographics and Partisanship." *Urban Affairs Review*. (Conditional Accept).
39. **Collingwood, Loren**, Gabriel Martinez, and Kassra Oskooii. "Undermining Sanctuary? When Local and National Partisan Cues Diverge." *Urban Affairs Review*. (Forthcoming).
38. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. "Is Distance to Drop Box an Appropriate Proxy for Drop Box Treatment? A Case Study of Washington State." *American Politics Research*. (Forthcoming)
37. Barreto, Matt, Michael Cohen, **Loren Collingwood**, Chad Dunn, and Sonni Waknin. "A Novel Method for Showing Racially Polarized Voting: The Promise of Bayesian Improved Surname Geocoding." *New York University Review of Law and Social Change*. 46(1). (Forthcoming)
36. Barreto, Matt, **Loren Collingwood**, Sergio Garcia-Rios, and Kassra Oskooii. "Estimating Candidate Support: Comparing Iterative EI & EI-RxC Methods." *Sociological Methods & Research*. (Forthcoming).
35. Morín, Jason L., Rachel Torres, and **Loren Collingwood**. 2021. "Cosponsoring and Cashing in: U.S. House Members' support for punitive immigration policy and financial payoffs from the private prison industry." *Business and Politics*. 23(4): 492-509.

Featured in KOAT-ABQ news

34. Newman, Benjamin; Merolla, Jennifer; Shah, Sono; Lemi, Danielle; **Collingwood, Loren**; Ramakrishnan, Karthick. 2021. "The Trump Effect: An Experimental Investigation of the Emboldening Effect of Racially Inflammatory Elite Communication." *British Journal of Political Science* 51(3): 1138-1159.

Featured in New York Times; Washington Post; The Times of India; Washington Post; NBC News; New York Times; Forbes; NBC News

33. **Collingwood, Loren** and Sean Long. 2021. "Can States Promote Minority Representation? Assessing the Effects of the California Voting Rights Act." *Urban Affairs Review*. 57(3): 731-762.

Featured in NPR; Modesto Bee, IVN News San Diego; Woodland Daily Democrat; Silicon Valley Voice; Spectrum 1; Washington Post; Politico

32. Oskooii, Kassra, Nazita Lajevardi, and **Loren Collingwood**. 2021. "Opinion Shift and Stability: Enduring Individual-Level Opposition to Trump's 'Muslim Ban'." *Political Behavior*. 43: 301-337.

Featured in Washington Post

31. Hickel, Flavio, Rudy Alamillo, Kassra Oskooii, and **Loren Collingwood**. 2020. "When American Identity Trumps Latinx Identity: Explaining Support for Restrictive Immigration Policies." *Public Opinion Quarterly*. 84(4), 860-891.

Featured in Academic Times



30. Walker, Hannah, **Loren Collingwood**, and Tehama Lopez Bunyasi. 2020. "White Response to Black Death: A Racialized Theory of White Attitudes About Gun Control." *DuBois Review: Social Science Research on Race*. 17(1): 165-188.
29. Filindra, Alexandra, **Loren Collingwood**, and Noah Kaplan. 2020. "Anxiety and Social Violence: The Emotional Underpinnings of Support for Gun Control." *Social Science Quarterly*. 101: 2101-2120.
28. McGuire, William, Benjamin Gonzalez O'Brien, Katherine Baird, Benjamin Corbett, and **Loren Collingwood**. 2020. "Does Distance Matter? Evaluating the Impact of Drop Boxes on Voter Turnout." *Social Science Quarterly*. 101: 1789-1809.
27. Reny, Tyler, Ali Valenzuela, and **Loren Collingwood**. 2020. "'No, You're Playing the Race Card': Testing the Effects of Anti-Black, Anti-Latino, and Anti-Immigrant Appeals in the Post-Obama Era." *Political Psychology*. 41(2): 283-302.

Featured in VOX The Weeds Podcast

26. **Collingwood, Loren**, Benjamin Gonzalez O'Brien, and Joe Tafoya. 2020. "Partisan Learning or Racial Learning: Opinion Change on Sanctuary City Policy Preferences in California and Texas." *Journal of Race and Ethnic Politics*. 5(1): 92-129.
25. **Collingwood, Loren** and Benjamin Gonzalez. 2019. "Covert Cross-Racial Mobilization, Black Activism, and Political Participation Pre-Voting Rights Act." *Florida Historical Quarterly* 97(4) Spring.
24. Gonzalez O'Brien, Ben, Elizabeth Hurst, Justin Reedy, and **Loren Collingwood**. 2019. "Framing Refuge: Media, Framing, and Sanctuary Cities." *Mass Communication and Society*. 22(6), 756-778.
23. DeMora, Stephanie, **Loren Collingwood**, and Adriana Ninci. 2019. "The Role of Super Interest Groups in Public Policy Diffusion." *Policy and Politics*. 47(4): 513-541.
22. **Collingwood, Loren**, Stephen Omar El-Khatib, Ben Gonzalez O'Brien. 2019. "Sustained Organizational Influence: American Legislative Exchange Council and the Diffusion of Anti-Sanctuary Policy." *Policy Studies Journal*. 47(3): 735-773.
21. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. 2019. "Public Opposition to Sanctuary Cities in Texas: Criminal Threat or Immigration Threat?" *Social Science Quarterly*. 100(4): 1182-1196.
20. Reny, Tyler, **Loren Collingwood**, and Ali Valenzuela. 2019. "Vote Switching in the 2016 Election: Racial and Immigration Attitudes, Not Economics, Explains Shifts in White Voting." *Public Opinion Quarterly*. 83(1): 91-113.

Featured in VOX; The Week; The Economist; New York Times; The Economist

19. Gonzalez-O'Brien, Benjamin, **Loren Collingwood**, and Stephen Omar El-Khatib. 2019. "The Politics of Refuge: Sanctuary Cities, Crime, and Undocumented Immigration." *Urban Affairs Review*. 55(1): 3-40.

Featured in WaPo Monkey Cage I; and Monkey Cage II; WaPo Fact Check; InsideHigherEd; PolitiFact; The Hill; Christian Science Monitor; Pacific Standard; NBC News; Huffington Post; Seattle Times; The Denver Post; San Jose Mercury News; Chicago Tribune; San Diego Union Tribune; VOX

18. Oskooii, Kassra, Sarah Dreier, and **Loren Collingwood**. 2018. "Partisan Attitudes Toward Sanctuary Cities: The Asymmetrical Effects of Political Knowledge." *Politics and Policy* 46(6): 951-984.
17. **Collingwood, Loren**, Jason Morín, and Stephen Omar El-Khatib. 2018. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." *Race and Social Problems*. 10(4): 275-292.  
  
Featured in CityLab; The Guardian; Mother Jones; NPR
16. **Collingwood, Loren**, Benjamin Gonzalez O'Brien, and Sarah K. Dreier. 2018. "Evaluating Public Support for Legalized Marijuana: The Case of Washington." *International Journal of Drug Policy*. 56: 6-20.
15. **Collingwood, Loren**, McGuire, Will, Gonzalez O'Brien, Ben, Baird, Katie, and Hampson, Sarah. 2018. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." *Election Law Journal*. 17:1.  
  
Featured in Seattle Times; CBS News
14. **Collingwood, Loren**, Nazita Lajevardi, and Kassra Oskooii. 2018. "A Change of Heart? How Demonstrations Shifted Individual-Level Public Opinion on Trump's Muslim Ban." *Political Behavior*. 40(4): 1035-1072.  
  
Featured in VOX; ThinkProgress; LSE Blog; Al Jazeera; San Francisco Chronicle; NPR; Business Insider; Washington Post
13. **Collingwood, Loren**, Ashley Jochim, and Kassra Oskooii. 2018. "The Politics of Choice Reconsidered: Partisanship and Minority Politics in Washington's Charter School Initiative." *State Politics & Policy Quarterly* 18(1): 61-92.
12. Newman, Ben, Sono Shah, and **Loren Collingwood**. 2018. "Race, Place, and Building a Base: Ethnic Change, Perceived Threat, and the Nascent Trump Campaign for President." *Public Opinion Quarterly*. 82(1): 122-134.  
  
Featured in Pacific Standard; LSE Blog; Newsweek
11. Skulley, Carrie, Andrea Silva, Marcus J. Long, **Loren Collingwood**, and Ben Bishin, "Majority Rule vs. Minority Rights: Immigrant Representation Despite Public Opposition on the 1986 Immigration Reform and Control Act." 2018. *Politics of Groups and Identities*. 6(4): 593-611.
10. Alamillo, Rudy and **Loren Collingwood**. 2017. "Chameleon Politics: Social Identity and Racial Cross-Over Appeals." *Politics of Groups and Identities*. 5(4): 533-650.  
  
Featured in WaPo's Monkey Cage; NBC News; Los Angeles Times
9. **Collingwood, Loren**, Kassra Oskooii, Sergio Garcia-Rios, and Matt Barreto. 2016. "eiCompare: Comparing ecological inference estimates across EI and EI:RxC." *The R Journal*. 8(2): 92-101.  
  
Featured in Investigate West
8. Barreto, Matt, **Loren Collingwood**, Christopher Parker, and Francisco Pedraza. 2015. "Racial Attitudes and Race of Interviewer Item Non-Response." *Survey Practice*. 8:5.

7. Barreto, Matt and **Loren Collingwood**. 2015. "Group-based Appeals and the Latino Vote in 2012: How Immigration Became a Mobilizing Issue." *Electoral Studies*. 40:490-499.

Featured in Latino Decisions blog

6. **Collingwood, Loren**, Matt Barreto, and Sergio Garcia-Rios. 2014. "Revisiting Latino Voting: Cross-Racial Mobilization in the 2012 Election." *Political Research Quarterly*. 67(3): 632-645.

Featured in LSE Blog

5. Jurka, Tim, **Loren Collingwood**, Amber Boydston, Emiliano Grossman, and Wouter van Atteveldt. 2013. "RTextTools: A Supervised Learning Package for Text Classification in R" *The R Journal*. 5(1).
4. **Collingwood, Loren**. 2012. "Education Levels and Support for Direct Democracy." *American Politics Research*, 40(4): 571-602.
3. **Collingwood, Loren** and John Wilkerson. 2012. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods." *Journal of Information Technology and Politics*, 9(3).
2. **Collingwood, Loren**, Matt Barreto and Todd Donovan. 2012. "Early Primaries, Viability, and Changing Preferences for Presidential Candidates." *Presidential Studies Quarterly*, 42(2).
1. Barreto, Matt, **Loren Collingwood**, and Sylvia Manzano. 2010. "A New Measure of Group Influence in Presidential Elections: Assessing Latino Influence in 2008." *Political Research Quarterly*. 63(4).

Featured in Latino Decisions blog

## Book Chapters

11. **Collingwood, Loren**, Stephanie DeMora , and Sean Long. "Demographic Change, White Decline, and the Changing Nature of Racial Politics in Election Campaigns." In *Cambridge Handbook in Political Psychology*. Edited by Danny Osborne and Chris Sibley. [Forthcoming].
10. Morín, Jason L. and **Loren Collingwood**. "Contractor Politics: How Political Events Influence Private Prison Company Stock Shares in the Pre and Post Trump Era." In *Anti-immigrant Rhetoric, Actions, and Policies during the Trump Era (2017-2019)*. [Forthcoming]
9. Parker, Christopher S., Christopher C. Towler, **Loren Collingwood**, and Kassra Oskooii. 2020. "Race and Racism in Campaigns." In Oxford Encyclopedia of Persuasion in Political Campaigns. Edited by Elizabeth Suhay, Bernard Grofman, and Alexander H. Trechsel. DOI: 10.1093/oxfordhb/9780190860806.013.38
8. **Collingwood, Loren**, and DeMora, Stephanie. 2019. "Latinos and Obama." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.
7. DeMora, Stephanie, and **Collingwood, Loren**. 2019. "George P. Bush." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.

6. El-Khatib, Stephen Omar, and **Collingwood, Loren**. 2019. "Ted Cruz." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.
  5. **Collingwood, Loren**, Sylvia Manzano and Ali Valenzuela. 2014. "November 2008: The Latino vote in Obama's general election landslide." In *Latino America: How America's Most Dynamic Population Is Poised to Transform the Politics of the Nation*. By Matt Barreto and Gary Segura. New York: Public Affairs Press. (co-authored chapter with Matt Barreto and Gary Segura)
  4. **Collingwood, Loren**, Justin Gross and Francisco Pedraza. 2014. "A 'decisive voting bloc' in 2012." In *Latino America: How America's Most Dynamic Population Is Poised to Transform the Politics of the Nation*. By Matt Barreto and Gary Segura. New York: Public Affairs Press. (co-authored chapter with Matt Barreto and Gary Segura)
  3. Barreto, Matt, **Loren Collingwood**, Ben Gonzalez, and Chris Parker. 2011. "Tea Party Politics in a Blue State: Dino Rossi and the 2010 Washington Senate Election." In William Miller and Jeremy Walling (eds.) *Stuck in the Middle to Lose: Tea Party Effects on 2010 U.S. Senate Elections*. Rowan and Littlefield Publishing Group.
  2. **Collingwood, Loren** and Justin Reedy. "Criticisms of Deliberative Democracy." In Nabatchi, Tina, Michael Weiksner, John Gastil, and Matt Leighninger, eds., *Democracy in motion: Evaluating the practice and impact of deliberative civic engagement*. New York: Oxford University Press, 2010.
  1. **Collingwood, Loren**. "Initiatives." In Haider-Markel, Donald P., and Michael A. Card. *Political Encyclopedia of U.S. States and Regions*. Washington, DC: CQ Press, 2009.
- 

## Software

R package: **RTextTools**. This package uses supervised learning methods to automate text classification. Coauthors include Jurka, Boydston, Grossman, and van Atteveldt. Available on CRAN.

R package: **eiCompare**. This package compares outcomes between ecological inference (EI) estimates and EI:Rows by Columns (RxC) estimates. Primary purpose is employed in racially polarized voting analysis. Development Version available here: [eiCompare](#) or on CRAN. Coauthors include Barreto, Oskooii, Garcia-Rios, Burke, Decter-Frain, Murayama, Sachdeva, Henderson, Wood, and Gross.

R package: **Rvoterdistance**. Calculates distance between voters and multiple polling locations and/or ballot drop boxes. Ports C++ code for high speed efficiency. Available on CRAN.

R package: **Rweights**. Creates survey weights via iterative variable raking. Survey design object and weights vector are produced for use with R, Stata, and other programs. Currently in alpha form with unix tarball available here: [Rweights](#).

R package: **Rmturkcheck**. Functions for cleaning and analyzing two-wave MTurk (or other) panel studies. Available: [Rmturkcheck](#)

R package: **RCopyFind**. Functions for extracting data frames then plotting results from WCopyFind plagiarism text program. Co-authored with and Maintained by Steph DeMora. Available: [RCopyFind](#)

---

## Under Review / Working Papers

Barreto, Matt, Michael Cohen, **Loren Collingwood**, Chad Dunn, and Sonni Waknin. “Using Bayesian Improved Surname Geocoding (BISG) to Assess Racially Polarized Voting in Voting Rights Act Challenges.” [Revise & Resubmit]

Decter-Frain, Ari, Pratik Sachdeva, **Loren Collingwood**, Juandalyn Burke, Hikari Murayama, Matt Barreto, Scott Henderson, Spencer Wood, and Joshua Zingher. “Comparing BISG to CVAP Estimates in Racially Polarized Voting Analyses.” [Revise & Resubmit]

Hickel Jr., Flavio R., Kassra A.R. Oskooii, and **Loren Collingwood**. “Social Mobility Through Immigrant Resentment: Explaining Latinx Support for Restrictive Immigration Policies and Anti-Immigrant Candidates.” [Revise & Resubmit]

**Collingwood, Loren**, Jason Morín, and Edward Vargas. “Protesting Detention: How Protests Activated Group Empathy and Party ID to Shift Attitudes on Child Detention.” [Working Paper]

Paarlberg, Michael A. and **Loren Collingwood**. “Fact or Fiction: Testing the link between local immigration policy and the MS-13 ‘Threat’.” [Working Paper]

## Awards, Grants, and Fellowships

Matt Barreto and Loren Collingwood. Detection of Vote Dilution: New tools and methods for protecting voting rights. Data Science for Social Good project selection, University of Washington. 2020

Loren Collingwood. Measuring Cross-Racial Voter Preferences. UCR Faculty Senate. \$3,500. 2019.

Francisco Pedraza and Loren Collingwood. Evaluating AltaMed’s 2018 GOTV Efforts in Los Angeles. \$12,000. 2018-2019.

Allan Colbern, Loren Collingwood, Marcel Roman. A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement. Center for American Progress. \$7,100. 2018.

Karthick Ramakrishnan, Mindy Romero, Loren Collingwood, Francisco Pedraza, Evaluating California’s Voter’s Choice Act. Irvine Foundation. \$150,000, 2018-2019.

William McGuire, Loren Collingwood, Ben Gonzalez O’Brien, and Katie Baird, “Evaluating the Impact of Drop Boxes and Get-Out-The-Vote Advertising on Voter Turnout in Pierce County, WA.” MIT Election Data and Science Lab, \$16,365, 2017

Justin Freebourn and Loren Collingwood, Blum Initiative \$4,000, 2017

Hellman Fellowship Grant, UC Riverside, \$30,000, 2014-2015

Best Dissertation Award, 2013 Western Political Science Association

UC Riverside Harrison & Ethel Silver Fund, \$2,000, 2013

Best Graduate Student Paper Award State Politics section, 2012 American Political Science Association

Texas A&M Experimental Methods Winter Institute, \$800, January, 2011

UseR! 2011 Conference travel grant, \$1000, August, 2011

Center for Statistics and the Social Sciences travel grant, \$870, January, 2011

David J. Olson Research Grant, University of Washington Political Science, \$2,000, January, 2011

Warren Miller Scholarship Award, Inter-University Consortium for Political and Social Research, Summer 2009

Matthews Fellowship, University of Washington, Winter 2008 - Spring 2009

Brennan Center for Justice, New York University [with Matt Barreto]

Indiana Voter Identification Study, \$40,000 – Oct. 2007, 6 months

## Teaching Experience

POSC 10 (American Politics); POSC 146 (Mass Media & Public Opinion); POSC 171 (State Politics); POSC 104S (Race and Ethnic Politics Special Topics); POSC 108 (Race and Ethnic Politics)

POLS 300: Immigration Politics with Focus on Latino Politics

POLS 300: The Voting Rights Act: Causes and Effects

POSC 202A: Introduction to Quantitative Methods (Graduate)

POSC 207: Statistical Programming and Data Science for the Social Sciences (Graduate)

POSC 207: Quantitative Text Analysis (Graduate)

POSC 220: Graduate Seminar in Race and Ethnic Politics in the U.S.

POSC 256: Graduate Seminar in Public Opinion

POSC 253: Graduate Seminar in Electoral Politics

Text Classification with R using the `RTextTools` package, UNC-Chapel Hill Workshop

Text Analysis with Political Data, Claremont Graduate School, 2019

CSSS Intermediate R Workshop 2011, Instructor (Summer)

POLS 501: Advanced Research Design and Analysis, Teaching Assistant (2 quarters)

ICPSR Summer Course: Methodological Issues in Quantitative Research on Race and Ethnicity, Teaching Assistant

POLS 202: Introduction to American Politics, Teaching Assistant

CSSS Math Camp 2011, Teaching Assistant

POLS 499D: Center for American Politics and Public Policy Undergraduate Honors Seminar (2 quarters)

## Professional Service

Co-editor, *Politics of Groups and Identities*, 2020-2021

Reviewer, Political Behavior, Journal of Information Technology and Politics, American Politics Research, Social Sciences Quarterly, Journal of Politics, Politics of Groups and Identities, American Journal of Political Science, Political Research Quarterly, State Politics and Public Policy, American Political Science Review, British Journal of Political Science, Journal of Race and Ethnic Politics, Urban Studies, Urban Affairs Review; many other journals

## Conference Papers and Presentations

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk California Lutheran University. (October 2020).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk California State University, Chico. (March 2020).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk Humboldt State University. (March 2020).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk Oregon State University. (February 2020).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of San Diego. (November 2019).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk University of Massachusetts. (January 2020).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk University of New Mexico. (December 2019).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk California State University, Northridge, Los Angeles. (November 2019).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk Occidental College, Los Angeles. (November 2019).

Collingwood, Loren (with Sean Long). "Can States Promote Minority Representation? Assessing the Effects of the California Voting Rights Act." UC Irvine Critical Observations on Race and Ethnicity Conference. (November 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Geneva, Switzerland. (November 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Bern, Switzerland. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk ETH Zurich, Switzerland. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk London School of Economics, U.K. (October 2019).



Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Leeds, U.K. (October 2019).

Valenzuela, Ali, Kassra Oskooi, and Loren Collingwood. "Threat or Reassurance? Framing Midterms Results among Latinos and Whites." American Political Science Association, Washington, DC. (August 2019).

Paarlberg, Michael A. and Loren Collingwood. "Much Ado about Nothing: Local Immigration Policy and the MS-13 'Threat' ." American Political Science Association, Washington, DC. (August 2019).

Collingwood, Loren. "A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement." International Center for Local Democracy (ICLD) Conference on Local Democracy. Umea, Sweden (June 2019).

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk University of California, Irvine (May 2019).

Collingwood, Loren. "Text Analysis with R." Invited talk and presentation. Claremont Graduate University (May 2019)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." PRIEC. UC Davis (May 2019).

Collingwood, Loren. "Data Analysis with R." Invited presentation and training Cal Poly Pomona (May 2019)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk Northern Arizona University (May 2019)

Collingwood, Loren (with Jason Morín). "Contractor Politics: How Political Events Influence Private Prison Company Stock Shares in the Pre and Post Trump Era." Invited Talk Universidad Nacional Autonoma de Mexico, Distrito Federal, Mexico (February 2019).

Roman, Marcel, Allan Colbern, and Loren Collingwood. "A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement." PRIEC Consortium. University of Houston (December 2018)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk University of Illinois Chicago (November 2018)

Collingwood, Loren. "Ongoing Research in Sanctuary Cities and Immigration Politics." Invited Talk University of Pennsylvania Perry World House (November 2018)

Collingwood, Loren. "Unfair Detention: How Protests Activated Racial Group Empathy to Shift Attitudes on Child Detention." Invited Talk Rutgers University (October 2018)

Collingwood, Loren. "Unfair Detention: How Protests Activated Racial Group Empathy to Shift Attitudes on Child Detention." UCR Alumni Research Presentation Washington and Philadelphia (October 2018)

Collingwood, Loren, Jason Morin. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." Invited Talk UCLA (October 2018).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "Opinion Shift and Stability: Enduring Opposition to Trump's "Muslim Ban". APSA (September 2018).

Collingwood, Loren, Jason Morin, and Stephen Omar El-Khatib. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." American Political Science Association Conference (August 2018).

Collingwood, Loren, Sergio Garcia-Rios, and Hannah Walker. "The Impact of Exposure to Police Brutality on Political Attitudes Among Black and White Americans." Cooperative Comparative Post-Election Survey (CMPS) Conference. (August, 2018).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "Opinion Shift and Stability: Enduring Opposition to Trump's "Muslim Ban". Politics of Race Immigration and Ethnicity Consortium (August 2018).

