

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

ALABAMA STATE CONFERENCE *
OF THE NAACP, et al., *
Plaintiffs, * 2:21-cv-1531-AMM
vs. * November 18, 2024
WES ALLEN, in his official *
capacity as Alabama Secretary *
of State, et al., *
Defendant. *

TRANSCRIPT OF BENCH TRIAL
VOLUME V
BEFORE THE HONORABLE ANNA M. MANASCO
UNITED STATES DISTRICT JUDGE

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P R O C E E D I N G S

(In open court.)

THE COURT: Good morning, everybody. Welcome back.

Okay. Are there any matters we need to take up before we proceed with the next witness?

MR. DAVIS: None for defendant.

MR. GENBERG: None for plaintiffs.

THE COURT: Excellent. Defendant's next witness.

MR. SEISS: The state calls Dr. Sean Trende.

THE COURT: All right.

SEAN TRENDE

having been first duly sworn by the Courtroom Deputy Clerk, was examined and testified as follows:

THE COURTROOM DEPUTY CLERK: Please state and spell your name for the record.

THE WITNESS: Yes. It's Sean Trende, S-E-A-N, T-R-E-N-D-E.

THE COURTROOM DEPUTY CLERK: Thank you.

MR. SEISS: Your Honor, I have clean copies of Defendant's Exhibit 7 and 8, which are Dr. Trende's reports. May I approach the witness?

THE COURT: I assume there's no objection.

MR. GENBERG: No objection.

THE COURT: You may.

1 DIRECT EXAMINATION

2 BY MR. SEISS:

3 Q Good morning, Dr. Trende.

4 A Good morning.

5 Q What are your current professional positions?

6 A I'm currently a senior elections analyst at Real Clear
7 Politics. I'm also a lecturer at the Ohio State University.

8 Q What is Real Clear Politics?

9 A So that is a company of about 50 people. It produces
10 online content, aggravating polls. We try to get -- on the hot
11 issues of the day, the best of the left and the right and put
12 it on the front page. Then we also produce original content,
13 which is what I primarily do.

14 Q What about your educational background?

15 A So I got a bachelor's degree in extreme political science
16 from Yale. I earned a JD from Duke. And at the same time,
17 Duke had a joint JD/MA program, so I got I master's in
18 political science, 2001.19 In 2016, I went back to school and enrolled in the Ph.D.
20 program at Ohio State. And they had an option where you could
21 do your statistics course work in the statistics department
22 instead of the political science department. So I took that
23 that road and decided I liked it. And about 40 credit hours
24 later, I had a master's degree in applied statistics. A few
25 years later, I finished up my dissertation and earned my Ph.D.

1 in political science.

2 Q Was course work in political methodology part of any of
3 your degrees?

4 A Yes. So for -- obviously, for my master's in applied
5 statistics, there was a lot of methods focus. But for my
6 Ph.D., when you finish your course work in political science,
7 you take comprehensive exams. I took comprehensive exams in
8 both American politics and political methodology and passed
9 both.

10 Q Did that course work include studying the frequentist and
11 Bayesian approaches to statistics?

12 A Yes. That's -- in the statistics department, most of the
13 work is frequentist focused because that's how most social
14 science is conducted, but there's also course work in Bayesian,
15 which is a competing approach to statistics.

16 Q Could you briefly just describe those two approaches?

17 A Yeah. The frequentist approach is what we commonly see
18 with -- in polls with error margins and such. The Bayesian
19 approach is a completely different more subjective approach
20 that looks at -- that conceptualizes the data a little bit
21 differently and allows you to make different sorts of claims
22 about it.

23 Q Was redistricting part of the course work for any of your
24 degrees?

25 A Yes. So I took classes in geographic information systems,

1 GIS software. I did course work in -- directed reading with
2 professor in redistricting, and then one of my Ph.D. papers, my
3 dissertation papers was on communities of interest in
4 redistricting simulations.