Collingwood, Loren, Jason Morin, and Stephen Omar El-Khatib. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." Politics of Race Immigration and Ethnicity Consortium, Michigan State University (April 2018)

Collingwood, Loren, Benjamin Gonzalez O'Brien, and Joe Tafoya. "Partisan Learning or Racial Learning: Opinion Change on Sanctuary City Policy Preferences in California and Texas." Midwest Political Science Association Conference (April 2018).

El-Khatib, Stephen Omar and Loren Collingwood. "State Policy Responses to Sanctuary Cities: Explaining the Rise of Sanctuary City Legislative Proposals." Midwest Political Science Association Conference (April 2018).

Hannah Walker, Loren Collingwood, and Tehama Lopez Bunyasi. "Under the Gun: Black Responsiveness and White Ambivalence to Racialized Black Death." Midwest Political Science Association Conference (April 2018).

Hannah Walker, Loren Collingwood, and Tehama Lopez Bunyasi. "Under the Gun: Black Responsiveness and White Ambivalence to Racialized Black Death." Western Political Science Association Conference (April 2018).

DeMora, Stephanie, Adriana Ninci, and Loren Collingwood. "Shoot First in ALEC's Castle: The Diffusion of Stand Your Ground Laws." Politics of Race Immigration and Ethnicity Consortium, ASU (February 2018).

El-Khatib, Stephen Omar and Loren Collingwood. "State Policy Responses to Sanctuary Cities: Explaining the Rise of Sanctuary City Legislative Proposals." Politics of Race Immigration and Ethnicity Consortium, UCR (September 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." APSA (September 2017).

Collingwood, Loren, McGuire, Will, Gonzalez O'Brien Ben, Hampson, Sarah, and Baird, Katie. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." APSA (September 2017).

Collingwood, Loren, Reny, Tyler, Valenzuela, Ali. "Flipping for Trump: In 2016, Immigration and Not Economic Anxiety Explains White Working Class Vote Switching." UCLA (May 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." UCLA (May 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." Politics of Race Immigration and Ethnicity Consortium, UCSB (May 2017).

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." Vancouver, Western Political Science Association Conference (April. 2017).

Collingwood, Loren, McGuire, Will, Gonzalez-O'Brien Ben, Hampson, Sarah, and Baird, Katie. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." WPSA (April 2017).

Gonzalez-O'Brien, Benjamin, Loren Collingwood, and Stephen El-Khatib. "Gimme Shelter: The Myth and Reality of the American Sanctuary City". Vancouver, Western Political Science Association Conference WPSA (April 2017).

Rush, Tye, Pedraza, Francisco, Collingwood, Loren. "Relieving the Conscience: White Guilt and Candidate Evaluation." Politics of Race Immigration and Ethnicity Consortium, UCI (March 2017).

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." Philadelphia, American Political Science Association Conference (Sept. 2016)

Barreto, Matt, Loren Collingwood, Sergio Garcia-Rios, and Kassra Oskooii. "Estimating Candidate Support: Comparing EI & EI-RxC." Chicago, Midwest Political Science Association Conference (April 2016)

Bishin, Benjamin, Loren Collingwood, and Erinn Lauterbach. "Cross-Racial Mobilization in a Rapidly Diversifying Polity: Latino Candidates and Anglo Voters" Chicago, Midwest Political Science Association Conference (April 2016)

Gonzalez-O'Brien, Benjamin, Loren Collingwood, and Stephen El-Khatib. "Gimme Shelter: The Myth and Reality of the American Sanctuary City". San Diego, Western Political Science Association Conference (April 2016)

Collingwood, Loren and Antoine Yoshinaka. The new carpetbaggers? Analyzing the effects of migration on Southern politics. The Citadel Conference on Southern Politics, Charleston, SC (Mar 2016)

Alamillo, Rudy and Loren Collingwood. Chameleon Politics: Social Identity and Racial Cross-Over Appeals. American Political Science Association Conference, San Francisco (Sept 2015)

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." San Francisco, American Political Science Association Conference (Sept 2015)

Alamillo, Rudy and Loren Collingwood. Chameleon Politics: Social Identity and Racial Cross-Over Appeals. Western Political Science Association Conference, Las Vegas (April 2015)

Barreto, Matt and Loren Collingwood. Confirming Electoral Change: The 2012 U.S. Presidential Election OSU Conference (October, 2013). "Earning and Learning the Latino Vote in 2008 and 2012: How the Obama Campaign Tried, Refined, Learned, and Made Big Steps in Cross-Racial Mobilization to Latinos.

Collingwood, Loren and Ashley Jochim. 2012 Midwest Political Science Association Annual Conference (April) Chicago, IL. "Electoral Competition and Latino Representation: The Partisan Politics of Immigration Policy in the 104th Congress."

Collingwood, Loren. 2012 Western Political Science Association Annual Conference (March) Portland, OR. "The Development and Use of Cross-Racial Mobilization as Campaign Strategy in U.S. Elections: The Case of Texas 1948-2010."

Collingwood, Loren. 2012 Institute for Pragmatic Practice Annual Conference (March) Seattle, WA. "Changing Demographics, Rural Electorates, and the Future of American Politics."

Collingwood, Loren. 2012 Politics of Race, Immigration, and Ethnicity Consortium (January) Riverside, CA. "The Development of Cross-Racial Mobilization: The Case of Texas 1948-2010."

Collingwood, Loren. 2011 American Political Science Association Annual Conference (September) Seattle, WA. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization."

Forman, Adam and Loren Collingwood. 2011 American Political Science Association Annual Conference (September) Seattle, WA. "Measuring Power via Presidential Phone Records." (Poster)

Collingwood, Loren with (Tim Jurka, Wouter Van Atteveldt, Amber Boydstun, and Emiliano Grossman). UseR! 2011 Conference. (August) Coventry, United Kingdom. "RTextTools: A Supervised Learning Package for Text Classification in R."

Jurka, Tim, Loren Collingwood, Wouter Van Atteveldt, Amber Boydstun, and Emiliano Grossman. 2011 Comparative Agendas Project Conference. (June) Catania, Italy. "RTextTools: A Supervised Learning Package for Text Classification in R."

Collingwood, Loren and John Wilkerson. 2011 Journal of Information Technology & Politics Conference. (May) Seattle, WA. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren. 2011 Politics of Race, Immigration, and Ethnicity Consortium (May) Davis, CA. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization"

Collingwood, Loren. 2011 Western Political Science Conference (April) San Antonio, TX. "Race-Matching as Targeted Mobilization."

Collingwood, Loren. 2011 Western Political Science Conference (April) San Antonio, TX. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization"

Collingwood, Loren (with John Wilkerson). Invited Talk: Texas A&M University. (April, 2011) "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren (with John Wilkerson). Invited Talk: Rice University. (April, 2011) "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren. 2011 Midwest Political Science Association Annual Conference (April) Chicago, IL. "Race-Matching as Targeted Mobilization."

Collingwood, Loren and John Wilkerson. 2011 Text as Data Conference. (March) Evanston, IL. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren and John Wilkerson. 2011 Southern Political Science Conference. (January) New Orleans, LA. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren (with Ben Gonzalez). 2010 American Political Science Association Annual Conference. (September) Washington, DC. "The Political Process in Florida: Modeling African American Registration Rates Post *Smith v. Allwright*, 1944-1964."

Wilkerson, John, Steve Purpura, and Loren Collingwood. 2010 NSF Funded Tools for Text Workshop. (June) Seattle, WA. "Rtexttools: A Supervised Machine Learning Package in an R-Wrapper."

Collingwood, Loren and Marcela Garcia-Castanon. 2010 Western Political Science Association Annual Conference. (April) San Francisco, CA. "Negativity as a Tool: candidate poll standing and attack politics."

Collingwood, Loren. 2010 Politics of Race, Immigration, and Ethnicity Consortium. (January) Riverside, CA. "White Outreach: A spatial approach to modeling black incorporation in Florida post *Smith v. Allwright*, 1944-1965."

Collingwood, Loren. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Levels of Education, Political Knowledge and Support for Direct Democracy."

Collingwood, Loren. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "The Negativity Effect: Psychological underpinnings of advertising recall in modern political campaigns."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Negativity as a Tool: predicting negative responses and their effectiveness in the 2008 campaign season."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Switching codes: analyzing Obama's strategy for addressing Latinos in the 2008 presidential campaign."

Collingwood, Loren, (with Matt Barreto and Sylvia Manzano) 2009 Shambaugh Conference. (March) University of Iowa, IA. "More than one way to shuck a tamale: Latino influence in the 2008 general election."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Switching codes: analyzing Obama's strategy for addressing Latinos in the 2008 presidential campaign."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Pacific Northwest Political Science Conference. (October) Victoria, BC. "Negativity as a Tool: predicting negative responses and their effectiveness in the 2008 campaign season."

Collingwood, Loren and Francisco Pedraza (with Matt Barreto and Chris Parker). 2009 Center for Statistics and the Social Sciences 10th Anniversary Conference. (May) Seattle, WA. "Race of interviewer effects: perceived versus actual."

Collingwood, Loren (with Matt Barreto, Chris Parker, and Francisco Pedraza). 2009 Pacific Northwest Political Science Conference. (October) Victoria, BC. "Race of interviewer effects: perceived versus actual."

Barreto, Matt, Loren Collingwood and Todd Donovan. 2008 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Early Presidential Primaries, Viability, and Vote Switching in 2008."

Collingwood, Loren. 2008 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Levels of Education and Support for Direct Democracy: A Survey Experiment."

Collingwood, Loren. 2008 American Political Science Association Annual Conference. (September) Boston, MA. "Levels of Education and Support for Direct Democracy: A Survey Experiment." (Poster)

Collingwood, Loren. 2008 American Political Science Association Annual Conference. (September) Boston, MA. "Response Effects in Multi-Candidate Primary Vote Questions." (Poster)

## Computer Skills

R, Stata, Python, WinBugs/JAGS, L<sup>A</sup>T<sub>E</sub>X, SPSS, MySQL, Access, ArcGIS, Some C++ when interacting with R.

## Reports

Collingwood, Loren. (2008). *The Washington Poll: pre-election analysis*. www.washingtonpoll.org.

Collingwood, Loren. (2008). *Democratic underperformance in the 2004 gubernatorial election: explaining 2004 voting patterns with an eye towards 2008*. www.washingtonpoll.org.

Barreto, Matt, Loren Collingwood, Francisco Pedraza, and Barry Pump. (2009). *Online voter registration in Washington State and Arizona*. Commissioned by Pew Research Center.

Collingwood, Loren, Todd Donovan, and Matt Barreto. (2009). *An assessment of ranked choice voting in Pierce County, WA*.

Collingwood, Loren. (2009). *An assessment of the fiscal impact of ranked choice voting in Pierce County, WA*. Commissioned by the League of Women Voters.

Barreto, Matt, and Loren Collingwood. (2009). *Latino candidates and racial block voting in primary and judicial elections: An analysis of voting in Los Angeles County board districts*. Commissioned by the Los Angeles County Chicano Employees Association.

Barreto, Matt, and Loren Collingwood. (2011). *A Review of Racially Polarized Voting For and Against Latino Candidates in Los Angeles County 1994-2010*. Commissioned by Los Angeles County Supervisor Gloria Molina. August 4.

Collingwood, Loren. (2012). *Recent Political History of Washington State: A Political Map*. Commissioned by the Korean Consulate.

Collingwood, Loren. (2012). *Analysis of Polling on Marijuana Initiatives*. Commissioned by Greenberg Quinlan Rosner.

Collingwood, Loren, Sean Long, and Francisco Pedraza. (2019). *Evaluating AltaMed Voter Mobilization in Southern California, November 2018*. Commissioned by AltaMed.



## Relevant Work Experience

### *Collingwood Research, LLC*

Statistical Consulting and Analysis

January 2008 - Present

Conducted over 200 projects involving political research, polling, statistical modeling, redistricting analysis and mapping, data analysis, micro-targeting, and R software development for political and non-profit clients. Clients include: Greenberg Quinlan Rosner, Latino Decisions, Pacific Market Research, Beck Research, Squier Knapp Dunn Communications, Anzalone-Lizst Research, League of Women Voters, Shelia Smoot for Congress, pollster.com, Comparative Agendas Project, Amplified Strategies, Gerstein Bocian & Agne, Strategies 360, the Korean Consulate, the California Redistricting Commission, Monterey County Redistricting Commission, ClearPath Strategies, Los Angeles County Council, Demchak & Baller Legal, Arnold & Porter LLP, JPM Strategic Solutions, National Democratic Institute (NDI) – on site in Iraq, Latham & Watkins, New York ACLU, United States Department of Justice (Demography), Inland Empire Funder's Alliance (Demography), Perkins & Coie, Elias Law Group; Campaign Legal Center; Santa Clara County (RPV Analysis); Native American Rights Fund (NARF); West Contra Costa Unified School District (Demography); Lawyers' Committee for Civil Rights Under Law; LatinoJustice PRLDEF, Voces de Frontera; Roswell, NM Independent School District

## Expert Witness Work

Expert Witness: *LOWER BRULE SIOUX TRIBE v. LYMAN COUNTY*, 2022

Expert Witness: *Walen and Henderson v. Burgum and Jaeger No 1:22-cv-00031-PDW-CRH*, 2022

Expert Witness: *Faith Rivera, et al. v. Scott Schwab and Michael Abbott No. 2022-CV-000089*, 2022

Expert Witness: *LULAC Texas et al. v. John Scott et al (1:21-cv-0786-XR)*, 2022

Expert Witness: *Pendergrass v. Raffensperger (N.D. Ga. 2021)*,

Expert Witness: *Johnson, et al., v. WEC, et al., No. 2021AP1450-OA*, 2021

Expert Witness: *East St. Louis Branch NAACP vs. Illinois State Board of Elections*, 2021

Expert Witness: *LULAC of Iowa vs. Pate*, 2021-2022

Expert Witness: *United States Department of Justice vs. City of Hesperia*, 2021-2022

Expert Witness: *NAACP vs. East Ramapo Central School District*, New York, 2018-2019

Riverside County, Corona and Eastvale, 2015

Los Angeles County Redistricting Commission, 2011

Racially Polarized Voting analysis of Latino and Asian candidates in San Mateo County and alternative map creation, 2010-2011

State of California, Citizens Redistricting Commission, including Blythe, CA, in Riverside County, 2011

Monterey County, CA Redistricting, alternative map creation, 2011



*Greenberg Quinlan Rosner*

Assistant Analyst, Anna Greenberg

June 2005 - May 2007

Assisted in the development of questionnaires, focus group guidelines, memos, and survey reports for political, non-profit, and corporate clients. Moderated in-depth interviews and focus groups.

*Greenberg Quinlan Rosner*

Field Associate

December 2003 - June 2005

Managed qualitative and quantitative data collection process in the U.S. and internationally. Provided methodological advice, including sample stratification, sampling Latino populations, and modal sampling strategies.

*Congressman Adam Schiff*

Database Manager

March 2003 - June 2003

Managed constituent mail and survey databases; updated and maintained Member's Congressional voting record.

*Strategic Consulting Group*

Field Organizer, Carol Roberts for Congress

July 2002 - November 2002

Recruited and coordinated over 100 volunteers for mailings, canvassing, phone banking, and GOTV operations. Developed internship program and managed 15 interns from local colleges and high schools.

*Institute for Policy Studies*

Intern, John Cavanagh

May 2001 - August 2001

Provided research assistance for projects advocating reform of the WTO, World Bank, and IMF. Worked on reports and op-ed pieces on global economic issues advocating fair trade.

## **Expert Report of Dr. Loren Collingwood**

*Pendergrass v. Raffensperger*, No. 1:21-CV-05339-SCJ (N.D. Ga.)

December 12, 2022

*Loren Collingwood*

---

DEFENDANTS'

12

A.A.B.

2/28/2023

## Background and Qualifications

I am an associate professor of political science at the University of New Mexico. Previously, I was an associate professor of political science and co-director of civic engagement at the Center for Social Innovation at the University of California, Riverside. I have published two books with *Oxford University Press*, 39 peer-reviewed journal articles, and nearly a dozen book chapters focusing on sanctuary cities, race/ethnic politics, election administration, and racially polarized voting. I received a Ph.D. in political science with a concentration in political methodology and applied statistics from the University of Washington in 2012 and a B.A. in psychology from the California State University, Chico, in 2002. I have attached my curriculum vitae, which includes an up-to-date list of publications.

In between my B.A. and Ph.D., I spent 3-4 years working in private consulting for the survey research firm Greenberg Quinlan Rosner Research in Washington, D.C. I also founded the research firm Collingwood Research, which focuses primarily on the statistical and demographic analysis of political data for a wide array of clients, and lead redistricting and map-drawing and demographic analysis for the Inland Empire Funding Alliance in Southern California. I am the redistricting consultant for the West Contra Costa Unified School District, California, independent redistricting commission, in which I am charged with drawing court-ordered single-member districts.

I have served as an expert witness in a number of cases related to redistricting. I testified for the plaintiff in the Voting Rights Act (VRA) Section 2 case *NAACP v. East Ramapo Central School District*, No. 17 Civ. 8943 (S.D.N.Y.), on which I worked from 2018 to 2020. In that case, I used the statistical software eiCompare and WRU to implement Bayesian Improved Surname Geocoding (BISG) to identify the racial/ethnic demographics of voters and estimate candidate preference by race using ecological data. I was also the racially polarized voting (RPV) expert in several cases during this redistricting cycle: *East St. Louis Branch NAACP v. Illinois State Board of Elections*, No. 1:21-cv-05512 (N.D. Ill.), having filed two reports and sat for a deposition; *Johnson v. Wisconsin Elections Commission*, No. 2021AP1450-OA (Wis.), having filed three reports; *Rivera v. Schwab*, No. 2022-CV-000089 (Kan. Dist. Ct.), having filed a report, sat for a deposition, and testified at trial; *LULAC v. Abbott*, No. 3:21-CV-00259-DCG-JES-JVB (W.D. Tex.), having filed three reports and sat for a deposition; *Walen v. Burgum*, No. 1:22-cv-00031-PDW-CRH (D.N.D.), having filed a report and testified at trial; and *Soto Palmer v. Hobbs*, No. 3:22-cv-05035-RSL (W.D. Wash.), having filed a report.

I have also served as an expert witness in other cases related to voting rights more generally. I am the quantitative expert in *LULAC of Iowa v. Pate*, No. CVCV061476 (Iowa Dist. Ct.), and have filed an expert report in that case. I am the BISG expert in *LULAC Texas v. Scott*, No. 1:21-cv-00786-XR (W.D. Tex.), and have filed two reports and been deposed in that case. I am also the RPV expert in *Lower Brule Sioux Tribe v. Lyman County*, No. 3:22-CV-03008-RAL (D.S.D.), where I filed a report and testified at trial.

I am being compensated at a rate of \$400/hour. No part of my compensation is dependent upon the conclusions that I reach or the opinions that I offer.

## **Executive Summary**

- On every metric, Black Georgians are disadvantaged socioeconomically relative to non-Hispanic white Georgians. Blacks are worse off than whites on the following measures: income, unemployment, poverty, health, and educational attainment.
- These socioeconomic disparities have an adverse effect on the ability of Black Georgians to participate in the political process, as measured by voter turnout and other forms of political participation.
- This means that the political system does not respond to Black Georgians in the same way it responds to white Georgians. If the system did respond, we would expect to see fewer gaps in both health and economic indicators and a reduction in voter turnout gaps.
- Instead, Black Georgians vote at significantly lower rates than white Georgians. That is true at the statewide, county, and precinct levels—including in the Atlanta-Sandy Springs-Alpharetta Metropolitan area. This is also true in the Black Belt region of Georgia.
- The data show a significant relationship between turnout and disparities in health, employment, and education: as health, education, and employment outcomes increase, so does voter turnout in a material way.
- Black Georgians also lag behind white Georgians in other forms of political participation, like making campaign contributions, engaging local officials, and running for office.
- The academic literature overwhelmingly shows that these low levels of political participation are attributable to the socioeconomic disparities discussed above.

My opinions are based on the following data sources: the American Community Survey (ACS) across time; 2020 and 2022 statewide-, county-, and precinct-level voter registration and aggregate turnout data from the Georgia Secretary of State; 2010-2022 statewide voter turnout from the Georgia Secretary of State; 2014-2022 county-level voter turnout data from the Georgia Secretary of State; and the 2020 Cooperative Election Study.

## **Analysis**

### **A. Senate Factor 5**

I have been asked to examine item 5 of what has come to be known as the Senate Factors. During the 1982 Voting Rights Act extension, the Senate Judiciary Committee listed out factors that could be considered in evaluating a Section 2 VRA claim. These factors allow experts to inform the court as to the extent that minorities “are denied equal access to the political process.”

Senate Factor 5 examines the extent that minority group members (here, Black individuals) in a political jurisdiction (in this case the state of Georgia) bear the effects of discrimination in education, employment, and health that hinder said group’s political participation. Without a doubt, my analysis demonstrates that Black Georgians face clear and significant disadvantages in the above areas that reduce their ability to participate in the political process.

This analysis also speaks to Senator Factor 8: whether elected officials are less responsive to the particularized needs of the members of the minority group. My findings show that clear disparities across health and socioeconomic indicators impede Black Georgians' political participation. It follows that the political system is relatively unresponsive to Black Georgians; otherwise, we would not observe such clear disadvantages in healthcare, economics, and education.

## **B. Socioeconomic Disparities**

Starting with the 2015-2019 ACS, I constructed the following metrics for both the Black and white populations in Georgia: household median income; total households reporting income above \$100,000; total households reporting income above \$125,000; households receiving Supplemental Nutrition Assistance Program (SNAP, or food stamps) benefits in the past 12 months; percent of the population living below the poverty line in the last 12 months; percent of children living below the poverty line; percent of adults living below the poverty line; percent of the population over the age of 25 with a high school diploma; percent of the population over the age of 25 with a college degree; unemployment rate; percent of the population reporting a disability; and percent of the population reporting health insurance. These metrics reflect broad racial disparities in education, employment, and health.

As shown in Table 1, there are clear racial disparities in employment. The unemployment rate among Black Georgians (8.7%) is nearly double that of white Georgians (4.4%). And disparities persist among those *with* employment: white households are twice as likely as Black households to report an annual income above \$100,000. Black Georgians, meanwhile, were more than twice as likely—and Black children in particular more than three times as likely—to live below the poverty line over the past year. Black Georgians were nearly three times more likely than white Georgians to receive SNAP benefits.

On education, Black adults over the age of 25 are more likely than their white peers to lack a high school diploma (13.3% compared to 9.4%). These disparities fare no better in higher education: 35% of white adults over the age of 25 have obtained a bachelor's degree or higher compared to 24% of their Black counterparts.

Finally, on health, the Black population in Georgia is more likely to report a disability (11.8% compared to 10.9% for whites) and is more likely to lack health insurance (18.9% compared to 14.2% among 19-64 year-olds). All told, the numbers convey consistent racial disparities across economics, health, employment, and education.

I also reproduced the same analyses using the 2016-2020 ACS. As shown in Table 2, the racial disparities reported above hold across the different economic, health, employment, and education metrics.