5 Q And then was survey methodology part of that course work?

6 A It was. I took classes both in the statistics department
7 and political science department on survey methodology. There
8 was an entire class in the statistics department that was about
9 the mathematics of survey methodology. The political science
10 class got into the mathematics somewhat, but it was more
11 complementary, design of survey, and how survey questions can
12 alter the responses, how to write a good survey instrument,
13 basically.

14 Q So I think you testified that you're a lecturer at Ohio
15 State. Have you taught any courses on research methodology,
16 redistricting, or survey methodology?

17 A So one of the courses I've taught is introduction to
18 American politics. It's the freshmen survey class, not on
19 surveys, but the general American politics class.

20 And we do talk a little bit about survey methods on voting
21 behavior. The two courses that are more in-depth, I teach a
22 class on voter participation and turnout. The first half talks
23 -- teaches about how voters make their decisions, whether to
24 turn out or not, who they make their choices for candidates
25 about.

1 The second half is more applied, and it goes into the
2 intersection of this knowledge and the law, so it talks about
3 redistricting litigation, talks about Voting Rights Act
4 litigation.

5 I have the students reading the actual cases and some of
6 the expert reports so that they kind of understand where these
7 decisions actually -- or these rules actually come from.

8 More directly, I also teach a class. It's an advanced
9 methods class for undergrads called survey methodology. And
10 that course work is entirely -- it's a fusion of the stats
11 course I took and the political science course I took in an
12 undergrad-friendly level.

13 The first half talks about the mathematics behind it. The
14 second half talks about survey design. The third -- I guess
15 those should be thirds. The third third the students actually
16 design a survey. We put it up on MTurk, and they have to
17 interpret it and do a presentation to the course on the results
18 of their survey.

19 Q Do you talk about confidence intervals in that class?

20 A So we do. It's undergrad friendly, but it is still an
21 advanced course. And so I put them through the proofs, show
22 them the mathematical proofs of why confidence intervals work,
23 where they come from. Like I said, the first third is entirely
24 dedicated to the mathematics of surveys.

25 Q Is it fair to say that analyzing polls is a significant

1 part of your career?

2 A It is. Any time you want to write about an election,
3 especially in our post-538/Silver Bulletin world, you have to
4 be able to talk competently about polls and polling
5 methodology. You know, in Real Clear Politics, one of the
6 things we're famous for is our poll averages. So it's a core
7 part of the business.

8 Q Does your background in polling have any applicability to
9 this case?

10 A Well, it's where I learned a lot of the stuff that's
11 relevant to this case. This case, as I understand it, is about
12 the American Community Survey, at least in large part about how
13 to interpret the American Community Survey. And it is a
14 survey. It is a type of poll. And these methods are the same
15 across different types of surveys.

16 Q When did you first become exposed to redistricting?

17 A I mean, it's something I always knew -- not always, but I
18 have known was there for decades, since undergrad. But I was
19 working at Real Clear Politics during the 2010 redistricting.
20 So that was my first cycle of dealing with it professionally.

21 Obviously, the 2020-cycle has been perhaps more in-depth
22 than I would have liked, but very in-depth.

23 Q You talked about your dissertation earlier. Does it have
24 any connection to redistricting?

25 A So, yes. It's a three-papers dissertation. It's not the

1 traditional write a minibook dissertation. There's kind of two
2 roads you can take in choosing your dissertation. The
3 three-papers dissertation, you write three peer-review-ready
4 papers. The first one was on ideology in the early Supreme
5 Court in the 1900s. It's fascinating, but not really relevant.

6 The second paper was about redistricting simulations, how
7 to incorporate a more rigorous definition of communities of
8 interest and what the political effect, if any, of taking
9 account of communities of interest would be.

10 Then the third paper was on Bayesian analysis of spatial
11 statistics, and how that would -- properly executed how that
12 would interact with our understanding of election outcomes.