	Black	White	White - Black
Median Household Income	\$44670	\$67955	\$23285
Pct. HH Income > \$100K	0.165	0.322	0.157
Pct. HH Income > \$125K	0.096	0.224	0.128
Pct. HH receiving SNAP	0.227	0.077	-0.15
Pct. below poverty line	0.215	0.101	-0.114
Pct. below poverty line, children	0.313	0.115	-0.198
Pct. below poverty line, VAP	0.18	0.098	-0.082
Pct. w/ Less than HS Diploma	0.133	0.094	-0.039
Pct. w/ Bachelor's Degree or higher	0.24	0.351	0.111
Pct. Unemployed	0.087	0.044	-0.043
Pct Disabled, ages 19-64	0.118	0.109	-0.009
Pct. Uninsured, ages 19-64	0.189	0.142	-0.047

*Table 1. Socioeconomic indicators across Black and white Georgians, 2015-2019 ACS.*

	<b>Black</b>	<b>White</b>	<b>White - Black</b>
Median Household Income	\$46964	\$70784	\$23820
Pct. HH Income > \$100K	0.18	0.34	0.16
Pct. HH Income > \$125K	0.108	0.24	0.132
Pct. HH receiving SNAP	0.222	0.071	-0.151
Pct. below poverty line	0.201	0.098	-0.103
Pct. below poverty line, children	0.293	0.108	-0.185
Pct. below poverty line, VAP	0.169	0.095	-0.074
Pct. w/ Less than HS Diploma	0.124	0.088	-0.036
Pct. w/ Bachelor's Degree or higher	0.251	0.358	0.107
Pct. Unemployed	0.085	0.043	-0.042
Pct Disabled, ages 19-64	0.121	0.109	-0.012
Pct. Uninsured, ages 19-64	0.187	0.141	-0.046

*Table 2. Socioeconomic indicators across Black and white Georgians, 2016-2020 ACS.*

These patterns hold across nearly every county in the state. Using the 2015-2019 ACS, I gathered the same metrics at the county level and considered only counties with at least 1,000 white and 1,000 Black residents. Georgia has 159 counties; of these, 141 meet this threshold. Whites have a higher median household income than Blacks in 136 of 141 of these counties.<sup>1</sup> Just two counties—Habersham and Paulding—feature a higher Black median household income (Habersham: \$64,286 vs. \$50,418; Paulding: \$50,418 vs. \$68,843). Among households making more than \$100,000, whites have an advantage over Blacks in 140 of the 141 counties.

Turning to SNAP, a higher percentage of Blacks have relied on SNAP in the past 12 months than whites in 140 of the 141 counties. In 136 of the 141 counties, Blacks are more likely to live below the poverty line than are whites. And in 130 of the 141 counties, whites are more likely than Blacks to have a 4-year college degree or higher.

---

<sup>1</sup> The ACS does not provide median income for Black households in three counties so these counties are treated as missing for this median household income comparison.



While the county distribution is not as pronounced with respect to unemployment and uninsured status, these disparities are still heavily weighted towards Black disadvantage. Blacks have a higher unemployment rate than whites in 118 of the 141 counties (84%), and the share of the population that is uninsured is higher for Blacks than for whites in 92 of the 141 counties (65%).<sup>2</sup>

## **C. Effect on Political Participation**

### **1. Academic Literature**

Socioeconomic disparities like these unquestionably affect political participation. There is a vast literature in political science that demonstrates a strong and consistent link between socioeconomic status (SES) and voter turnout. In general, voters with higher income and education are disproportionately likely to vote and participate in American politics (Wolfinger and Rosenstone 1980; Leighley and Nagler 2013; Nie et al. 1996; Mayer 2011). Brady, Verba, and Schlozman (1995) argue that resources—conceptualized as time, money, and civic skills (all related to education and income)—drive donation behavior, campaign volunteering, and voting. These broad SES findings hold using a variety of research designs. For example, Henderson (2018) uses a hookworm eradication program haphazardly (i.e., at random) applied to counties in the early 20th century South (the program exogenously covaries with educational attainment) to show a causal relationship between education and political participation.

Other research is in accord. Avery (2015) indicates that states with higher income inequality have greater income bias in turnout. Shah and Wichowsky (2019) show a link between home foreclosures and participation: Neighborhoods with a higher share of home foreclosures during the 2008 financial crisis subsequently experienced a drop in voter turnout, and affected individuals were less likely to vote in future elections. And findings in Pacheco and Fletcher (2015) indicate an association between self-reported health and voter turnout.

This overwhelming academic literature shows that the socioeconomic disadvantages suffered by Black Georgians affect their ability to participate in the political process.

This means that the political system does not respond to Black Georgians in the same way it responds to white Georgians. If the system did respond, we would expect to see fewer gaps in both health and economic indicators and a reduction in voter turnout gaps. A clear and consistent finding in political science research demonstrates that elected officials do not respond to constituent inquiry from minorities as readily as they do to white constituents (Barreto et al. 2004; Costa, 2017; White et al., 2015).

### **2. Voter Turnout**

When Georgians register to vote, they indicate their race. The Georgia Secretary of State maintains yearly statewide-, county-, and precinct-level voter registration and turnout by race. I gathered

---

<sup>2</sup> My conclusions about the reported racial disparities do not change when relying on the 2016-2020 ACS.

these data for the 2020 and 2022 general elections.<sup>3</sup> To calculate voter turnout, for both Black and white Georgians, I divided the total number of Black and white people who voted by the total number of the respective registered voter counts.

**a. Statewide Analysis**

For the years 2010-2022, I gathered statewide turnout data by race. The 2010-2012 turnout data is only available on the Secretary of State's website at the statewide level. Table 3 displays even-year statewide general election voter turnout by race across the 2010-2022 time period. This is a comprehensive list of elections as it covers both midterm and presidential election cycles.

For each election cycle, registered white voters turned out at higher rates than did registered Black voters. For instance, during the 2022 midterm election, whites turned out at 58.3%, whereas Blacks turned out at 45.0%, which translates into a gap of 13.3 percentage points in turnout. A similar gap (12.6%) is visible in the 2020 presidential election cycle. This Black-white gap is most narrow during President Obama's 2012 re-election – at 3.1% -- but in every single case whites vote at a noticeably higher rate than do Blacks.

<b>Year</b>	<b>Black TO</b>	<b>White TO</b>	<b>Gap</b>	<b>Total Turnout</b>
<b>2022</b>	<b>45</b>	<b>58.3</b>	<b>-13.3</b>	<b>50.5</b>
<b>2020</b>	<b>60</b>	<b>72.6</b>	<b>-12.6</b>	<b>65.7</b>
<b>2018</b>	<b>53.9</b>	<b>62.2</b>	<b>-8.3</b>	<b>56.4</b>
<b>2016</b>	<b>56.2</b>	<b>67.9</b>	<b>-11.6</b>	<b>62</b>
<b>2014</b>	<b>40.6</b>	<b>47.5</b>	<b>-6.9</b>	<b>42.9</b>
<b>2012</b>	<b>72.6</b>	<b>75.7</b>	<b>-3.1</b>	<b>72.9</b>
<b>2010</b>	<b>50.4</b>	<b>55.9</b>	<b>-5.5</b>	<b>52.1</b>

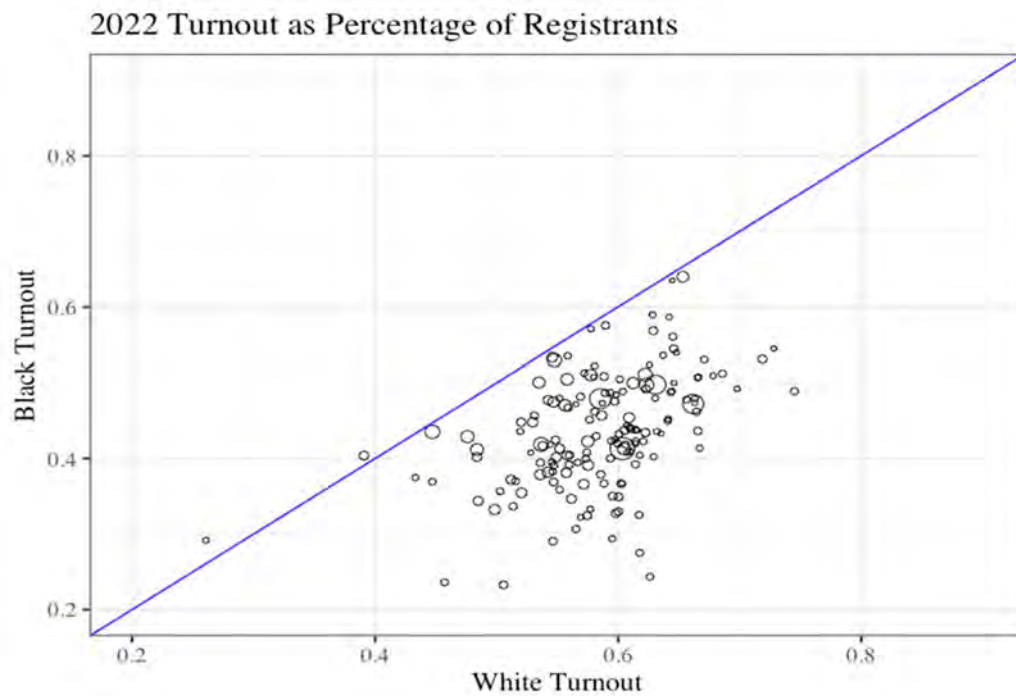
*Table 3. Statewide voter turnout by race, 2010-2022.*

**b. Countywide Analysis**

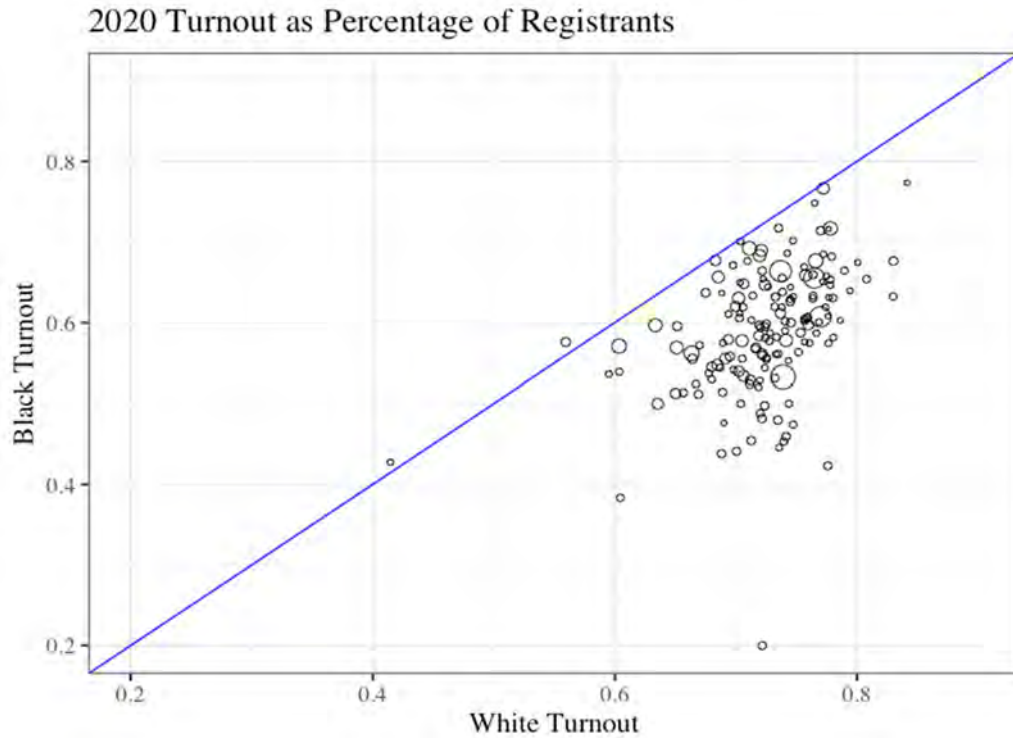
Next, I compared the share of a county's white registrants who voted in 2022 against the share of a county's Black registrants who voted in 2022. Figure 1 visually compares turnout (denominator is registration) between whites and Blacks across the state's counties. In almost every single county, white registrants voted at higher rates than did Black registrants. This is visually demonstrated by the fact that almost all of the dots (counties) fall below the blue identity line, as opposed to above. Only in Chattahoochee and Liberty Counties did Black registrants cast ballots

<sup>3</sup> This data was previously available at: [https://sos.ga.gov/index.php/elections/general\\_election\\_turnout\\_by\\_demographics\\_november\\_2020](https://sos.ga.gov/index.php/elections/general_election_turnout_by_demographics_november_2020).

at (slightly) higher rates than did white registrants. Using 2020 data, I find nearly identical results, as illustrated in Figure 2.

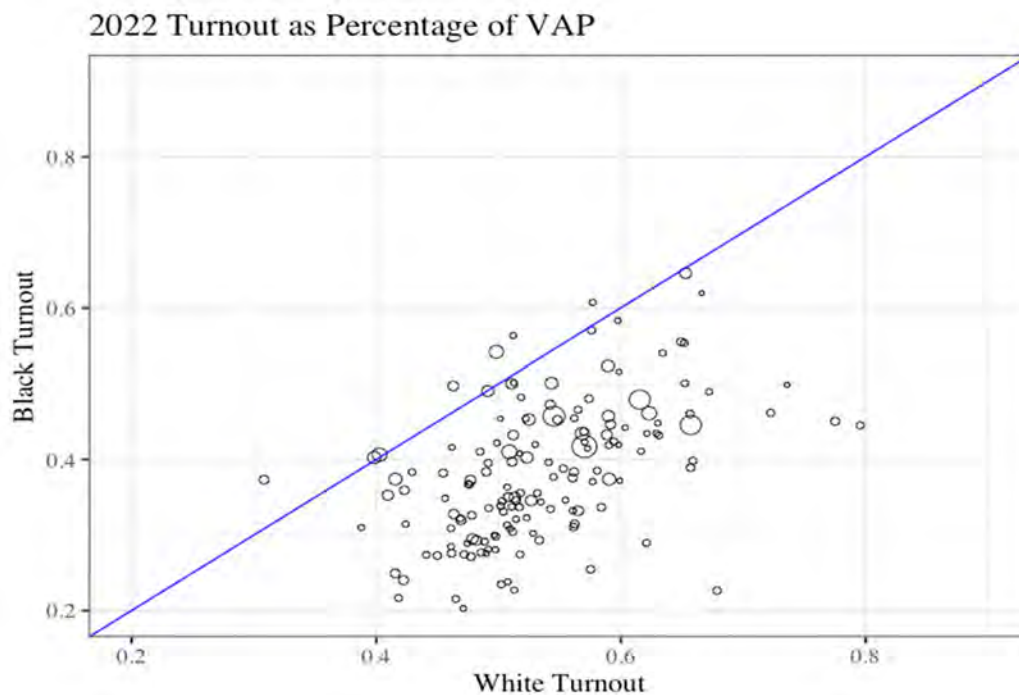


*Figure 1. 2022 turnout by county; white-Black differential based on voter registration.*

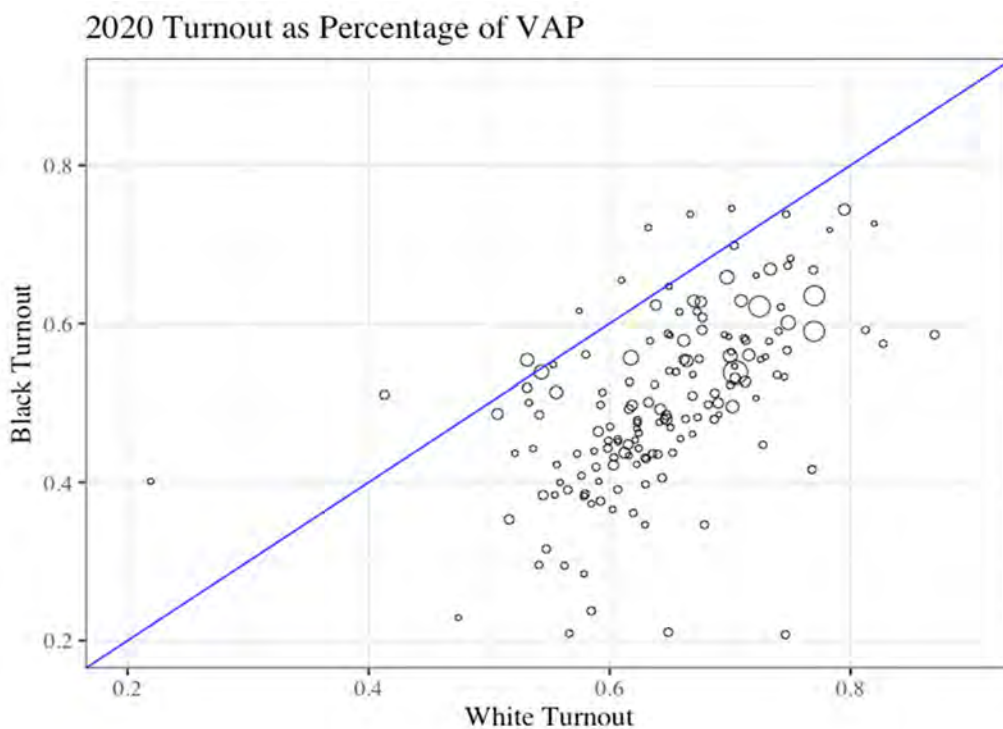


*Figure 2. 2020 turnout by county; white-Black differential based on voter registration.*

Below, Figures 3 and 4 plot out the same relationship but swap out registration for voting age population (VAP) as the denominator. The relationship is very similar using both 2022 and 2020 turnout data. Stated differently, the substantive findings do not change regarding which denominator is selected: white Georgians clearly vote at higher rates than Black Georgians.

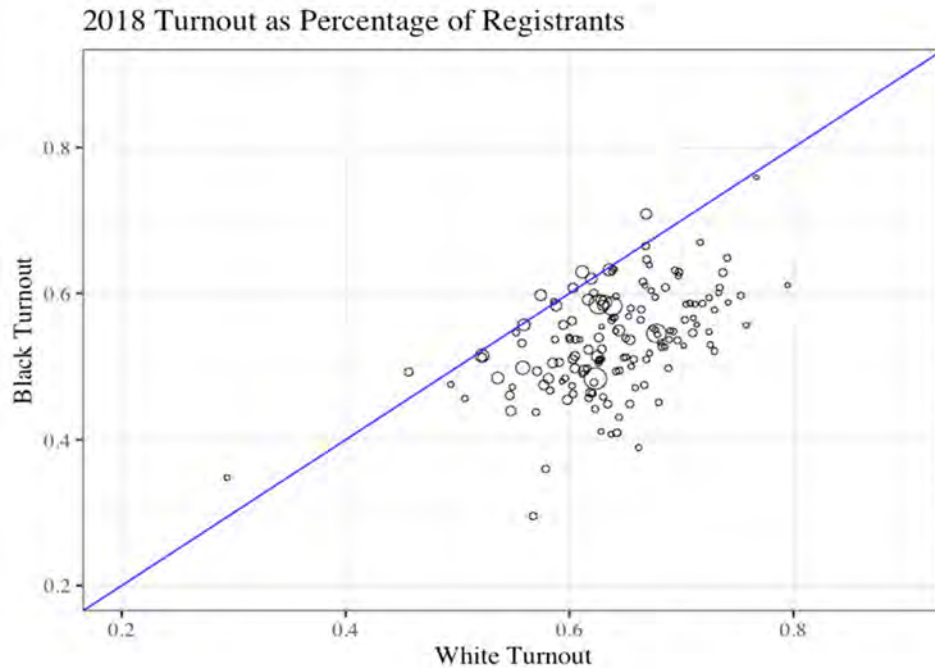


*Figure 3. 2020 turnout by county; white-Black differential based on VAP.*



*Figure 4. 2020 turnout by county; white-Black differential based on VAP.*

I also replicated the white-Black turnout differential analysis for the 2014-2018 elections because such data are readily available from the Georgia Secretary of State. Figure 5 plots out the 2018 white vs. Black turnout gap and demonstrates substantively the same trends discussed above. Figures 6 and 7 present the same analyses for the 2016 and 2014 elections, respectively.



*Figure 5. 2018 turnout by county; white-Black differential based on voter registration.*

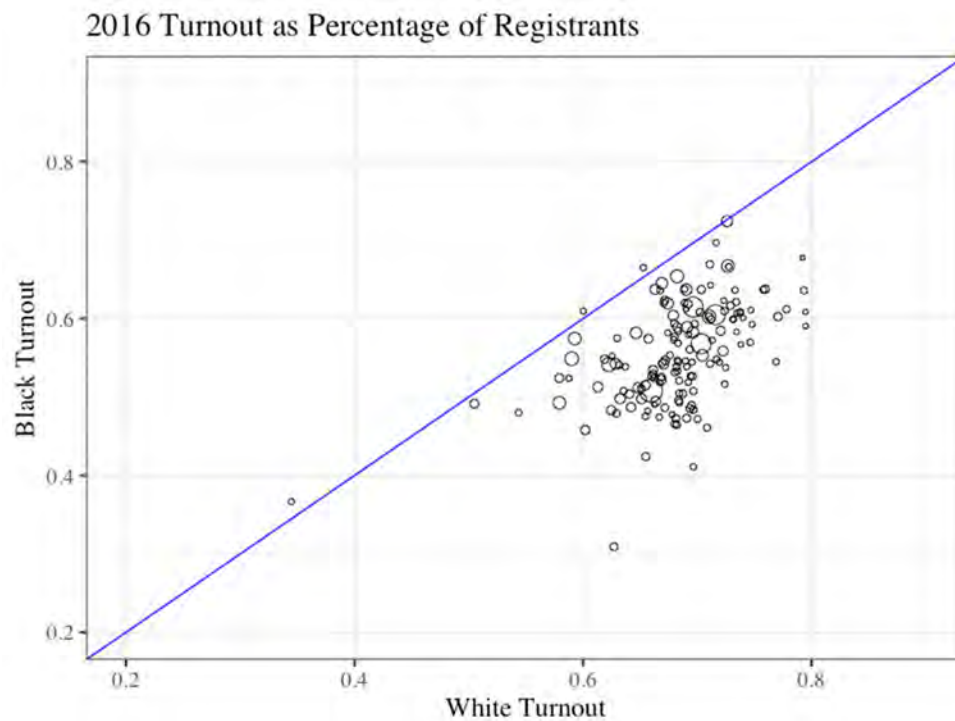


Figure 6. 2016 turnout by county; white-Black differential based on voter registration.

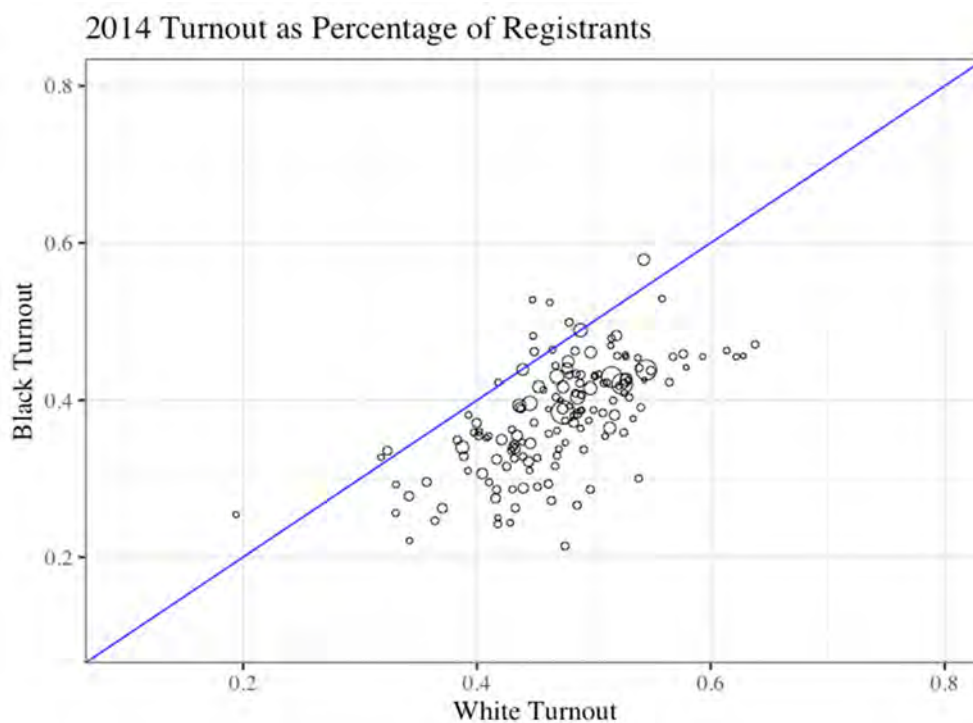


Figure 7. 2014 turnout by county; white-Black differential based on voter registration.



**c. Precinct-Level Analysis**

I replicated the 2020 and 2022 county analysis with Georgia precincts gathered from the Secretary of State's website.<sup>4</sup> The 2020 precinct file contains 2,784 precincts across the state and the 2022 precinct file contains 2,852 precincts. Both files include both registration and votes cast for whites and Blacks. I then subset the datasets to precincts with more than 100 Blacks and 100 whites to reduce the influence of outliers—namely, extremely small precincts. This resulted in a total of 1,957 precincts in the 2020 data and 2,010 precincts in the 2022 data.

The analysis of precinct-level turnout does not change the core substance of the reported findings. Of the 1,957 precincts in 2020, whites have a higher turnout in 1,549 (79.2%) precincts and Blacks in only 408 (20.8%) precincts. In 2022, whites have a higher turnout in 1,629 (81.0%) of the precincts, while Blacks have a turnout advantage in only 381 (19.0%) of the precincts. Figures 8 and 9 visually display the results, which are consistent with both the statewide and county analyses. The clear majority of precinct dots fall below the blue identity line.

---

<sup>4</sup> This data was previously available at: [https://sos.ga.gov/index.php/elections/general\\_election\\_turnout\\_by\\_demographics\\_november\\_2020](https://sos.ga.gov/index.php/elections/general_election_turnout_by_demographics_november_2020).

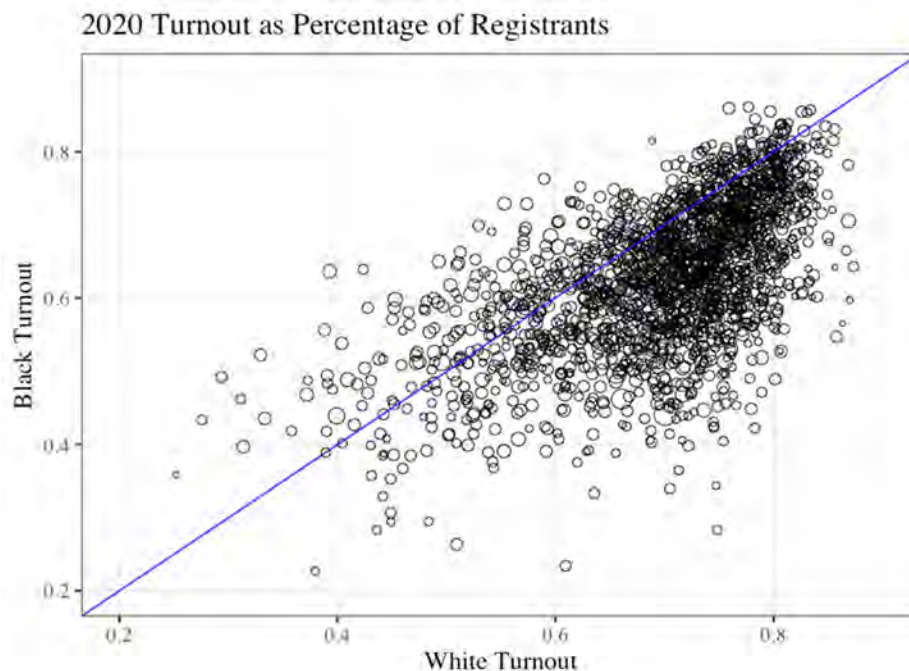


Figure 8. 2020 turnout by precinct; white-Black differential based on voter registration.

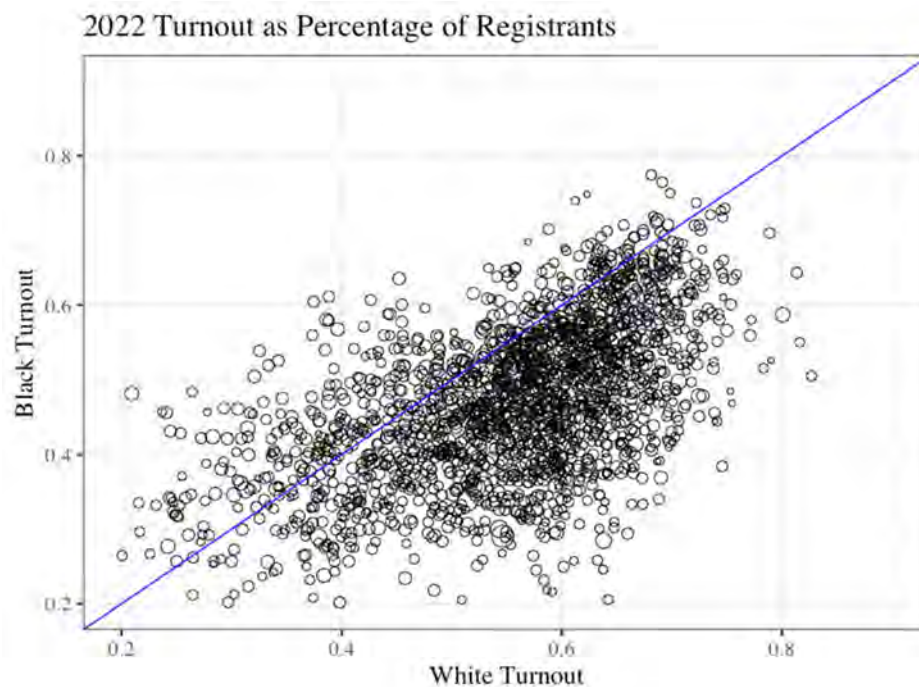


Figure 9. 2020 turnout by precinct; white-Black differential based on voter registration.

**d. Analysis of Atlanta-Sandy Springs-Alpharetta Metropolitan Area**

I also examined Black vs. white voter turnout rates in the Atlanta metropolitan area and Black Belt. For the former, I analyzed a subset Georgia counties: those in the Atlanta-Sandy Springs-Alpharetta Metropolitan Statistical Area.<sup>5</sup> Figures 10 through 13 plot out the white vs. Black turnout gap in the 2020 and 2022 general elections based on both registration and voting age population as the denominators. The trend is very similar to the overall statewide trend. In the 2020 election, Black turnout was not higher than white turnout in any of the counties. This result is consistent with the 2022 election, except that Black turnout very slightly exceeded white turnout in only three counties (Clayton, Henry, and Rockdale) when using voting age population, rather than registration, as the denominator.

---

<sup>5</sup> The counties include: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton.

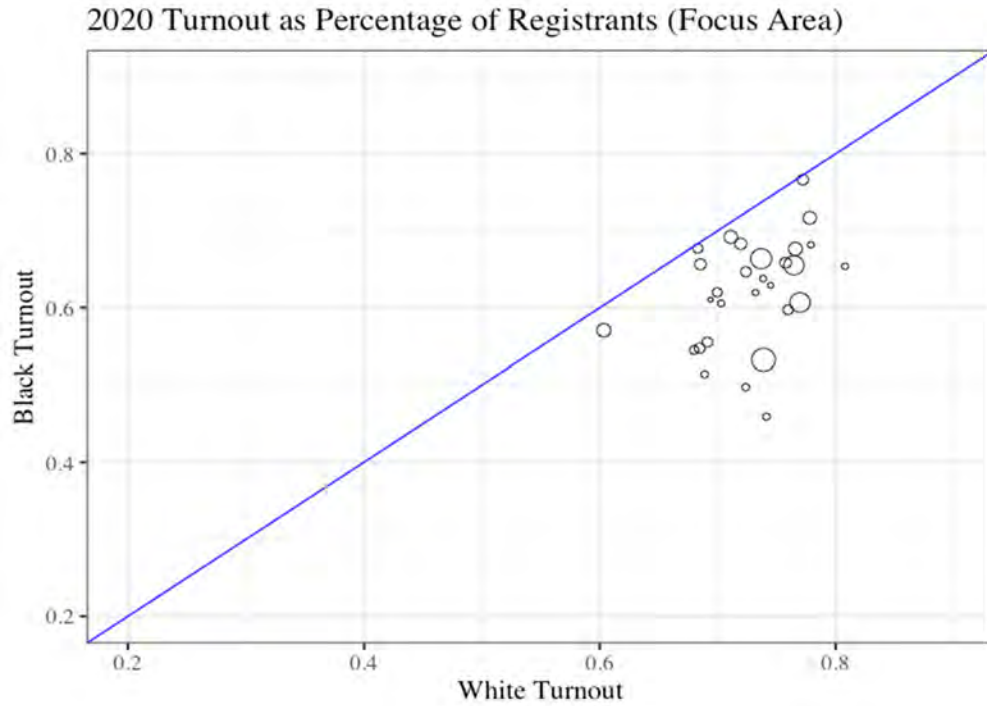


Figure 10. 2020 turnout by county in Atlanta metropolitan area; white-Black differential based on voter registration.

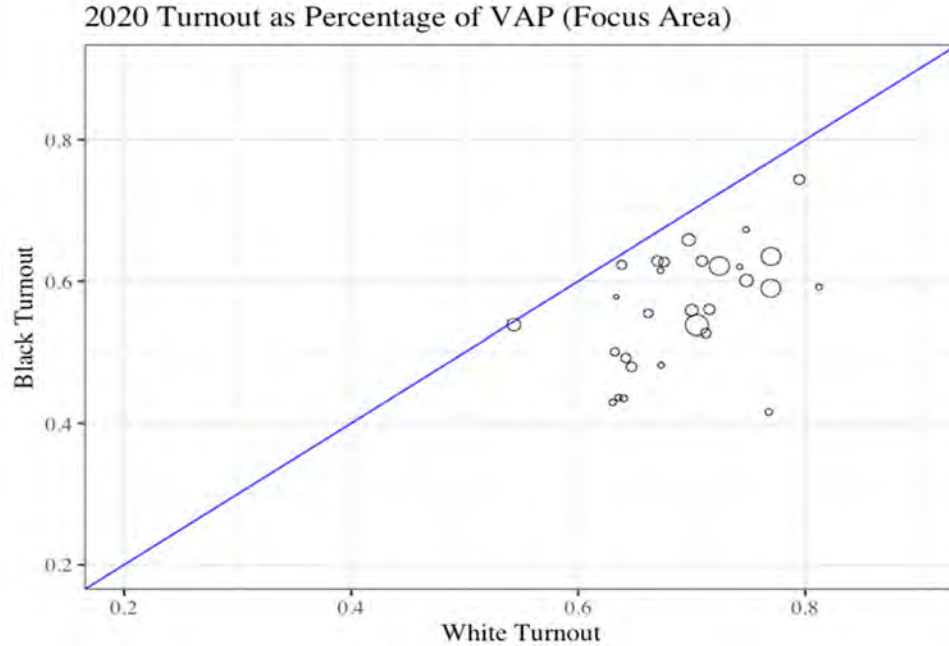
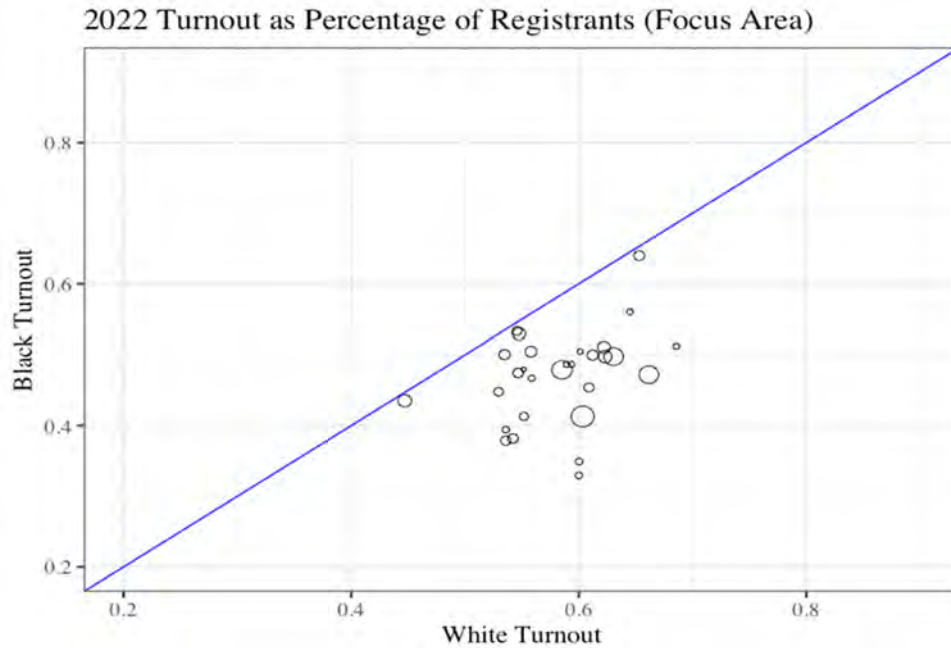
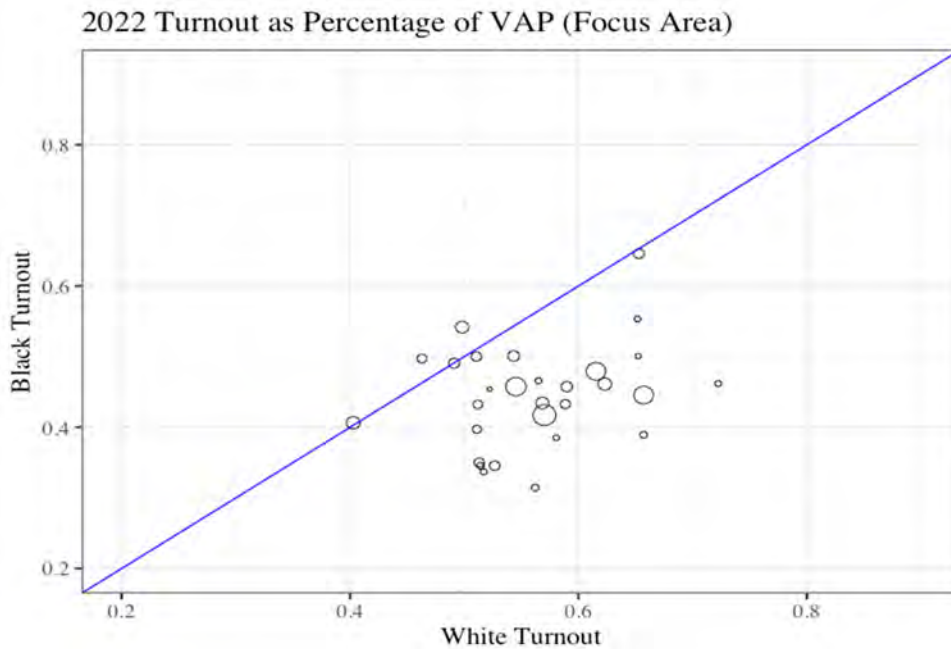


Figure 11. 2020 turnout by county in Atlanta metropolitan area; white-Black differential based on VAP.

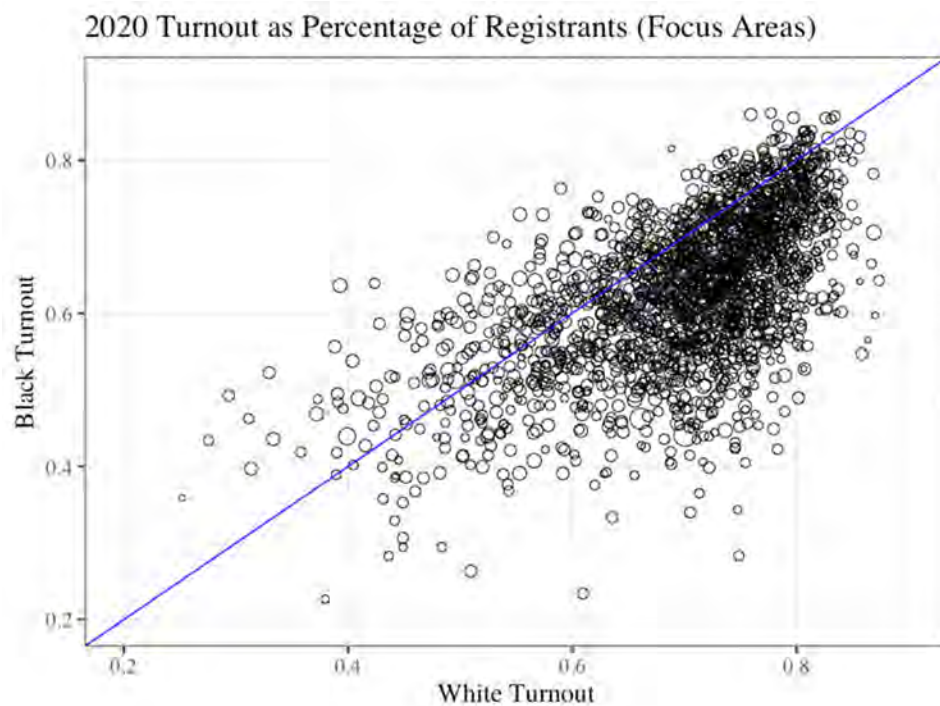


*Figure 12. 2022 turnout by county in Atlanta metropolitan area; white-Black differential based on voter registration.*

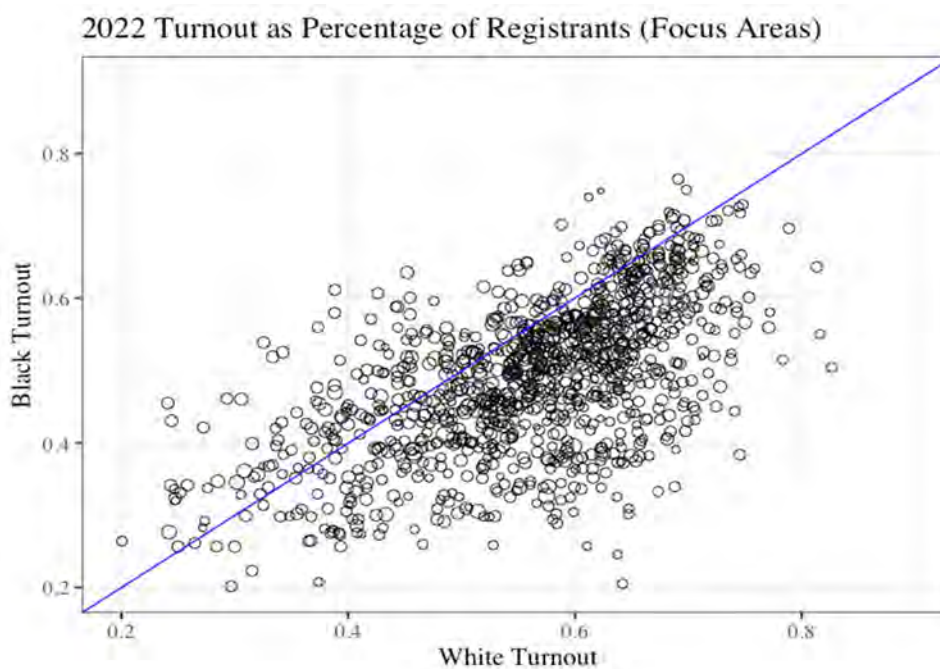


*Figure 13. 2020 turnout by county in Atlanta metropolitan area; white-Black differential based on VAP.*

Finally, I conducted the same analysis among precincts falling in the same set of counties. Again, as shown in Figures 14 and 15, whites vote at higher rates than do Blacks in the overwhelming majority of precincts.



*Figure 14. 2020 turnout by precinct in Atlanta metropolitan area; white-Black differential based on voter registration.*



*Figure 15. 2022 turnout by precinct in Atlanta metropolitan area; white-Black differential based on voter registration.*

**e. Analysis of the Black Belt Area**

As an additional set of analyses, I examined 2020 and 2022 Black vs. white voter turnout rates in the traditional “Black Belt” area of the state. The geographic area includes the following counties, which I subset the data to: Baker, Bibb, Burke, Calhoun, Chattahoochee, Clay, Dooly, Dougherty, Early, Glascock, Hancock, Houston, Jefferson, Lee, Macon, Marion, McDuffie, Miller, Mitchell, Muscogee, Peach, Quitman, Randolph, Richmond, Schley, Stewart, Sumter, Talbot, Taliaferro, Taylor, Terrell, Twiggs, Warren, Washington, Webster, and Wilkinson.

Figures 16 through 19 plot out the Black vs. white turnout gap based on both registration and VAP in this area. The trend is very similar to the overall statewide trend for both the 2020 and 2022 general elections.



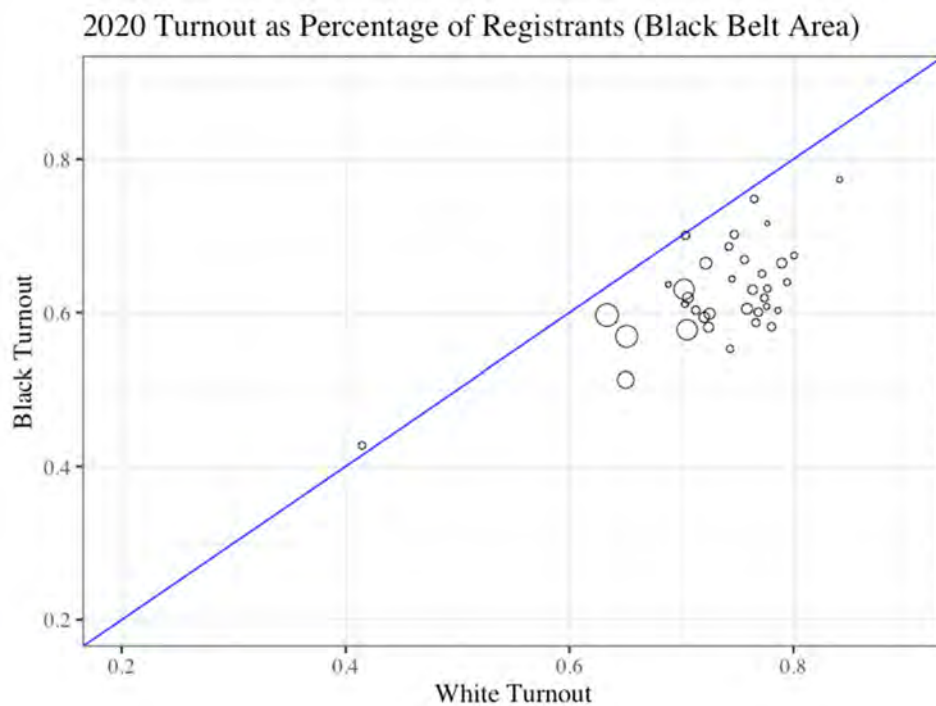


Figure 16. 2020 turnout by county in Black Belt; white-Black differential based on voter registration.