13 Q Do you have any practical experience with redistricting?

14 A Well, yes. Obviously, there's been a lot of litigation
15 this cycle. I was actually appointed by the Supreme Court of
16 Belize to be the court's expert in their country's version of
17 *Baker vs. Carr* and tried to draw non-mal-apportioned districts
18 for the country.

19 In our country, I was appointed by the Supreme Court of
20 Virginia, along with Bernie Grofman, Dr. Bernie Grofman to draw
21 their congressional and state legislative maps. I'm happy to
22 say they're the only maps in the South that haven't been
23 challenged as a political or racial gerrymander.

24 And I drew -- I served as a consulting expert for the
25 attorneys in the -- in the Arizona redistricting effort by

1 their independent commission.

2 Q Have you ever testified as a redistricting expert before?

3 A I have pretty extensive experience testifying in
4 redistricting cases going back to *Whitford vs. Nichol* and *Rucho*
5 *vs. League of Women Voters* the two Supreme Court cases. I've
6 done a variety of testimony this cycle at the state level.

7 Q Roughly how many cases have you been involved in?

8 A For redistricting, I would say probably 10 to 15.

9 Q Do you have experience in critiquing a plan that someone
10 else has drawn?

11 A Well, yes. I mean, that's a core portion of the work that
12 I've done in some of these redistricting litigations. Some of
13 it's been defending plans. But in New York, for example, in
14 the *Harkenrider vs. Hochul* case, I was the expert for the
15 plaintiffs critiquing the original New York map that was struck
16 down and affirmed by the Court of Appeals there.

17 I was also the plaintiffs' expert in the Maryland case
18 that got the congressional map struck down. And I was the
19 plaintiffs' expert in the state legislative cases in Michigan.
20 Those weren't political cases. Those were Voting Rights Act
21 and racial gerrymandering cases that resulted in those maps
22 being struck down.

23 MR. SEISS: Your Honor, pursuant to Federal Rule of
24 Evidence 702, we move to tender Dr. Trende as an expert in
25 redistricting, political methodology, and survey methods.

1 THE COURT: Any objection?

2 MR. GENBERG: No objection.

3 THE COURT: Admitted.

4 BY MR. SEISS:

5 Q Dr. Trende, did you submit any expert reports in this
6 case?

7 A I did. I authored two reports.

8 Q Let's pull up Defendant's Exhibit 7.

9 Dr. Trende, can you see that on your screen?

10 A Yes.

11 Q Is that your initial report?

12 A It is.

13 Q And then let's pull up Defendant's Exhibit 8.

14 Dr. Trende, is this your supplemental report?

15 A It is.

16 MR. SEISS: Your Honor, the state offers Defendant's
17 Exhibit 7 and 8 into evidence.

18 THE COURT: I have 7 on my admitted list.

19 MR. SEISS: Okay. Then just Exhibit 8.

20 THE COURT: Okay. Just 8. Any objection?

21 MR. GENBERG: No objection.

22 THE COURT: Admitted.

23 (Defense Exhibit 8 admitted in evidence.)

24 BY MR. SEISS:

25 Q Dr. Trende, was your supplemental report a full-throated

1 response to plaintiffs' experts who addressed your report on
2 rebuttal?

3 A It was not. It -- since there was no supplemental report
4 in the order, I felt it would be inappropriate to take the
5 opportunity to respond to say Dr. Oskooii's critiques which
6 were rebuttal to mine.

7 The supplemental report is focused on the new maps that
8 Dr. -- that Mr. Fairfax had submitted in his rebuttal report.
9 So we had his initial map. I wrote a report. In his rebuttal
10 report, he submitted some new maps. And the supplemental
11 confines itself to those maps.

12 Now, there's issues in responding to those maps that --
13 you know, obviously, I wasn't unaware of what critiques would
14 be, so I adjusted some of the maps that I drew in response to
15 some of the critiques that were made. But it's not a
16 full-throated response, no.

17 Q And those new plans that you're referring to for
18 Mr. Fairfax are Plans 2 and 3?

19 A That's correct.

20 Q Did you analyze Mr. Fairfax's Plan 2A in either of your
21 reports?

22 A I didn't. It wasn't in by the time I wrote my
23 supplemental report. I believe I received it two days before
24 my deposition. So I didn't have an opportunity to review that.

25 Q Have you since examined Plan 2A?

1 A Very minimally.

2 Q Let's pull up page 3 of Plaintiffs' Exhibit 10, which is
3 Mr. Fairfax's supplemental rebuttal report. And if you could
4 zoom in on that map.

5 Dr. Trende, can you tell what this map is?

6 A Yes. This is Illustrative Plan 2A with the red lines
7 denoting the old Plan 2, which I responded to, and then the
8 full black line depicts the new Plan 2A.

9 Q How would you describe the differences between Senate
10 District 7 in Plan 2 and Plan 2A?

11 A They're minimal changes, I think a handful of precincts or
12 parts of precincts are changed.

13 Q Do these minimal differences change your analysis of Plan
14 2?

15 A Certainly not the analysis of the compactness or other
16 aspects of it. And some of the stuff we'll talk about soon
17 about error margins doesn't change, either.

18 Q But it might affect things on the margins maybe?

19 A It might affect things on the margins, that's right.

20 Q Okay. We can pull that map down.

21 Dr. Trende, did you analyze the racial Voting Age
22 Population demographics of Senate District 7 in Mr. Fairfax's
23 plans?

24 A I did.

25 Q Where does that data come from?

1 A So that data comes from the decennial census. The voting
2 page population data come from the census going out and trying
3 to contact every U.S. household to do an actual count of people
4 in the United States.

5 Q Is census data an estimate?

6 A No. Census data is treated as an enumeration. There were
7 attempts to incorporate sampling into the census data that to
8 my understanding were struck down by the Supreme Court. So
9 it's an actual enumeration.

10 Q Let's pull up pages 6 and 7 of Defendant's Exhibit 7.

11 Dr. Trende, what were your findings as to the total
12 population demographics for Plan 1?

13 A So Plan 1, if you'll -- I don't think this is contested,
14 but if you look at the Voting Age Population, it was
15 48 percent, the Voting Age Population was 48-and-a-half percent
16 black.

17 Q Do you mean total population?

18 A Yes. I'm sorry. Yeah.

19 Q And then what was the --

20 A Yes.

21 Q And then what was the Black Voting Age Population
22 percentage?

23 A The Black Voting Age Population percentage was
24 46.8 percent.

25 Q What definition are you using for black in these

1 statistics?

2 A So the census allows you to select up to eight -- six
3 racial categories. And there's some dispute. I don't know how
4 much of a legal dispute it is in a case like this. But there's
5 some dispute over how you should treat someone who identifies
6 as a sixth black -- part black.

7 In this case, if the person -- if an individual has any
8 identification as black, I count them as black individuals.
9 It's the any-part black definition.

10 Q So using the any-part black definition, Senate District 7
11 in Plan 1 is not majority Black Voting Age Population?

12 A That's right.

13 Q Was Senate District 7 in Plan 2 majority BVAP?

14 A It was not.

15 Q Do you remember what that Black Voting Age Population
16 percentage was?

17 A I don't remember the precise percentage. I only remember
18 that it was under 50 percent.

19 Q If I told you that it was 48.47 percent, would that sound
20 about right?

21 A That would sound about right. I remember Mr. Fairfax had
22 it calculated and got the same answer.

23 Q What about for Senate District 7 in Plan 3? Is that
24 majority BVAP?

25 A So Plan 3 does cross the 50 percent BVAP threshold. So

1 using the census data, it is 50 percent plus 1. It's not much
2 more than 50 percent plus 1. I think it's around 50 black
3 individuals, but it crosses that threshold.

4 Q Dr. Trende, have you ever been involved in a case where
5 the plaintiff uses a minority Voting Age Population district as
6 in the minority population at issue is less than 50 percent by
7 Voting Age Population as their illustrative district?