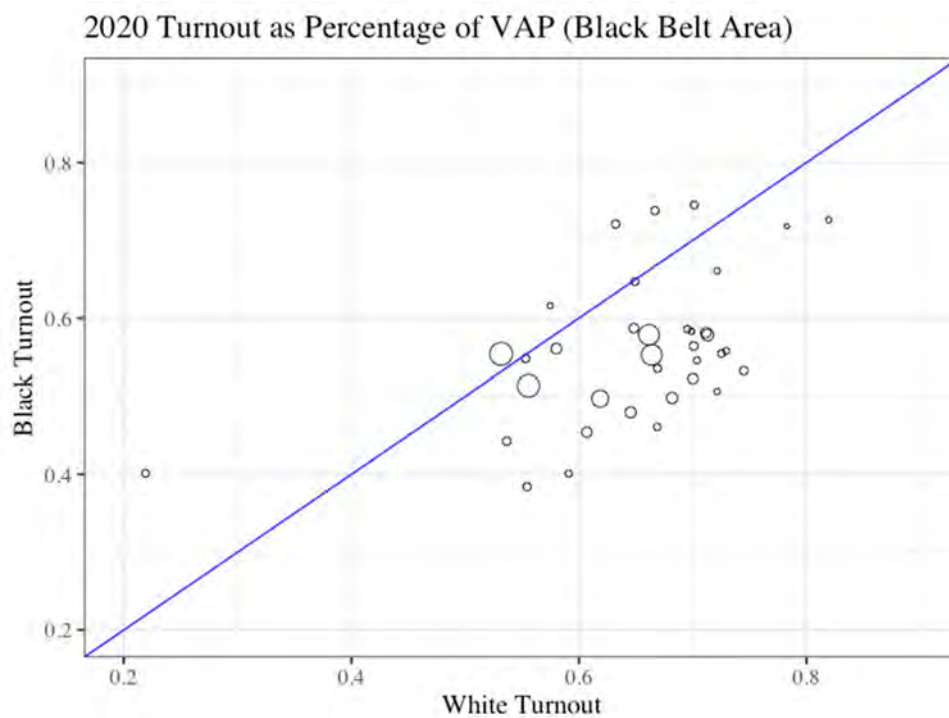
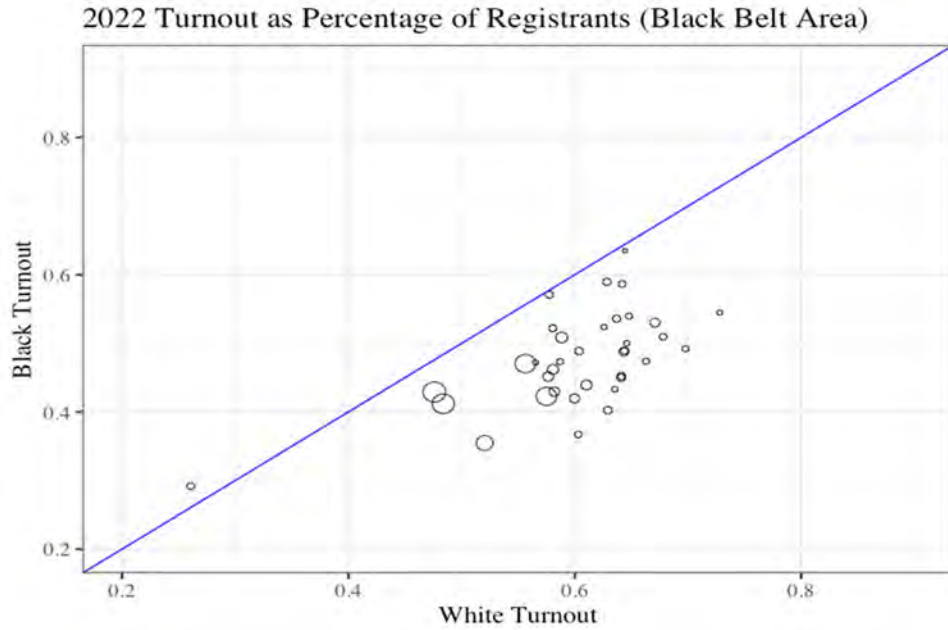
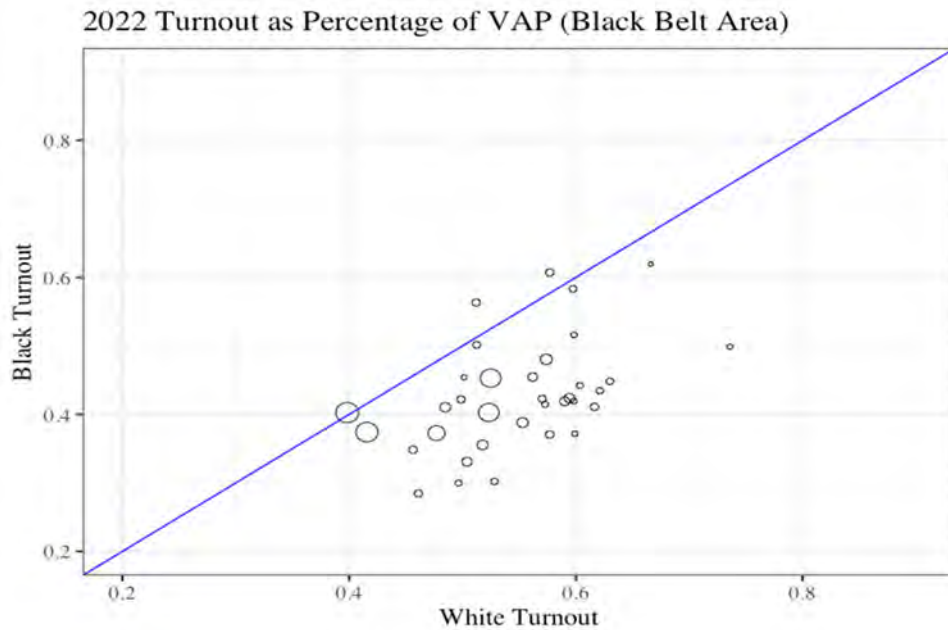


Figure 17. 2020 turnout by county in Black Belt; white-Black differential based on VAP.



*Figure 18. 2022 turnout by county in Black Belt; white-Black differential based on voter registration.*



*Figure 19. 2020 turnout by county in Black Belt; white-Black differential based on VAP.*

Similar to the analysis in the Atlanta metropolitan area, I examined the white-Black turnout differential among precincts falling into the set of Black Belt counties. As depicted in Figures 20 and 21, once again, I find that whites vote at higher rates than do Blacks in the clear majority of the precincts.

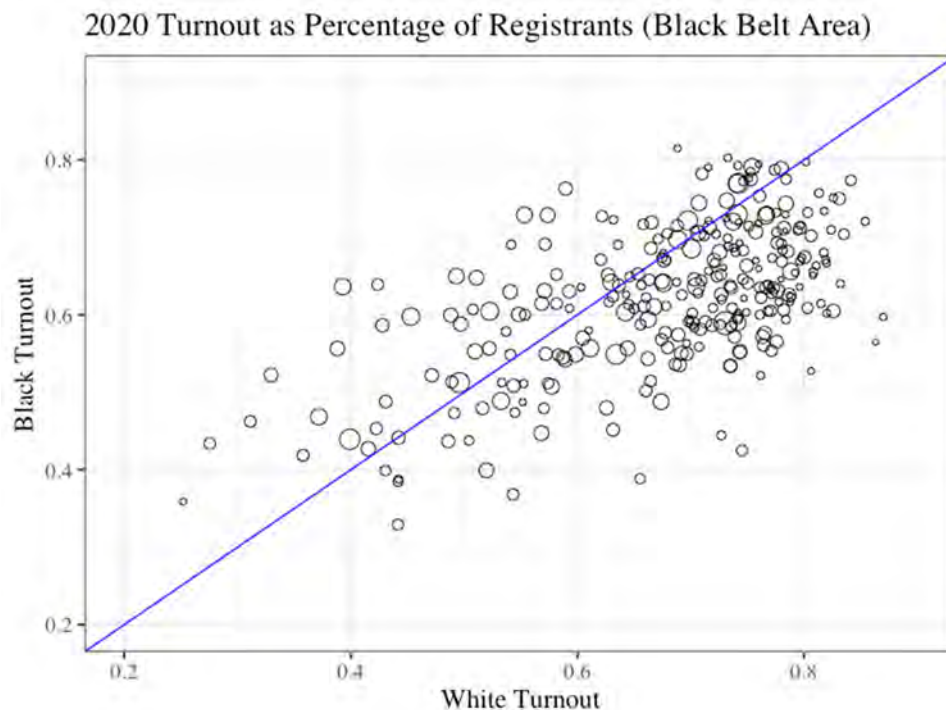


Figure 20. 2020 turnout by precinct in Black Belt; white-Black differential based on voter registration.

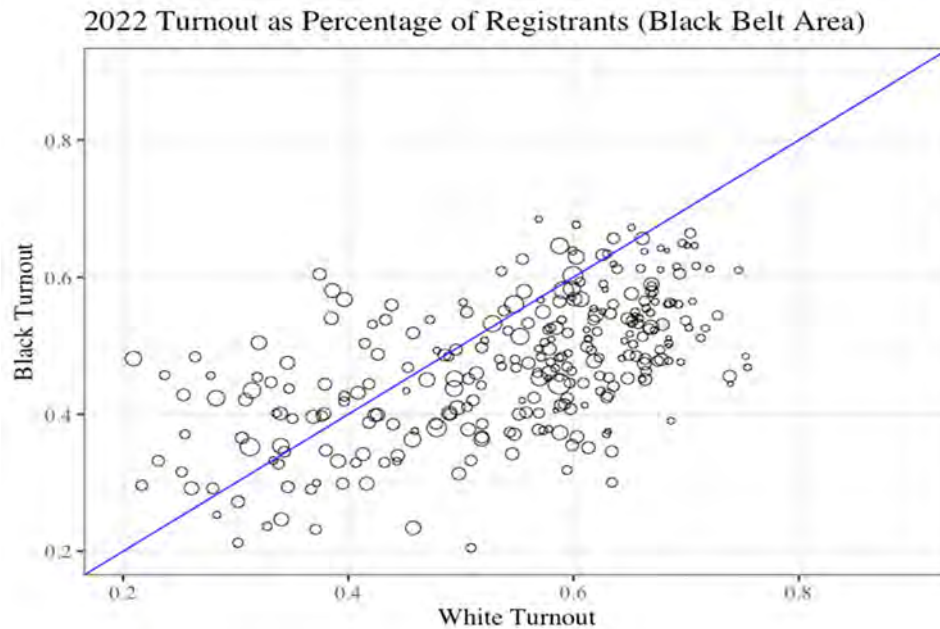


Figure 21. 2022 turnout by precinct in Black Belt; white-Black differential based on voter registration.

**f. Relationship Between Turnout in 2020 and Socioeconomic Disparities**

This section examines how the documented turnout differences are related to the socioeconomic disparities discussed at the outset of this report, like education and income, using both the 2015-2019 and 2016-2020 ACS datasets. Specifically, I examined the county-level relationship between different measures of Black educational attainment and Black voter turnout using the 2020 general election data.<sup>6</sup> Figure 22 plots out the relationship between percent Black with less than a high school education and Black voter turnout using the 2015-2019 ACS.<sup>7</sup> The blue line is the bivariate regression line ( $\beta = -0.35$ ,  $p < 0.001$ ), which shows that each 10-percentage-point increase in the size of the Black population without a high school degree decreases Black turnout by 3.5 percentage points. The difference between counties with the highest percentage of Black population with less than a high school education compared to counties with the lowest percentage of Black population with less than a high school degree (referred to as “min-max effects”)<sup>8</sup> surmounts to a decline of 11.8 [7.0, 16.5] percentage points in the Black turnout.

Figure 23 shows that these relationships hold when relying on the 2016-2020 ACS estimates for educational attainment. Specifically, a 10-percentage-point increase in the size of the Black population without a high school degree corresponds to a statistically significant 3.8 percentage point ( $p < 0.001$ ) decline in the Black turnout. The corresponding min-max decline in turnout is 12.4 [7.5, 17.3] percentage points.

---

<sup>6</sup> I replicated this analysis using 2022 turnout data, as shown in subsection (g).

<sup>7</sup> For each analysis I subset the data to counties with more than 1,000 registered Black voters. I do this to avoid outlier issues that can emerge with smaller counties. However, this subset does not change in any substantive way the results compared to a full data analysis. All regression analyses are weighted by total Black registration in the county.

<sup>8</sup> Min-max effect is the discrete change of moving from minimum to maximum value of the independent variable (for example, percent black population without high school education). Ninety-five percent (95%) confidence intervals for each estimate are reported in brackets.

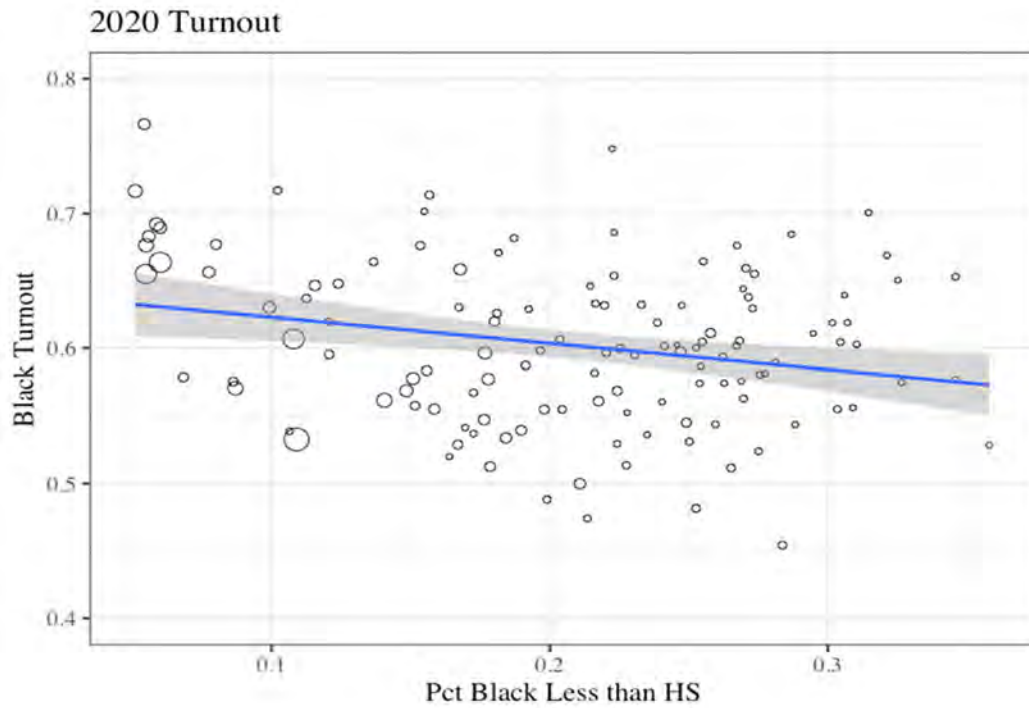


Figure 22. Association between Black less than high school education and 2020 Black turnout (2015-2019 ACS).

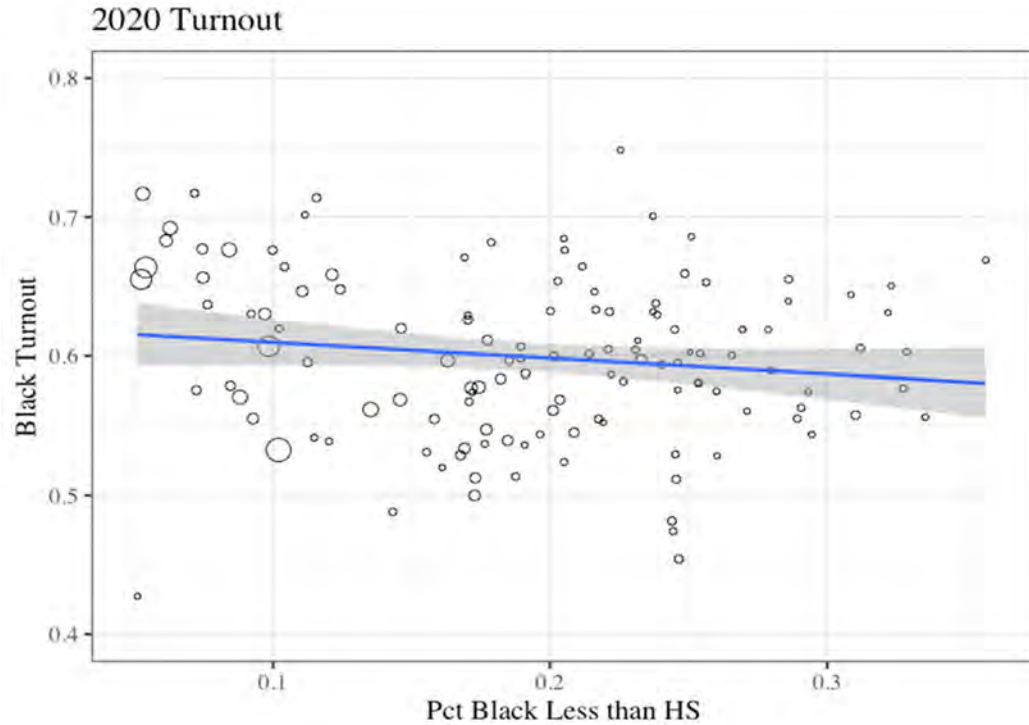


Figure 23. Association between Black less than high school education and 2020 Black turnout (2016-2020 ACS).

Figure 24 plots the relationship between the share of Blacks with a 4-year college degree and the share of Black registrants who voted by county. The relationship paints an inverse picture to the previous plot. As a county's Black education rises, so does the turnout rate. A bivariate regression reveals a statistically significant relationship ( $\beta = 0.23$ ,  $p < 0.001$ ), indicating that Black turnout rises 2.3 percentage points for each 10-percentage-point increase in percent Black 4-year degree, with a min-max effect size of 11.2 [6.9, 15.5] percentage points.

Figure 25 represents the same analysis using the 2016-2020 ACS. As shown, Black turnout increases by 2.1 percentage points for each 10-percentage-point increase in percent Black 4-year degree, with a min-max effect size of 11.8 [7.1, 16.6] percentage points. In both cases, I find statistically and substantively significant relationships between educational attainment and turnout, indicating that counties with lower levels of Black education are less likely than counties with higher levels of education to turnout.

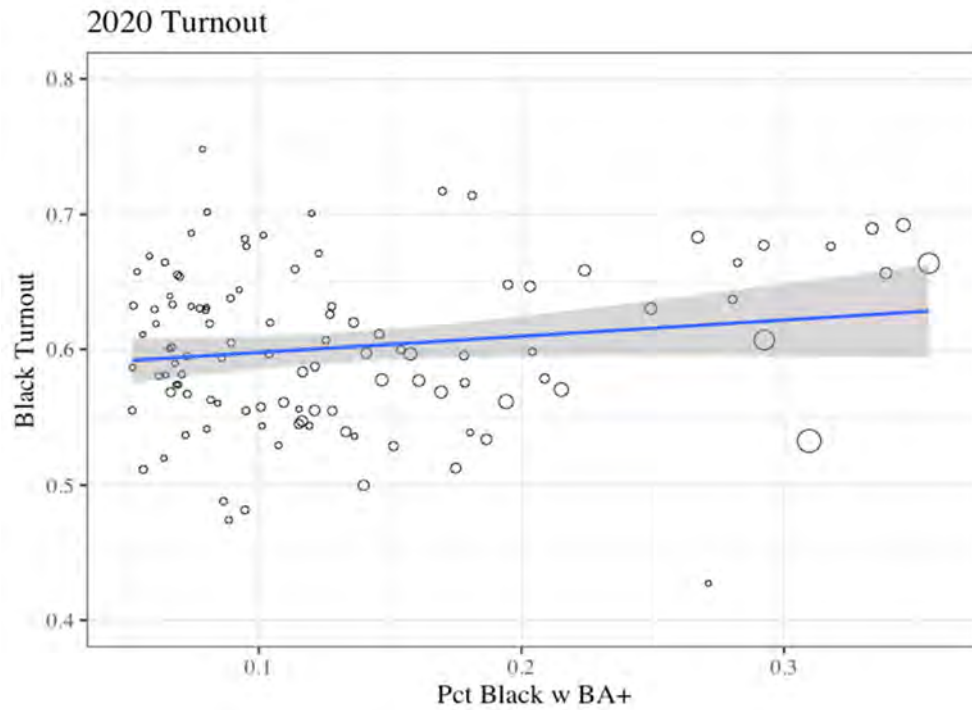


Figure 24. Association between Black 4-year degree and 2020 Black turnout (2015-2019 ACS).

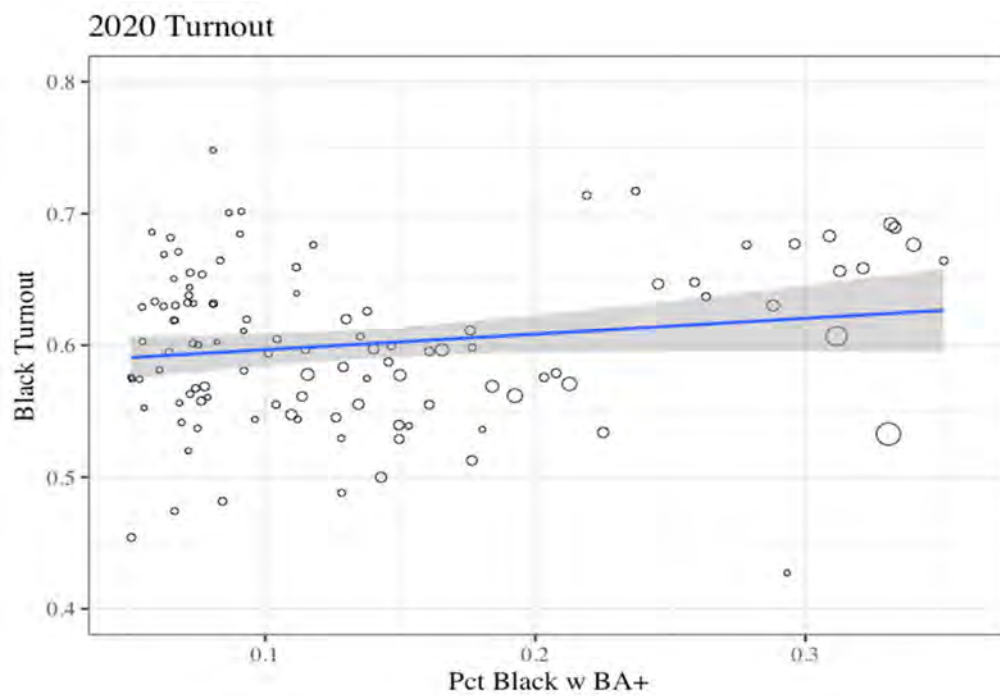


Figure 25. Association between Black 4-year degree and 2020 Black turnout (2016-2020 ACS).