8 A Yeah. Not for purposes of *Gingles*, certainly not.

9 Q Your report then looks at CVAP data, correct?

10 A That's right.

11 Q What is CVAP?

12 A So CVAP is Citizen Voting Age Population.

13 Q Where does CVAP data come from?

14 A So CVAP data unlike the VAP data, the Voting Age
15 Population, there's no citizenship question on the United
16 States census. There was some efforts to do it for the 2020
17 census, but those efforts ran afoul of the Administrative
18 Procedures Act.

19 And so what we are left with for determining citizenship
20 is data from the American Community Survey or ACS.

21 Q What is the American Community Survey?

22 A So the ACS is a census product that -- it's exactly what
23 it says. It's a survey of U.S. citizens. It doesn't contact
24 every person. Instead, it takes a sample of individuals within
25 states, census tracts, block groups, and reports those data

1 out. It covers all manner of socioeconomic statistics.

2 What makes it special here is that there's a special --
3 the ACS data usually comes out in late -- towards the end of
4 the year, late fall.

5 And around February of March, the census publishes a
6 supplement that contains citizenship data broken down by racial
7 groups and a few other categories.

8 Q Where are you getting the most recent CVAP estimates in
9 your report?

10 A The most recent CVAP estimates for myself are downloaded
11 from the American Community Survey website and then processed
12 with a couple of techniques for purposes of determining
13 districts' CVAP.

14 Q What year from the ACS is the most recent year that you
15 used?

16 A So the most recent year is 2022 is what we call it, but
17 the ACS is five-year estimates. They roll together five years.
18 So when we talk about the 2022 data, it's not really 2022.
19 It's the estimates from 2018, '19, '20, '21, and '22 combined.

20 If you talk about the 2020 data, it's not data that's been
21 drawn consistent with the census. It's data actually from
22 2016, '17, '18, '19, and '20 rolled together.

23 Q Did you report how many Alabamians were interviewed in the
24 2022 one-year ACS?

25 A Yes. I believe it was around 30,000 -- 32,000 Alabamians.

1 Q And just to be clear, that number would be higher using
2 the five-year estimates?

3 A Yes. Yes. That's just to give a sense of scale.

4 Q Do you know roughly how many Alabamians were surveyed that
5 reside in Senate District 7 in Plan 1, Mr. Fairfax's Plan 1?

6 A It's impossible to know exactly. We'll talk about this in
7 a little bit. But the CVAP data are only reported down to the
8 block group level.

9 And block groups, at least in -- in most states, but in
10 Alabama, as well, precinct lines don't correspond with block
11 group lines. So you end up with split block groups that you
12 have to kind of estimate. I believe it worked out to around
13 1100 estimated individuals within Senate District 7.

14 Q And do you know how many people in each block group that
15 comes out to be?

16 A On average in Alabama, it's about ten people surveyed in a
17 given year in a block group. Obviously, that's a single year,
18 so over five years it will more than that, but it's still a
19 fairly small sample within a single block group.

20 Q Let's pull up page 19 of Defendant's Exhibit 7. And let's
21 zoom in on that map in the middle.

22 Dr. Trende, you were talking earlier about how precinct
23 lines don't necessarily line up with block group lines. Is
24 that what this map is showing?

25 A That's right. So the blue boundary here is Senate

1 District 7 in Map 1, Mr. Fairfax's Map 1.

2 The white lines that are shaded in light gray are the
3 block groups. And so you can see there are a lot of block
4 groups that are completely contained within Senate District 7.
5 So there's no -- there are issues with it, but some of the
6 issues we'll talk about don't apply to those block groups.

7 There are, however, block groups that are split. You can
8 see that the dashed line will be somewhat inside the blue line,
9 but then also extend well beyond the blue line. And that's,
10 again, a function of census block groups don't line up
11 perfectly with precinct lines.