Turning to income-related measures, Figure 26 plots out the relationship between the share of Blacks below the poverty line and the share of Black registrants who voted by county. As a county's Black poverty rises, the turnout rate declines. A bivariate regression reveals a statistically significant relationship ( $\beta = -0.49$ ,  $p < 0.001$ ), indicating that Black turnout falls 4.9 percentage points for each 10-percentage-point increase in percent Black below the poverty line. The min-max effect size is a decline of 25.7 [20.4, 31.1] percentage points in turnout, which is a substantively large gap between counties with the lowest Black poverty levels and those with the highest Black poverty levels.

Figure 27 visually depicts the same associations using the 2016-2020 ACS data. A 10-percentage-point increase in percent Black below the poverty line corresponds to a statistically significant 5.0 percentage point ( $p < 0.001$ ) decline in turnout. The difference in turnout levels between counties with the highest and lowest poverty levels amounts to a 21.1 [16.6, 25.6] percentage point gap.

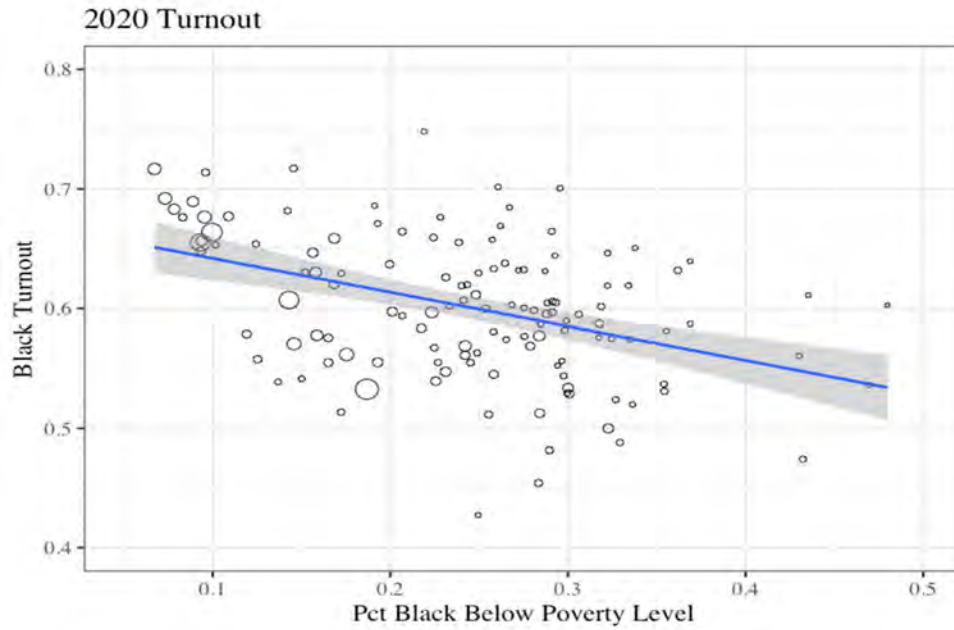


Figure 26. Association between Black poverty rates and 2020 Black turnout (2015-2019 ACS).

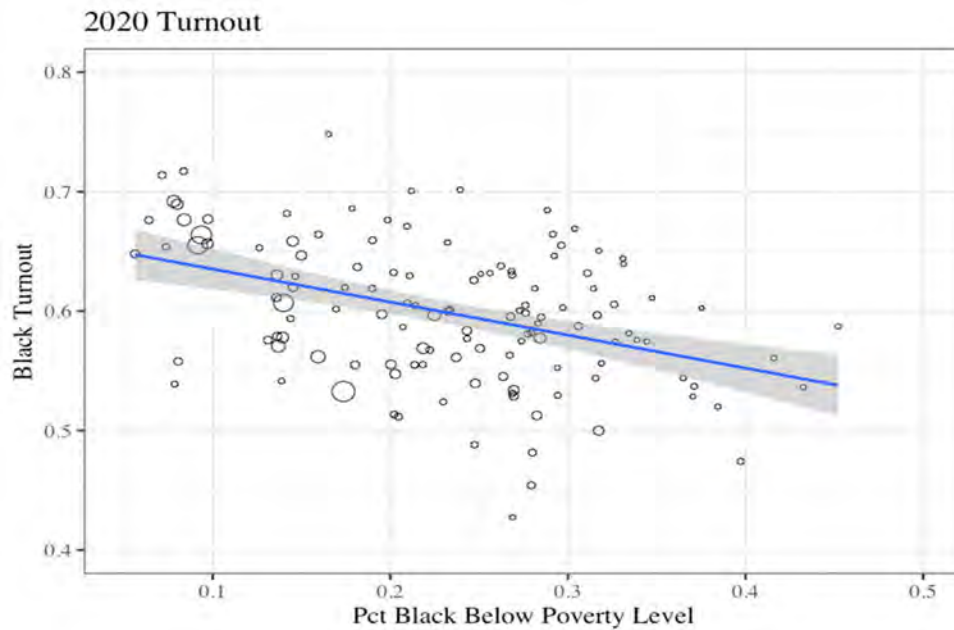


Figure 27. Association between Black poverty rates and 2020 Black turnout (2016-2020 ACS).

Lastly, Figures 28 and 29 plot the relationship between Black median household income and the share of Black registrants who voted by county. As a county's Black household income rises, the turnout rate rises. A bivariate regression with the 2015-2019 ACS data reveals a statistically significant relationship ( $\beta = 0.117$ ,  $p < 0.001$ ), and a min-max effect of 22.1 [17.5, 26.7] percentage points. The results are statistically and substantively similar using the 2016-2020 ACS: Counties with higher levels of Black median household income have a higher black turnout ( $\beta = 0.120$ ,

$p < 0.001$ ). The discrete difference between such counties amounts to a min-max effect size of 20.5 [16.4, 24.7] percentage points in turnout.

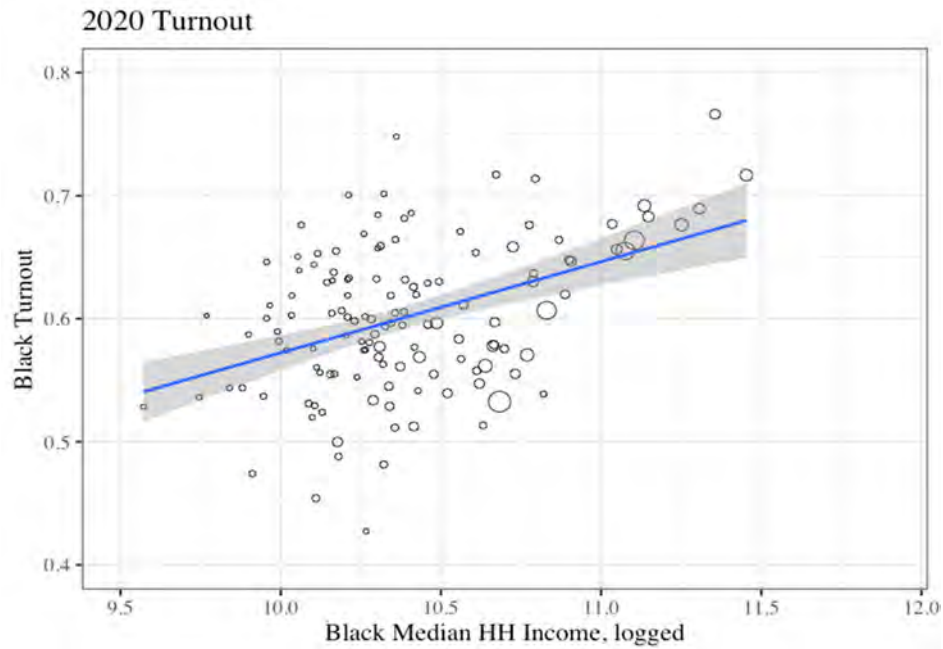


Figure 28. Association between Black median household income and 2020 Black turnout (2015-2019 ACS).

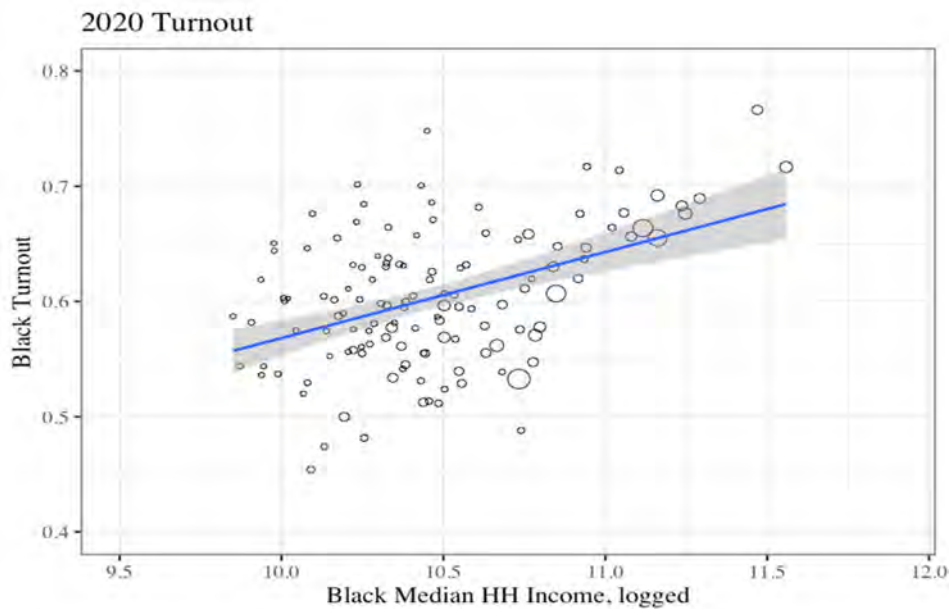


Figure 29. Association between Black median household income and 2020 Black turnout (2016-2020 ACS).

**g. Replication of the Relationship Between Turnout and Socioeconomic Disparities Using 2022 General Election Data**

This section replicates the analysis of Black turnout and socioeconomic disparities, as measured with the 2016-2020 ACS, using the 2022 general election data. This analysis shows that all the four socioeconomic indicators are once again statistically associated with Black turnout levels.

Starting with education, Figures 30 and 31 show that both measures of educational attainments are associated with Black turnout (at  $p < 0.001$ ). The discrete difference between counties with the highest percentage of Black population with less than a high school degree compared to counties with the lowest percentage of Black population with less than a high school degree amount to a 12.5 [8.2, 16.7] percentage point decline in Black turnout. When comparing counties with the highest share of bachelor's degrees to those with the lowest share of a bachelor's degrees, I find a discrete difference of 13.3 [9.3, 17.3] percentage points in turnout. This means that counties with lower levels of Black education attainment have significantly lower levels of Black turnout.

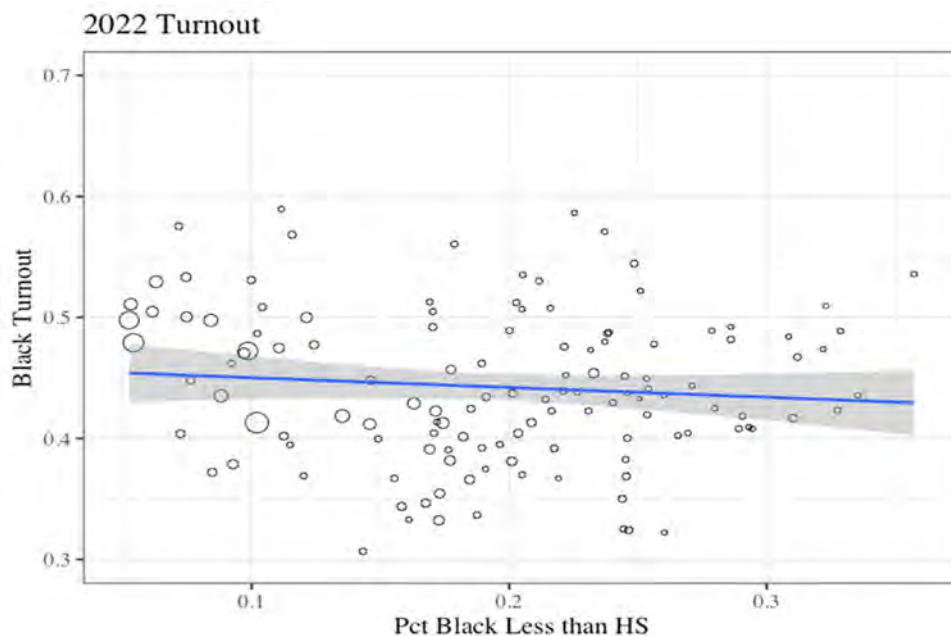


Figure 30. Association between Black less than high school education and 2022 Black turnout (2016-2020 ACS).

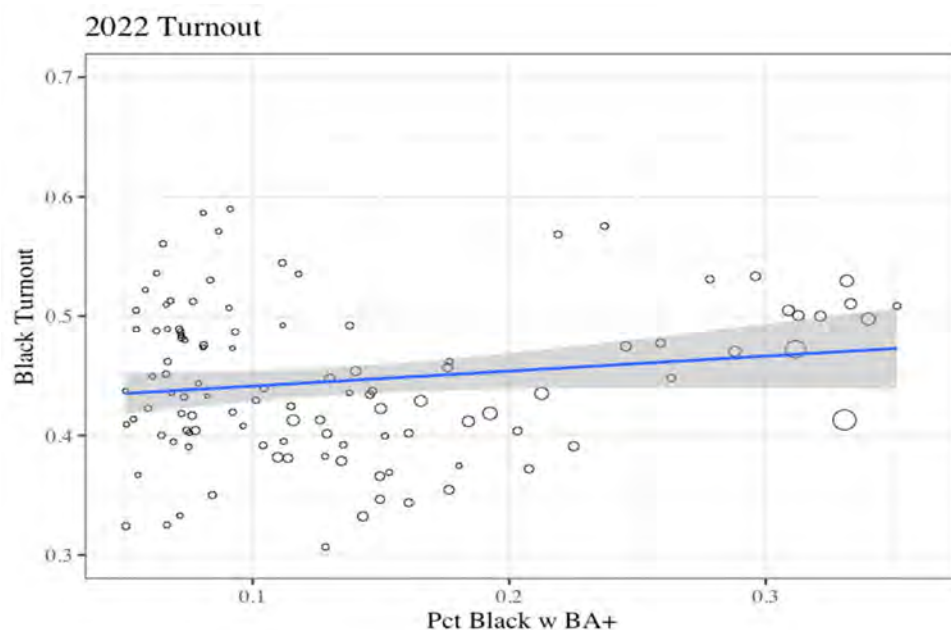


Figure 31. Association between Black 4-year degree and 2022 Black turnout (2016-2020 ACS).

Moving on to indicators of economic disparities, I find that as the percentage of counties with Blacks below the poverty line rises, Black turnout declines (see Figure 32). This relationship is statistically significant (at  $p < 0.001$ ). Substantively, counties with the highest levels of Black poverty have a 20.4 [16.5, 24.2] percentage point *lower* Black turnout than counties with the lowest levels of Black poverty. Replacing poverty levels with median household income leads to the same

conclusion. As Figure 33 shows, logged household income is statistically associated with Black turnout. Specifically, counties with the highest Black median household income report 19.0 [15.4, 22.6] percentage point higher Black turnout than counties with the lowest median household income. In sum, this replication analysis using the 2022 general election data further underscores how socioeconomic disparities are linked to turnout levels.

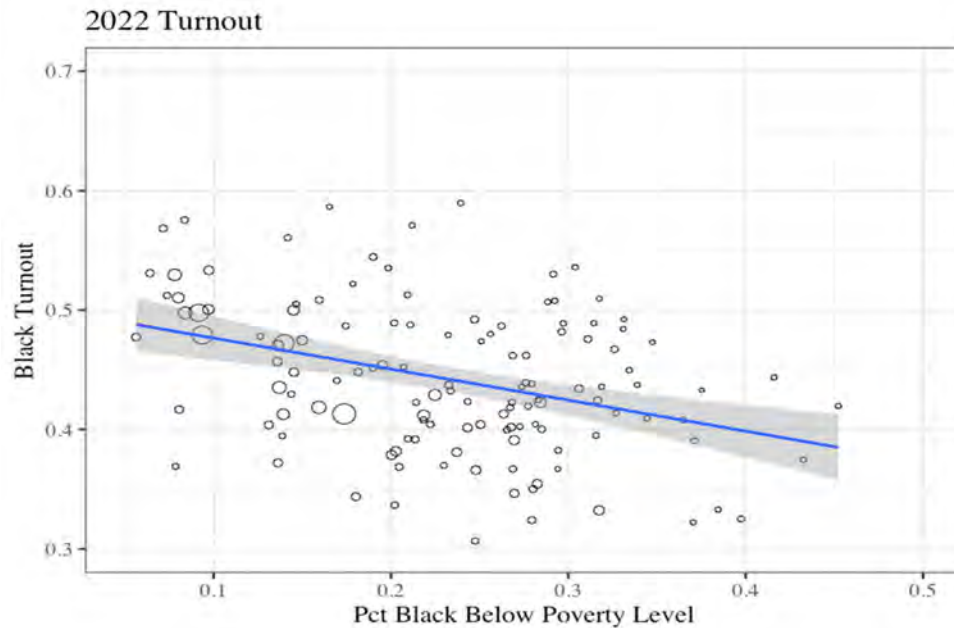


Figure 32. Association between Black poverty rates and 2022 Black turnout (2016-2020 ACS).

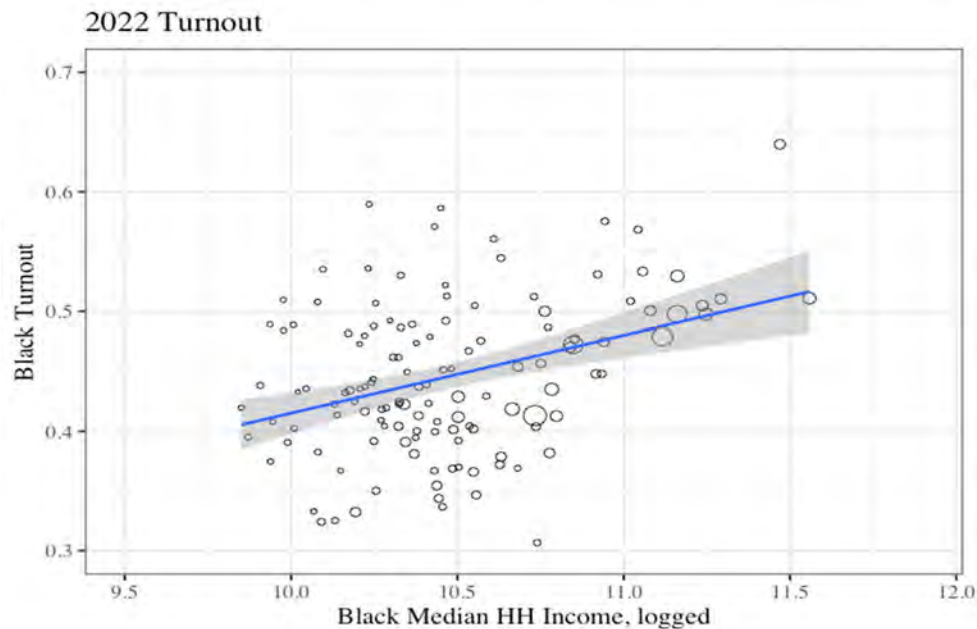


Figure 33. Association between Black median household income and 2022 Black turnout (2016-2020 ACS).

### 3. Other Forms of Voter Participation

This next section examines disparities between Blacks and whites among other modes of voter participation. I downloaded the 2020 Cooperative Election Study (CES) common form post-election survey.<sup>9</sup> The CES is a widely used publicly available survey dataset political scientists use to write academic papers and inform our scientific knowledge of the American voter. The full dataset contains 61,000 interviews. I subset the data to Georgia respondents, of which there are 2,002. To compare white vs. Black political participation, I further subset the data to only non-Hispanic white and Black respondents. This yields a dataset of n=1,753. Finally, 339 individuals whom CES initially interviewed in the pre-election survey did not take the post-election survey; thus, the final dataset is n=1,414. All tabulations presented below include survey weights to ensure that the analysis is representative of the target audience.<sup>10</sup>

The survey asks a battery of political participation questions where respondents indicate they have (1) or have not (0) participated in such an act.

1. Attend local political meetings (such as school board or city council)
2. Put up a political sign (such as a lawn sign or bumper sticker)
3. Work for a candidate or campaign
4. Attend a political protest, march or demonstration
5. Contact a public official
6. Donate money to a candidate, campaign, or political organization

I also analyze two other yes (1) / no (0) questions related to political participation:

1. Did a candidate or political campaign organization contact you during the 2020 election?
2. Have you ever run for elective office at any level of government (local, state or federal)?

Below I present cross-tabulations between each item and race (white/Black), along with a chi-square statistical test. The cross-tabulation shows, for instance, the share of whites that participate in a particular activity vs. the share of whites that do not participate in such activity. The analysis is designed to assess whether Blacks and whites engage in political participation at different rates. If the chi-square p-value is .10, then we can say that we have 90% confidence that this relationship has not occurred by chance. In short, the lower the p-value, the more statistical confidence we have that whites and Blacks behave differently politically.

Overall, the results strongly point to relative Black disparity in political participation. In five of the eight survey items, a statistically significant relationship exists between race and political

---

<sup>9</sup> Available at: <https://cces.gov.harvard.edu>.

<sup>10</sup> Weighting data here has the effect of growing the sample size of the dataset to n=1,557 respondents.



participation (at either  $p < .10$  or  $p < .05$ ). That is, whites are more likely to say they engaged in the political activity than are Blacks.

For instance, 5.9% of whites say they attended a political meeting, whereas 3.5% of Blacks said they did ( $p < 0.05$ ). On political signs, 17.9% of whites put one up vs. 6.5% of Blacks ( $p < 0.001$ ). Whites are also more likely to report having worked for a candidate or campaign (3.6% vs. 1.8%,  $p < 0.05$ ). One of the larger differences emerges on the question regarding contacting a public official. Twenty-one percent (21%) of whites say they contacted an official, whereas 8.8% of Blacks report doing so ( $p < 0.001$ ). Differences emerge across donation behavior too: 24.4% vs. 13.6% ( $p < 0.001$ ).

There are three questions where significant statistical differences do not emerge, although whites nonetheless engage in the political activity to a greater degree than do Blacks: political protest (whites at 6.2% vs. Blacks at 4.4%,  $p = 0.142$ ); being contacted by a political campaign organization (61.3% vs. 61.3%,  $p = 0.995$ ), and running for office (1.7% vs. 0.7%,  $p = 0.12$ ).