12 Q Is it common for block groups to be split by a map drawer?

13 A Yeah. Map drawers, when they draw are typically drawing
14 with respect to precinct lines. And if they have to split a
15 precinct, they will do it usually at the block level.

16 Blocks are kind of the quarks of the census bureau.
17 They're the lowest -- they're the smallest entity for reporting
18 census data. But ACS data aren't reported down to the census
19 block level, only down to the block group level, which is sort
20 of the next level up.

21 Q Did you analyze the Citizen Voting Age Population for
22 Senate District 7 in all of Mr. Fairfax's plans?

23 A Yes.

24 Q But you didn't look at Plan 2A, correct?

25 A I'm sorry. Yes. With -- I never looked in detail at Plan

1 2A because of when I received it.

2 Q And then Plan 3 was majority black voting --

3 A I'm sorry. I stepped on you. That's right. Plan 3
4 because it crosses the VAP threshold didn't really trigger any
5 scrutiny of how the CVAP was being used. That's *Gingles'*
6 numerosity requirement straightforward there.

7 Q So is it right that you looked at CVAP really only for
8 Plans 1 and 2?

9 A That's right.

10 Q Why did you look at Senate District 7's CVAP?

11 A Well, one of the issues -- the ACS data is fine. It's
12 good data produced by the United States Census Bureau. It's
13 beyond professional.

14 But all survey data come with error margins. The ACS is
15 effectively a poll. And we all know polls have error margins.
16 We've just had a really good reminder that those error margins
17 can be really important in understanding what these surveys
18 really do.

19 And so when you have something like Mr. Fairfax's
20 districts that are drawn down very close to the 50 percent
21 threshold, and that 50 percent threshold is very important.
22 The question then becomes, well, okay, are we really sure that
23 these reported numbers are above 50 percent? And you determine
24 that by looking at the error margins, which requires looking at
25 the CVAP level at the block group level to begin with.

1 Q Do you normally look at CVAP data when dealing with a
2 majority-black illustrative district?

3 A I can honestly say for *Gingles* 1 analysis I haven't done
4 that. There might be instances where you want to look at CVAP
5 data, but for *Gingles* 1 for a -- for the black population, I
6 have only seen VAP used.

7 Q Would one of those instances be, say, if the black
8 population had a low citizenship rate?

9 A Yeah. So if you were in, say, northeast Columbus, where
10 we have a lodge Somali population or, you know, Miami where
11 there's a large Haitian population, there may be reason to look
12 at the CVAP. You know, courts have demanded that as kind of a
13 double check on the Voting Age Population.

14 I've just never seen it done when the VAP threshold isn't
15 crossed. It's kind of a substitute for Voting Age Population.

16 Q In your experience, what is the context where CVAP is
17 typically used for illustrative districts?

18 A I've honestly typically seen it when you are talking about
19 Hispanic population because Hispanic population -- because the
20 census looks at all individuals whether they're citizens,
21 whether they're in the country legally or not, you can get a
22 large population in the district of voting age, but it's a
23 hollow population. You get say 51 percent Voting Age
24 Population, but maybe only a quarter of that is actually
25 eligible to vote.

1 So some courts have asked to backstop that by looking at
2 citizenship rates, as well.

3 Q Do you believe it is always inappropriate to use CVAP data
4 in *Gingles* 1?

5 A No, not at all. All I think is that you have to remember
6 what the CVAP data are. They aren't census data that are
7 treated as an actual enumeration. They're survey data, and
8 they have error margins. They're just different than the
9 census data we typically work with.

10 And so you just have to remember the limitations of the
11 data you're working with.

12 Q Have you used CVAP data in any of your redistricting work?

13 A Oh, I have, yes.

14 Q So I believe Dr. Oskooii's report mentions a few of those
15 instances, and I'd like to walk you through some of those.