**Attend local political meetings (such as school board or city council)?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	954	94.08%	60	5.92%
Black	523	96.49%	19	3.51%
<i>Chi-2 = 4.262 DF = 1 P-Value = 0.039</i>				

*Table 4. Political attendance.***Put up a political sign (such as a lawn sign or bumper sticker)?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	832	82.05%	182	17.95%
Black	507	93.54%	35	6.46%
<i>Chi-2 = 38.863 DF = 1 P-Value = 0</i>				

*Table 5. Political signs.***Work for a candidate or campaign?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	978	96.35%	37	3.65%
Black	533	98.16%	10	1.84%
<i>Chi-2 = 3.934 DF = 1 P-Value = 0.0473</i>				

*Table 6. Campaign work.***Attend a political protest, march, or demonstration?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	951	93.79%	63	6.21%
Black	519	95.58%	24	4.42%
<i>Chi-2 = 2.155 DF = 1 P-Value = 0.1421</i>				

*Table 7. Political protest.*

**Contact a public official?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	801	78.99%	213	21.01%
Black	495	91.16%	48	8.84%
<i>Chi-2 = 37.513 DF = 1 P-Value = 0</i>				

*Table 8. Contacting officials.***Donate money to a candidate, campaign, or political organization?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	767	75.64%	247	24.36%
Black	469	86.37%	74	13.63%
<i>Chi-2 = 24.882 DF = 1 P-Value = 0</i>				

*Table 9. Political donations.***Did a candidate or political campaign organization contact you during the 2020 election?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	392	38.66%	622	61.34%
Black	210	38.67%	333	61.33%
<i>Chi-2 = 0 DF = 1 P-Value = 0.9953</i>				

*Table 10. Campaign contacts.*

**Have you ever run for elective office at any level of government (local, state or federal)?**

<i>Race</i>	<i>No</i>	<i>Pct. No</i>	<i>Yes</i>	<i>Pct. Yes</i>
White	986	98.31%	17	1.69%
Black	539	99.26%	4	0.74%
<i>Chi-2 = 2.414 DF = 1 P-Value = 0.1202</i>				

*Table 11. Running for office.*

All told, the results are compelling: White Georgians engage in a wide range of political activity at higher rates than Black Georgians, including activities like donating to campaigns, contacting public officials, and posting political signs. And as the academic literature discussed earlier in this report shows, these differences are directly attributable to socioeconomic disparities in health, education, and income.

**Conclusion**

The picture these data paint is straightforward: Black Georgians experience significant disparities in income, education, and health compared to non-Hispanic white Georgians. And these disparities cause Black Georgians to be less likely to participate effectively in the political process as measured by voter turnout and other forms of voter participation like making political donations, engaging elected officials, and even running for office. These trends are in accord with overwhelming academic literature showing that Blacks suffer socioeconomic disparities and so are therefore less likely than whites to participate in the political process. These findings therefore provide strong evidence for the presence of Senate Factor 5 in the state of Georgia.

**References**

- Avery, James M. 2015. “Does Who Votes Matter? Income Bias in Voter Turnout and Economic Inequality in the American States from 1980 to 2010.” *Political Behavior* 37 (4): 955–76.
- Barreto, M. A., Segura, G. M., & Woods, N. D. (2004). The mobilizing effect of majority–minority districts on Latino turnout. *American Political Science Review*, 98(1), 65-75.
- Brady, Henry E, Sidney Verba, and Kay Lehman Schlozman. 1995. “Beyond Ses: A Resource Model of Political Participation.” *American Political Science Review* 89 (2): 271–94.
- Costa, M. (2017). How Responsive are Political Elites? A Meta-Analysis of Experiments on Public Officials. *Journal of Experimental Political Science*, 4(3), 241-254.
- Henderson, John A. 2018. “Hookworm Eradication as a Natural Experiment for Schooling and Voting in the American South.” *Political Behavior* 40 (2): 467–94.
- Leighley, Jan E, and Jonathan Nagler. 2013. *Who Votes Now?* Princeton University Press.

Mayer, Alexander K. 2011. “Does Education Increase Political Participation?” *The Journal of Politics* 73 (3): 633–45.

Nie, Norman H, Jane Junn, Kenneth Stehlik-Barry, and others. 1996. *Education and Democratic Citizenship in America*. University of Chicago Press.

Pacheco, Julianna, and Jason Fletcher. 2015. “Incorporating Health into Studies of Political Behavior: Evidence for Turnout and Partisanship.” *Political Research Quarterly* 68 (1): 104–16.

Shah, Paru, and Amber Wichowsky. 2019. “Foreclosure’s Fallout: Economic Adversity and Voter Turnout.” *Political Behavior* 41 (4): 1099–1115.

White, A., Nathan, N., & Faller, J. (2015). What Do I Need to Vote? Bureaucratic Discretion and Discrimination by Local Election Officials. *American Political Science Review*, 109(1), 129-142.

Wolfinger, Raymond E, and Steven J Rosenstone. 1980. *Who Votes?* Yale University Press.

# Loren Collingwood

University of New Mexico  
Department of Political Science  
1 University of New Mexico  
Albuquerque, NM 87131

Office: (951) 827-5590  
Email: [1collingwood@unm.edu](mailto:1collingwood@unm.edu)  
website: <http://www.collingwoodresearch.com>

---

## Employment

Associate Professor, University of New Mexico, 2020 - Present  
Associate Professor, University of California, Riverside 2019 - 2020  
Assistant Professor, University of California, Riverside 2012 - 2019  
Assistant Analyst, Greenberg Quinlan Rosner, Washington DC 2005-2007  
Field Associate, Greenberg Quinlan Rosner, Washington DC 2003-2005

---

## Education

Ph.D., Political Science, University of Washington 2007 - 2012  
Committee: Matt Barreto (chair), Chris Parker, Luis Fraga, Chris Adolph, Peter Hoff  
M.A., Political Science, University of Washington, 2009  
B.A., Psychology, California State University, Chico, 1998 - 2002  
Minor: Political Science  
Honors: *Cum Laude*, NCAA Scholar-Athlete in soccer

---

## Research Fields

American Politics, Political Behavior, Methods, Race and Ethnic Politics, Immigration

---

## Books

2. **Collingwood, Loren.** *Campaigning in a Racially Diversifying America: When and How Cross-Racial Electoral Mobilization Works.* 2020. Oxford University Press.

Featured in *Veja*, Brazil

1. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. *Sanctuary Cities: The Politics of Refuge.* 2019. Oxford University Press.

Featured in *Teen Vogue*, *Seattle Times*; *Phoenix New Times*

---

## Articles

40. Gonzalez O'Brien, Ben, **Loren Collingwood**, and Michael A. Paarlberg. "What Leads to Refuge? Sanctuary Policies and the Influence of Local Demographics and Partisanship." *Urban Affairs Review*. (Conditional Accept).
39. **Collingwood, Loren**, Gabriel Martinez, and Kassra Oskooii. "Undermining Sanctuary? When Local and National Partisan Cues Diverge." *Urban Affairs Review*. (Forthcoming).
38. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. "Is Distance to Drop Box an Appropriate Proxy for Drop Box Treatment? A Case Study of Washington State." *American Politics Research*. (Forthcoming)
37. Barreto, Matt, Michael Cohen, **Loren Collingwood**, Chad Dunn, and Sonni Waknin. "A Novel Method for Showing Racially Polarized Voting: The Promise of Bayesian Improved Surname Geocoding." *New York University Review of Law and Social Change*. 46(1). (Forthcoming)
36. Barreto, Matt, **Loren Collingwood**, Sergio Garcia-Rios, and Kassra Oskooii. "Estimating Candidate Support: Comparing Iterative EI & EI-RxC Methods." *Sociological Methods & Research*. (Forthcoming).
35. Morín, Jason L., Rachel Torres, and **Loren Collingwood**. 2021. "Cosponsoring and Cashing in: U.S. House Members' support for punitive immigration policy and financial payoffs from the private prison industry." *Business and Politics*. 23(4): 492-509.  
  
Featured in KOAT-ABQ news
34. Newman, Benjamin; Merolla, Jennifer; Shah, Sono; Lemi, Danielle; **Collingwood, Loren**; Ramakrishnan, Karthick. 2021. "The Trump Effect: An Experimental Investigation of the Emboldening Effect of Racially Inflammatory Elite Communication." *British Journal of Political Science* 51(3): 1138-1159.  
  
Featured in New York Times; Washington Post; The Times of India; Washington Post; NBC News; New York Times; Forbes; NBC News
33. **Collingwood, Loren** and Sean Long. 2021. "Can States Promote Minority Representation? Assessing the Effects of the California Voting Rights Act." *Urban Affairs Review*. 57(3): 731-762.  
  
Featured in NPR; Modesto Bee, IVN News San Diego; Woodland Daily Democrat; Silicon Valley Voice; Spectrum 1; Washington Post; Politico
32. Oskooii, Kassra, Nazita Lajevardi, and **Loren Collingwood**. 2021. "Opinion Shift and Stability: Enduring Individual-Level Opposition to Trump's 'Muslim Ban'." *Political Behavior*. 43: 301-337.  
  
Featured in Washington Post
31. Hickel, Flavio, Rudy Alamillo, Kassra Oskooii, and **Loren Collingwood**. 2020. "When American Identity Trumps Latinx Identity: Explaining Support for Restrictive Immigration Policies." *Public Opinion Quarterly*. 84(4), 860-891.  
  
Featured in Academic Times



30. Walker, Hannah, **Loren Collingwood**, and Tehama Lopez Bunyasi. 2020. "White Response to Black Death: A Racialized Theory of White Attitudes About Gun Control." *DuBois Review: Social Science Research on Race*. 17(1): 165-188.
29. Filindra, Alexandra, **Loren Collingwood**, and Noah Kaplan. 2020. "Anxiety and Social Violence: The Emotional Underpinnings of Support for Gun Control." *Social Science Quarterly*. 101: 2101-2120.
28. McGuire, William, Benjamin Gonzalez O'Brien, Katherine Baird, Benjamin Corbett, and **Loren Collingwood**. 2020. "Does Distance Matter? Evaluating the Impact of Drop Boxes on Voter Turnout." *Social Science Quarterly*. 101: 1789-1809.
27. Reny, Tyler, Ali Valenzuela, and **Loren Collingwood**. 2020. "'No, You're Playing the Race Card': Testing the Effects of Anti-Black, Anti-Latino, and Anti-Immigrant Appeals in the Post-Obama Era." *Political Psychology*. 41(2): 283-302.

Featured in VOX The Weeds Podcast

26. **Collingwood, Loren**, Benjamin Gonzalez O'Brien, and Joe Tafoya. 2020. "Partisan Learning or Racial Learning: Opinion Change on Sanctuary City Policy Preferences in California and Texas." *Journal of Race and Ethnic Politics*. 5(1): 92-129.
25. **Collingwood, Loren** and Benjamin Gonzalez. 2019. "Covert Cross-Racial Mobilization, Black Activism, and Political Participation Pre-Voting Rights Act." *Florida Historical Quarterly* 97(4) Spring.
24. Gonzalez O'Brien, Ben, Elizabeth Hurst, Justin Reedy, and **Loren Collingwood**. 2019. "Framing Refuge: Media, Framing, and Sanctuary Cities." *Mass Communication and Society*. 22(6), 756-778.
23. DeMora, Stephanie, **Loren Collingwood**, and Adriana Ninci. 2019. "The Role of Super Interest Groups in Public Policy Diffusion." *Policy and Politics*. 47(4): 513-541.
22. **Collingwood, Loren**, Stephen Omar El-Khatib, Ben Gonzalez O'Brien. 2019. "Sustained Organizational Influence: American Legislative Exchange Council and the Diffusion of Anti-Sanctuary Policy." *Policy Studies Journal*. 47(3): 735-773.
21. **Collingwood, Loren** and Benjamin Gonzalez O'Brien. 2019. "Public Opposition to Sanctuary Cities in Texas: Criminal Threat or Immigration Threat?" *Social Science Quarterly*. 100(4): 1182-1196.
20. Reny, Tyler, **Loren Collingwood**, and Ali Valenzuela. 2019. "Vote Switching in the 2016 Election: Racial and Immigration Attitudes, Not Economics, Explains Shifts in White Voting." *Public Opinion Quarterly*. 83(1): 91-113.

Featured in VOX; The Week; The Economist; New York Times; The Economist

19. Gonzalez-O'Brien, Benjamin, **Loren Collingwood**, and Stephen Omar El-Khatib. 2019. "The Politics of Refuge: Sanctuary Cities, Crime, and Undocumented Immigration." *Urban Affairs Review*. 55(1): 3-40.

Featured in WaPo Monkey Cage I; and Monkey Cage II; WaPo Fact Check; InsideHigherEd; PolitiFact; The Hill; Christian Science Monitor; Pacific Standard; NBC News; Huffington Post; Seattle Times; The Denver Post; San Jose Mercury News; Chicago Tribune; San Diego Union Tribune; VOX

18. Oskooii, Kassra, Sarah Dreier, and **Loren Collingwood**. 2018. "Partisan Attitudes Toward Sanctuary Cities: The Asymmetrical Effects of Political Knowledge." *Politics and Policy* 46(6): 951-984.
17. **Collingwood, Loren**, Jason Morín, and Stephen Omar El-Khatib. 2018. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." *Race and Social Problems*. 10(4): 275-292.  
  
Featured in CityLab; The Guardian; Mother Jones; NPR
16. **Collingwood, Loren**, Benjamin Gonzalez O'Brien, and Sarah K. Dreier. 2018. "Evaluating Public Support for Legalized Marijuana: The Case of Washington." *International Journal of Drug Policy*. 56: 6-20.
15. **Collingwood, Loren**, McGuire, Will, Gonzalez O'Brien, Ben, Baird, Katie, and Hampson, Sarah. 2018. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." *Election Law Journal*. 17:1.  
  
Featured in Seattle Times; CBS News
14. **Collingwood, Loren**, Nazita Lajevardi, and Kassra Oskooii. 2018. "A Change of Heart? How Demonstrations Shifted Individual-Level Public Opinion on Trump's Muslim Ban." *Political Behavior*. 40(4): 1035-1072.  
  
Featured in VOX; ThinkProgress; LSE Blog; Al Jazeera; San Francisco Chronicle; NPR; Business Insider; Washington Post
13. **Collingwood, Loren**, Ashley Jochim, and Kassra Oskooii. 2018. "The Politics of Choice Reconsidered: Partisanship and Minority Politics in Washington's Charter School Initiative." *State Politics & Policy Quarterly* 18(1): 61-92.
12. Newman, Ben, Sono Shah, and **Loren Collingwood**. 2018. "Race, Place, and Building a Base: Ethnic Change, Perceived Threat, and the Nascent Trump Campaign for President." *Public Opinion Quarterly*. 82(1): 122-134.  
  
Featured in Pacific Standard; LSE Blog; Newsweek
11. Skulley, Carrie, Andrea Silva, Marcus J. Long, **Loren Collingwood**, and Ben Bishin, "Majority Rule vs. Minority Rights: Immigrant Representation Despite Public Opposition on the 1986 Immigration Reform and Control Act." 2018. *Politics of Groups and Identities*. 6(4): 593-611.
10. Alamillo, Rudy and **Loren Collingwood**. 2017. "Chameleon Politics: Social Identity and Racial Cross-Over Appeals." *Politics of Groups and Identities*. 5(4): 533-650.  
  
Featured in WaPo's Monkey Cage; NBC News; Los Angeles Times
9. **Collingwood, Loren**, Kassra Oskooii, Sergio Garcia-Rios, and Matt Barreto. 2016. "eiCompare: Comparing ecological inference estimates across EI and EI:RxC." *The R Journal*. 8(2): 92-101.  
  
Featured in Investigate West
8. Barreto, Matt, **Loren Collingwood**, Christopher Parker, and Francisco Pedraza. 2015. "Racial Attitudes and Race of Interviewer Item Non-Response." *Survey Practice*. 8:5.

7. Barreto, Matt and **Loren Collingwood**. 2015. "Group-based Appeals and the Latino Vote in 2012: How Immigration Became a Mobilizing Issue." *Electoral Studies*. 40:490-499.

Featured in Latino Decisions blog

6. **Collingwood, Loren**, Matt Barreto, and Sergio Garcia-Rios. 2014. "Revisiting Latino Voting: Cross-Racial Mobilization in the 2012 Election." *Political Research Quarterly*. 67(3): 632-645.

Featured in LSE Blog

5. Jurka, Tim, **Loren Collingwood**, Amber Boydston, Emiliano Grossman, and Wouter van Atteveldt. 2013. "RTextTools: A Supervised Learning Package for Text Classification in R" *The R Journal*. 5(1).
4. **Collingwood, Loren**. 2012. "Education Levels and Support for Direct Democracy." *American Politics Research*, 40(4): 571-602.
3. **Collingwood, Loren** and John Wilkerson. 2012. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods." *Journal of Information Technology and Politics*, 9(3).
2. **Collingwood, Loren**, Matt Barreto and Todd Donovan. 2012. "Early Primaries, Viability, and Changing Preferences for Presidential Candidates." *Presidential Studies Quarterly*, 42(2).
1. Barreto, Matt, **Loren Collingwood**, and Sylvia Manzano. 2010. "A New Measure of Group Influence in Presidential Elections: Assessing Latino Influence in 2008." *Political Research Quarterly*. 63(4).

Featured in Latino Decisions blog

## Book Chapters

11. **Collingwood, Loren**, Stephanie DeMora , and Sean Long. "Demographic Change, White Decline, and the Changing Nature of Racial Politics in Election Campaigns." In *Cambridge Handbook in Political Psychology*. Edited by Danny Osborne and Chris Sibley. [Forthcoming].
10. Morín, Jason L. and **Loren Collingwood**. "Contractor Politics: How Political Events Influence Private Prison Company Stock Shares in the Pre and Post Trump Era." In *Anti-immigrant Rhetoric, Actions, and Policies during the Trump Era (2017-2019)*. [Forthcoming]
9. Parker, Christopher S., Christopher C. Towler, **Loren Collingwood**, and Kassra Oskooii. 2020. "Race and Racism in Campaigns." In Oxford Encyclopedia of Persuasion in Political Campaigns. Edited by Elizabeth Suhay, Bernard Grofman, and Alexander H. Trechsel. DOI: 10.1093/oxfordhb/9780190860806.013.38
8. **Collingwood, Loren**, and DeMora, Stephanie. 2019. "Latinos and Obama." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.
7. DeMora, Stephanie, and **Collingwood, Loren**. 2019. "George P. Bush." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.

6. El-Khatib, Stephen Omar, and **Collingwood, Loren**. 2019. "Ted Cruz." In Jessica Lavariega Monforti (ed.) *Latinos in the American Political System: An Encyclopedia of Latinos as Voters, Candidates, and Office Holders*.
  5. **Collingwood, Loren**, Sylvia Manzano and Ali Valenzuela. 2014. "November 2008: The Latino vote in Obama's general election landslide." In *Latino America: How America's Most Dynamic Population Is Poised to Transform the Politics of the Nation*. By Matt Barreto and Gary Segura. New York: Public Affairs Press. (co-authored chapter with Matt Barreto and Gary Segura)
  4. **Collingwood, Loren**, Justin Gross and Francisco Pedraza. 2014. "A 'decisive voting bloc' in 2012." In *Latino America: How America's Most Dynamic Population Is Poised to Transform the Politics of the Nation*. By Matt Barreto and Gary Segura. New York: Public Affairs Press. (co-authored chapter with Matt Barreto and Gary Segura)
  3. Barreto, Matt, **Loren Collingwood**, Ben Gonzalez, and Chris Parker. 2011. "Tea Party Politics in a Blue State: Dino Rossi and the 2010 Washington Senate Election." In William Miller and Jeremy Walling (eds.) *Stuck in the Middle to Lose: Tea Party Effects on 2010 U.S. Senate Elections*. Rowan and Littlefield Publishing Group.
  2. **Collingwood, Loren** and Justin Reedy. "Criticisms of Deliberative Democracy." In Nabatchi, Tina, Michael Weiksner, John Gastil, and Matt Leighninger, eds., *Democracy in motion: Evaluating the practice and impact of deliberative civic engagement*. New York: Oxford University Press, 2010.
  1. **Collingwood, Loren**. "Initiatives." In Haider-Markel, Donald P., and Michael A. Card. *Political Encyclopedia of U.S. States and Regions*. Washington, DC: CQ Press, 2009.
- 

## Software

R package: **RTextTools**. This package uses supervised learning methods to automate text classification. Coauthors include Jurka, Boydston, Grossman, and van Atteveldt. Available on CRAN.

R package: **eiCompare**. This package compares outcomes between ecological inference (EI) estimates and EI:Rows by Columns (RxC) estimates. Primary purpose is employed in racially polarized voting analysis. Development Version available here: [eiCompare](#) or on CRAN. Coauthors include Barreto, Oskooii, Garcia-Rios, Burke, Decter-Frain, Murayama, Sachdeva, Henderson, Wood, and Gross.

R package: **Rvoterdistance**. Calculates distance between voters and multiple polling locations and/or ballot drop boxes. Ports C++ code for high speed efficiency. Available on CRAN.

R package: **Rweights**. Creates survey weights via iterative variable raking. Survey design object and weights vector are produced for use with R, Stata, and other programs. Currently in alpha form with unix tarball available here: [Rweights](#).

R package: **Rmturkcheck**. Functions for cleaning and analyzing two-wave MTurk (or other) panel studies. Available: [Rmturkcheck](#)

R package: **RCopyFind**. Functions for extracting data frames then plotting results from WCopyFind plagiarism text program. Co-authored with and Maintained by Steph DeMora. Available: [RCopyFind](#)

---

## Under Review / Working Papers

Barreto, Matt, Michael Cohen, **Loren Collingwood**, Chad Dunn, and Sonni Waknin. “Using Bayesian Improved Surname Geocoding (BISG) to Assess Racially Polarized Voting in Voting Rights Act Challenges.” [Revise & Resubmit]

Decter-Frain, Ari, Pratik Sachdeva, **Loren Collingwood**, Juandalyn Burke, Hikari Murayama, Matt Barreto, Scott Henderson, Spencer Wood, and Joshua Zingher. “Comparing BISG to CVAP Estimates in Racially Polarized Voting Analyses.” [Revise & Resubmit]

Hickel Jr., Flavio R., Kassra A.R. Oskooii, and **Loren Collingwood**. “Social Mobility Through Immigrant Resentment: Explaining Latinx Support for Restrictive Immigration Policies and Anti-Immigrant Candidates.” [Revise & Resubmit]

**Collingwood, Loren**, Jason Morín, and Edward Vargas. “Protesting Detention: How Protests Activated Group Empathy and Party ID to Shift Attitudes on Child Detention.” [Working Paper]

Paarlberg, Michael A. and **Loren Collingwood**. “Fact or Fiction: Testing the link between local immigration policy and the MS-13 ‘Threat’.” [Working Paper]

## Awards, Grants, and Fellowships

Matt Barreto and Loren Collingwood. Detection of Vote Dilution: New tools and methods for protecting voting rights. Data Science for Social Good project selection, University of Washington. 2020

Loren Collingwood. Measuring Cross-Racial Voter Preferences. UCR Faculty Senate. \$3,500. 2019.

Francisco Pedraza and Loren Collingwood. Evaluating AltaMed’s 2018 GOTV Efforts in Los Angeles. \$12,000. 2018-2019.

Allan Colbern, Loren Collingwood, Marcel Roman. A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement. Center for American Progress. \$7,100. 2018.

Karthick Ramakrishnan, Mindy Romero, Loren Collingwood, Francisco Pedraza, Evaluating California’s Voter’s Choice Act. Irvine Foundation. \$150,000, 2018-2019.

William McGuire, Loren Collingwood, Ben Gonzalez O’Brien, and Katie Baird, “Evaluating the Impact of Drop Boxes and Get-Out-The-Vote Advertising on Voter Turnout in Pierce County, WA.” MIT Election Data and Science Lab, \$16,365, 2017

Justin Freebourn and Loren Collingwood, Blum Initiative \$4,000, 2017

Hellman Fellowship Grant, UC Riverside, \$30,000, 2014-2015

Best Dissertation Award, 2013 Western Political Science Association

UC Riverside Harrison & Ethel Silver Fund, \$2,000, 2013

Best Graduate Student Paper Award State Politics section, 2012 American Political Science Association

Texas A&M Experimental Methods Winter Institute, \$800, January, 2011

UseR! 2011 Conference travel grant, \$1000, August, 2011

Center for Statistics and the Social Sciences travel grant, \$870, January, 2011

David J. Olson Research Grant, University of Washington Political Science, \$2,000, January, 2011

Warren Miller Scholarship Award, Inter-University Consortium for Political and Social Research, Summer 2009

Matthews Fellowship, University of Washington, Winter 2008 - Spring 2009

Brennan Center for Justice, New York University [with Matt Barreto]

Indiana Voter Identification Study, \$40,000 – Oct. 2007, 6 months

## Teaching Experience

POSC 10 (American Politics); POSC 146 (Mass Media & Public Opinion); POSC 171 (State Politics); POSC 104S (Race and Ethnic Politics Special Topics); POSC 108 (Race and Ethnic Politics)

POLS 300: Immigration Politics with Focus on Latino Politics

POLS 300: The Voting Rights Act: Causes and Effects

POSC 202A: Introduction to Quantitative Methods (Graduate)

POSC 207: Statistical Programming and Data Science for the Social Sciences (Graduate)

POSC 207: Quantitative Text Analysis (Graduate)

POSC 220: Graduate Seminar in Race and Ethnic Politics in the U.S.

POSC 256: Graduate Seminar in Public Opinion

POSC 253: Graduate Seminar in Electoral Politics

Text Classification with R using the `RTextTools` package, UNC-Chapel Hill Workshop

Text Analysis with Political Data, Claremont Graduate School, 2019

CSSS Intermediate R Workshop 2011, Instructor (Summer)

POLS 501: Advanced Research Design and Analysis, Teaching Assistant (2 quarters)

ICPSR Summer Course: Methodological Issues in Quantitative Research on Race and Ethnicity, Teaching Assistant

POLS 202: Introduction to American Politics, Teaching Assistant

CSSS Math Camp 2011, Teaching Assistant

POLS 499D: Center for American Politics and Public Policy Undergraduate Honors Seminar (2 quarters)

## Professional Service

Co-editor, *Politics of Groups and Identities*, 2020-2021

Reviewer, Political Behavior, Journal of Information Technology and Politics, American Politics Research, Social Sciences Quarterly, Journal of Politics, Politics of Groups and Identities, American Journal of Political Science, Political Research Quarterly, State Politics and Public Policy, American Political Science Review, British Journal of Political Science, Journal of Race and Ethnic Politics, Urban Studies, Urban Affairs Review; many other journals

## Conference Papers and Presentations

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk California Lutheran University. (October 2020).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk California State University, Chico. (March 2020).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk Humboldt State University. (March 2020).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk Oregon State University. (February 2020).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of San Diego. (November 2019).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk University of Massachusetts. (January 2020).

Collingwood, Loren. "Campaigning in a Racially Diversifying America: Whether and How Cross-Racial Electoral Mobilization Works." Invited Talk University of New Mexico. (December 2019).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk California State University, Northridge, Los Angeles. (November 2019).

Collingwood, Loren and Benjamin Gonzalez O'Brien. "Sanctuary Cities: The Politics of Refuge." Invited Talk Occidental College, Los Angeles. (November 2019).

Collingwood, Loren (with Sean Long). "Can States Promote Minority Representation? Assessing the Effects of the California Voting Rights Act." UC Irvine Critical Observations on Race and Ethnicity Conference. (November 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Geneva, Switzerland. (November 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Bern, Switzerland. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk ETH Zurich, Switzerland. (October 2019).

Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk London School of Economics, U.K. (October 2019).



Collingwood, Loren. "Sanctuary Cities: The Politics of Refuge." Invited Talk University of Leeds, U.K. (October 2019).

Valenzuela, Ali, Kassra Oskooi, and Loren Collingwood. "Threat or Reassurance? Framing Midterms Results among Latinos and Whites." American Political Science Association, Washington, DC. (August 2019).

Paarlberg, Michael A. and Loren Collingwood. "Much Ado about Nothing: Local Immigration Policy and the MS-13 'Threat' ." American Political Science Association, Washington, DC. (August 2019).

Collingwood, Loren. "A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement." International Center for Local Democracy (ICLD) Conference on Local Democracy. Umea, Sweden (June 2019).

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk University of California, Irvine (May 2019).

Collingwood, Loren. "Text Analysis with R." Invited talk and presentation. Claremont Graduate University (May 2019)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." PRIEC. UC Davis (May 2019).

Collingwood, Loren. "Data Analysis with R." Invited presentation and training Cal Poly Pomona (May 2019)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk Northern Arizona University (May 2019)

Collingwood, Loren (with Jason Morín). "Contractor Politics: How Political Events Influence Private Prison Company Stock Shares in the Pre and Post Trump Era." Invited Talk Universidad Nacional Autonoma de Mexico, Distrito Federal, Mexico (February 2019).

Roman, Marcel, Allan Colbern, and Loren Collingwood. "A Mess in Texas: The Deleterious Effects of SB4 on Public Trust in Law Enforcement." PRIEC Consortium. University of Houston (December 2018)

Collingwood, Loren. "The #FamiliesBelongTogether Outcry: How Protests Shifted Attitudes on Immigrant Family Separation and Child Detention." Invited Talk University of Illinois Chicago (November 2018)

Collingwood, Loren. "Ongoing Research in Sanctuary Cities and Immigration Politics." Invited Talk University of Pennsylvania Perry World House (November 2018)

Collingwood, Loren. "Unfair Detention: How Protests Activated Racial Group Empathy to Shift Attitudes on Child Detention." Invited Talk Rutgers University (October 2018)

Collingwood, Loren. "Unfair Detention: How Protests Activated Racial Group Empathy to Shift Attitudes on Child Detention." UCR Alumni Research Presentation Washington and Philadelphia (October 2018)

Collingwood, Loren, Jason Morin. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." Invited Talk UCLA (October 2018).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "Opinion Shift and Stability: Enduring Opposition to Trump's "Muslim Ban". APSA (September 2018).

Collingwood, Loren, Jason Morin, and Stephen Omar El-Khatib. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." American Political Science Association Conference (August 2018).

Collingwood, Loren, Sergio Garcia-Rios, and Hannah Walker. "The Impact of Exposure to Police Brutality on Political Attitudes Among Black and White Americans." Cooperative Comparative Post-Election Survey (CMPS) Conference. (August, 2018).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "Opinion Shift and Stability: Enduring Opposition to Trump's "Muslim Ban". Politics of Race Immigration and Ethnicity Consortium (August 2018).

Collingwood, Loren, Jason Morin, and Stephen Omar El-Khatib. "Expanding Carceral Markets: Detention Facilities, ICE Contracts, and the Financial Interests of Punitive Immigration Policy." Politics of Race Immigration and Ethnicity Consortium, Michigan State University (April 2018)

Collingwood, Loren, Benjamin Gonzalez O'Brien, and Joe Tafoya. "Partisan Learning or Racial Learning: Opinion Change on Sanctuary City Policy Preferences in California and Texas." Midwest Political Science Association Conference (April 2018).

El-Khatib, Stephen Omar and Loren Collingwood. "State Policy Responses to Sanctuary Cities: Explaining the Rise of Sanctuary City Legislative Proposals." Midwest Political Science Association Conference (April 2018).

Hannah Walker, Loren Collingwood, and Tehama Lopez Bunyasi. "Under the Gun: Black Responsiveness and White Ambivalence to Racialized Black Death." Midwest Political Science Association Conference (April 2018).

Hannah Walker, Loren Collingwood, and Tehama Lopez Bunyasi. "Under the Gun: Black Responsiveness and White Ambivalence to Racialized Black Death." Western Political Science Association Conference (April 2018).

DeMora, Stephanie, Adriana Ninci, and Loren Collingwood. "Shoot First in ALEC's Castle: The Diffusion of Stand Your Ground Laws." Politics of Race Immigration and Ethnicity Consortium, ASU (February 2018).

El-Khatib, Stephen Omar and Loren Collingwood. "State Policy Responses to Sanctuary Cities: Explaining the Rise of Sanctuary City Legislative Proposals." Politics of Race Immigration and Ethnicity Consortium, UCR (September 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." APSA (September 2017).

Collingwood, Loren, McGuire, Will, Gonzalez O'Brien Ben, Hampson, Sarah, and Baird, Katie. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." APSA (September 2017).

Collingwood, Loren, Reny, Tyler, Valenzuela, Ali. "Flipping for Trump: In 2016, Immigration and Not Economic Anxiety Explains White Working Class Vote Switching." UCLA (May 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." UCLA (May 2017).

Collingwood, Loren, Nazita Lajevardi, and Kassra Oskooii. "A Change of Heart? How Protests Shifted Individual-Level Public Opinion on Trump's Muslim Ban." Politics of Race Immigration and Ethnicity Consortium, UCSB (May 2017).

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." Vancouver, Western Political Science Association Conference (April. 2017).

Collingwood, Loren, McGuire, Will, Gonzalez-O'Brien Ben, Hampson, Sarah, and Baird, Katie. "Do Dropboxes Improve Voter Turnout? Evidence from King County, Washington." WPSA (April 2017).

Gonzalez-O'Brien, Benjamin, Loren Collingwood, and Stephen El-Khatib. "Gimme Shelter: The Myth and Reality of the American Sanctuary City". Vancouver, Western Political Science Association Conference WPSA (April 2017).

Rush, Tye, Pedraza, Francisco, Collingwood, Loren. "Relieving the Conscience: White Guilt and Candidate Evaluation." Politics of Race Immigration and Ethnicity Consortium, UCI (March 2017).

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." Philadelphia, American Political Science Association Conference (Sept. 2016)

Barreto, Matt, Loren Collingwood, Sergio Garcia-Rios, and Kassra Oskooii. "Estimating Candidate Support: Comparing EI & EI-RxC." Chicago, Midwest Political Science Association Conference (April 2016)

Bishin, Benjamin, Loren Collingwood, and Erinn Lauterbach. "Cross-Racial Mobilization in a Rapidly Diversifying Polity: Latino Candidates and Anglo Voters" Chicago, Midwest Political Science Association Conference (April 2016)

Gonzalez-O'Brien, Benjamin, Loren Collingwood, and Stephen El-Khatib. "Gimme Shelter: The Myth and Reality of the American Sanctuary City". San Diego, Western Political Science Association Conference (April 2016)

Collingwood, Loren and Antoine Yoshinaka. The new carpetbaggers? Analyzing the effects of migration on Southern politics. The Citadel Conference on Southern Politics, Charleston, SC (Mar 2016)

Alamillo, Rudy and Loren Collingwood. Chameleon Politics: Social Identity and Racial Cross-Over Appeals. American Political Science Association Conference, San Francisco (Sept 2015)

Reny, Tyler, Ali Valenzuela, and Loren Collingwood. "Public Reactions to Anti-Latino Appeals in the Age of Obama: Race, Illegality and Changing Norms." San Francisco, American Political Science Association Conference (Sept 2015)

Alamillo, Rudy and Loren Collingwood. Chameleon Politics: Social Identity and Racial Cross-Over Appeals. Western Political Science Association Conference, Las Vegas (April 2015)

Barreto, Matt and Loren Collingwood. Confirming Electoral Change: The 2012 U.S. Presidential Election OSU Conference (October, 2013). "Earning and Learning the Latino Vote in 2008 and 2012: How the Obama Campaign Tried, Refined, Learned, and Made Big Steps in Cross-Racial Mobilization to Latinos.

Collingwood, Loren and Ashley Jochim. 2012 Midwest Political Science Association Annual Conference (April) Chicago, IL. "Electoral Competition and Latino Representation: The Partisan Politics of Immigration Policy in the 104th Congress."

Collingwood, Loren. 2012 Western Political Science Association Annual Conference (March) Portland, OR. "The Development and Use of Cross-Racial Mobilization as Campaign Strategy in U.S. Elections: The Case of Texas 1948-2010."

Collingwood, Loren. 2012 Institute for Pragmatic Practice Annual Conference (March) Seattle, WA. "Changing Demographics, Rural Electorates, and the Future of American Politics."

Collingwood, Loren. 2012 Politics of Race, Immigration, and Ethnicity Consortium (January) Riverside, CA. "The Development of Cross-Racial Mobilization: The Case of Texas 1948-2010."

Collingwood, Loren. 2011 American Political Science Association Annual Conference (September) Seattle, WA. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization."

Forman, Adam and Loren Collingwood. 2011 American Political Science Association Annual Conference (September) Seattle, WA. "Measuring Power via Presidential Phone Records." (Poster)

Collingwood, Loren with (Tim Jurka, Wouter Van Atteveldt, Amber Boydstun, and Emiliano Grossman). UseR! 2011 Conference. (August) Coventry, United Kingdom. "RTextTools: A Supervised Learning Package for Text Classification in R."

Jurka, Tim, Loren Collingwood, Wouter Van Atteveldt, Amber Boydstun, and Emiliano Grossman. 2011 Comparative Agendas Project Conference. (June) Catania, Italy. "RTextTools: A Supervised Learning Package for Text Classification in R."

Collingwood, Loren and John Wilkerson. 2011 Journal of Information Technology & Politics Conference. (May) Seattle, WA. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren. 2011 Politics of Race, Immigration, and Ethnicity Consortium (May) Davis, CA. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization"

Collingwood, Loren. 2011 Western Political Science Conference (April) San Antonio, TX. "Race-Matching as Targeted Mobilization."

Collingwood, Loren. 2011 Western Political Science Conference (April) San Antonio, TX. "The Pursuit of Victory and Incorporation: Elite Strategy, Group Pressure, and Cross Racial Mobilization"

Collingwood, Loren (with John Wilkerson). Invited Talk: Texas A&M University. (April, 2011) "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren (with John Wilkerson). Invited Talk: Rice University. (April, 2011) "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren. 2011 Midwest Political Science Association Annual Conference (April) Chicago, IL. "Race-Matching as Targeted Mobilization."

Collingwood, Loren and John Wilkerson. 2011 Text as Data Conference. (March) Evanston, IL. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren and John Wilkerson. 2011 Southern Political Science Conference. (January) New Orleans, LA. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods."

Collingwood, Loren (with Ben Gonzalez). 2010 American Political Science Association Annual Conference. (September) Washington, DC. "The Political Process in Florida: Modeling African American Registration Rates Post *Smith v. Allwright*, 1944-1964."

Wilkerson, John, Steve Purpura, and Loren Collingwood. 2010 NSF Funded Tools for Text Workshop. (June) Seattle, WA. "Rtexttools: A Supervised Machine Learning Package in an R-Wrapper."

Collingwood, Loren and Marcela Garcia-Castanon. 2010 Western Political Science Association Annual Conference. (April) San Francisco, CA. "Negativity as a Tool: candidate poll standing and attack politics."

Collingwood, Loren. 2010 Politics of Race, Immigration, and Ethnicity Consortium. (January) Riverside, CA. "White Outreach: A spatial approach to modeling black incorporation in Florida post *Smith v. Allwright*, 1944-1965."

Collingwood, Loren. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Levels of Education, Political Knowledge and Support for Direct Democracy."

Collingwood, Loren. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "The Negativity Effect: Psychological underpinnings of advertising recall in modern political campaigns."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Negativity as a Tool: predicting negative responses and their effectiveness in the 2008 campaign season."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Western Political Science Association Annual Conference. (March) Vancouver, BC. "Switching codes: analyzing Obama's strategy for addressing Latinos in the 2008 presidential campaign."

Collingwood, Loren, (with Matt Barreto and Sylvia Manzano) 2009 Shambaugh Conference. (March) University of Iowa, IA. "More than one way to shuck a tamale: Latino influence in the 2008 general election."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Switching codes: analyzing Obama's strategy for addressing Latinos in the 2008 presidential campaign."

Collingwood, Loren and Marcela Garcia-Castanon. 2009 Pacific Northwest Political Science Conference. (October) Victoria, BC. "Negativity as a Tool: predicting negative responses and their effectiveness in the 2008 campaign season."

Collingwood, Loren and Francisco Pedraza (with Matt Barreto and Chris Parker). 2009 Center for Statistics and the Social Sciences 10th Anniversary Conference. (May) Seattle, WA. "Race of interviewer effects: perceived versus actual."

Collingwood, Loren (with Matt Barreto, Chris Parker, and Francisco Pedraza). 2009 Pacific Northwest Political Science Conference. (October) Victoria, BC. "Race of interviewer effects: perceived versus actual."

Barreto, Matt, Loren Collingwood and Todd Donovan. 2008 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Early Presidential Primaries, Viability, and Vote Switching in 2008."

Collingwood, Loren. 2008 Midwest Political Science Association Annual Conference. (April) Chicago, IL. "Levels of Education and Support for Direct Democracy: A Survey Experiment."

Collingwood, Loren. 2008 American Political Science Association Annual Conference. (September) Boston, MA. "Levels of Education and Support for Direct Democracy: A Survey Experiment." (Poster)

Collingwood, Loren. 2008 American Political Science Association Annual Conference. (September) Boston, MA. "Response Effects in Multi-Candidate Primary Vote Questions." (Poster)

## Computer Skills

R, Stata, Python, WinBugs/JAGS, L<sup>A</sup>T<sub>E</sub>X, SPSS, MySQL, Access, ArcGIS, Some C++ when interacting with R.

## Reports

Collingwood, Loren. (2008). *The Washington Poll: pre-election analysis*. www.washingtonpoll.org.

Collingwood, Loren. (2008). *Democratic underperformance in the 2004 gubernatorial election: explaining 2004 voting patterns with an eye towards 2008*. www.washingtonpoll.org.

Barreto, Matt, Loren Collingwood, Francisco Pedraza, and Barry Pump. (2009). *Online voter registration in Washington State and Arizona*. Commissioned by Pew Research Center.

Collingwood, Loren, Todd Donovan, and Matt Barreto. (2009). *An assessment of ranked choice voting in Pierce County, WA*.

Collingwood, Loren. (2009). *An assessment of the fiscal impact of ranked choice voting in Pierce County, WA*. Commissioned by the League of Women Voters.

Barreto, Matt, and Loren Collingwood. (2009). *Latino candidates and racial block voting in primary and judicial elections: An analysis of voting in Los Angeles County board districts*. Commissioned by the Los Angeles County Chicano Employees Association.

Barreto, Matt, and Loren Collingwood. (2011). *A Review of Racially Polarized Voting For and Against Latino Candidates in Los Angeles County 1994-2010*. Commissioned by Los Angeles County Supervisor Gloria Molina. August 4.

Collingwood, Loren. (2012). *Recent Political History of Washington State: A Political Map*. Commissioned by the Korean Consulate.

Collingwood, Loren. (2012). *Analysis of Polling on Marijuana Initiatives*. Commissioned by Greenberg Quinlan Rosner.

Collingwood, Loren, Sean Long, and Francisco Pedraza. (2019). *Evaluating AltaMed Voter Mobilization in Southern California, November 2018*. Commissioned by AltaMed.



## Relevant Work Experience

### *Collingwood Research, LLC*

Statistical Consulting and Analysis

January 2008 - Present

Conducted over 200 projects involving political research, polling, statistical modeling, redistricting analysis and mapping, data analysis, micro-targeting, and R software development for political and non-profit clients. Clients include: Greenberg Quinlan Rosner, Latino Decisions, Pacific Market Research, Beck Research, Squier Knapp Dunn Communications, Anzalone-Lizst Research, League of Women Voters, Shelia Smoot for Congress, pollster.com, Comparative Agendas Project, Amplified Strategies, Gerstein Bocian & Agne, Strategies 360, the Korean Consulate, the California Redistricting Commission, Monterey County Redistricting Commission, ClearPath Strategies, Los Angeles County Council, Demchak & Baller Legal, Arnold & Porter LLP, JPM Strategic Solutions, National Democratic Institute (NDI) – on site in Iraq, Latham & Watkins, New York ACLU, United States Department of Justice (Demography), Inland Empire Funder's Alliance (Demography), Perkins & Coie, Elias Law Group; Campaign Legal Center; Santa Clara County (RPV Analysis); Native American Rights Fund (NARF); West Contra Costa Unified School District (Demography); Lawyers' Committee for Civil Rights Under Law; LatinoJustice PRLDEF, Voces de Frontera; Roswell, NM Independent School District

## Expert Witness Work

Expert Witness: *LOWER BRULE SIOUX TRIBE v. LYMAN COUNTY*, 2022

Expert Witness: *Walen and Henderson v. Burgum and Jaeger No 1:22-cv-00031-PDW-CRH*, 2022

Expert Witness: *Faith Rivera, et al. v. Scott Schwab and Michael Abbott No. 2022-CV-000089*, 2022

Expert Witness: *LULAC Texas et al. v. John Scott et al (1:21-cv-0786-XR)*, 2022

Expert Witness: *Pendergrass v. Raffensperger (N.D. Ga. 2021)*,

Expert Witness: *Johnson, et al., v. WEC, et al., No. 2021AP1450-OA*, 2021

Expert Witness: *East St. Louis Branch NAACP vs. Illinois State Board of Elections*, 2021

Expert Witness: *LULAC of Iowa vs. Pate*, 2021-2022

Expert Witness: *United States Department of Justice vs. City of Hesperia*, 2021-2022

Expert Witness: *NAACP vs. East Ramapo Central School District*, New York, 2018-2019

Riverside County, Corona and Eastvale, 2015

Los Angeles County Redistricting Commission, 2011

Racially Polarized Voting analysis of Latino and Asian candidates in San Mateo County and alternative map creation, 2010-2011

State of California, Citizens Redistricting Commission, including Blythe, CA, in Riverside County, 2011

Monterey County, CA Redistricting, alternative map creation, 2011



*Greenberg Quinlan Rosner*

Assistant Analyst, Anna Greenberg

June 2005 - May 2007

Assisted in the development of questionnaires, focus group guidelines, memos, and survey reports for political, non-profit, and corporate clients. Moderated in-depth interviews and focus groups.

*Greenberg Quinlan Rosner*

Field Associate

December 2003 - June 2005

Managed qualitative and quantitative data collection process in the U.S. and internationally. Provided methodological advice, including sample stratification, sampling Latino populations, and modal sampling strategies.

*Congressman Adam Schiff*

Database Manager

March 2003 - June 2003

Managed constituent mail and survey databases; updated and maintained Member's Congressional voting record.

*Strategic Consulting Group*

Field Organizer, Carol Roberts for Congress

July 2002 - November 2002

Recruited and coordinated over 100 volunteers for mailings, canvassing, phone banking, and GOTV operations. Developed internship program and managed 15 interns from local colleges and high schools.

*Institute for Policy Studies*

Intern, John Cavanagh

May 2001 - August 2001

Provided research assistance for projects advocating reform of the WTO, World Bank, and IMF. Worked on reports and op-ed pieces on global economic issues advocating fair trade.