16 So he mentioned your work as Special Master in Virginia.
17 Could you walk us through your use of CVAP there?

18 A Yeah. So when I was -- I have to be careful because there
19 is a confidentiality order on what exactly we did. But in
20 Virginia, we were -- we didn't do a *Gingles* analysis. We just
21 didn't have time. And we had -- there's two memos that were
22 processed and were expressed about that in our memos.

23 We did, however, want to know whether districts were
24 likely to elect the black candidate of choice to get a sense of
25 whether we were likely to be sued over them or not. We drew

1 race blind, and, frankly, things worked out because of
2 Virginia's political geography.

3 So we did an analysis of the Black Voting Age Population
4 in addition to the Voting Age Population to get a sense of
5 whether the districts would perform.

6 The 50 percent threshold wasn't that important if a
7 district was actually 49 or 48 or 47, didn't matter that much
8 for the performance analysis that we were doing. We were
9 critiqued in that case by the NAACP for doing it. You know, so
10 we used a different CVAP look. But it was more of a holistic
11 approach where there wasn't a specific threshold that we had to
12 cross.

13 Q What about your work in Arizona?

14 A So Arizona is a tougher case. And that's another case
15 where there is a confidentiality agreement governing my work.
16 It's part of its work product.

17 We had two sets of lawyers. We had two sets of experts.
18 We had the map drawer, and the map drawer had his own Voting
19 Rights Act expert. So that was a product of compromise. What
20 I can say there is, again, we didn't do the *Gingles* 1 analysis.
21 We were evaluating final maps. So the 50 percent plus 1
22 threshold wasn't as important as it is in the first steps of
23 the *Gingles* analysis.

24 The other thing -- what ended up produced in that
25 litigation was a memo that reported the point estimates and

1 said what the districts were and then acknowledged that there
2 were error margins accompanying those estimates.

3 But if that map -- again, we weren't doing the
4 illustrative maps, and I think if that map was challenged, it
5 would probably -- if I were the expert, it would probably be
6 defended with a different illustrative map.

7 Q What about your work on the Dodge City case where
8 Dr. Oskooii's was involved?

9 A Yeah. I'm a little -- I will confess I'm a little
10 confused on that one because I didn't attack numerosity on his
11 districts at all. Maybe I should have. But it wasn't anything
12 we looked at.

13 Now, that was a challenge to a multi-member district, so
14 Dr. Oskooii only had to draw one District in each map in one of
15 his 14 maps. Some of his districts were drawn up to 70 percent
16 CVAP.

17 Again, maybe I should have gone back and checked to see if
18 the error margins that accompanied that were more than
19 20 percent, but that's not the route that litigation took. It
20 still had error margins. I just didn't look to see what they
21 were.

22 Q Were those illustrative Hispanic districts, were they
23 above 50 percent Hispanic Voting Age Population?

24 A All of them crossed the VAP threshold.

25 Q And then lastly, what about the Washington case that you

1 were involved with Dr. Oskooii on?

2 A So the Washington case is another odd instance. I came in
3 at the remedial phase in that case. I wasn't involved in the
4 trial phase, which is when the Court resolved the *Gingles* 1
5 challenge, which is when that 50 percent threshold becomes
6 important.

7 I know there's differences of opinion among conservative
8 and liberal lawyers about whether the actual remedial districts
9 also have to be 50 percent plus 1. I think most courts have
10 gone the way that they don't. It's just a question of whether
11 they perform.

12 The bottom line is I was coming in at the remedial phase
13 when *Gingles* 1 wasn't in question. And it was a little late to
14 mount kind of a collateral attack on the data. Everyone had
15 been using the point estimates. And so I used the point
16 estimates.

17 Q Did any of these matters involve illustrative districts
18 where the relevant minority group was African-Americans?

19 A Virginia -- no. So Virginia was the only one of those
20 that involved black residents, and it wasn't a *Gingles* 1
21 analysis.

22 Q Is your use of CVAP in those matters inconsistent with
23 your opinions in this case?

24 A It really isn't. They weren't -- they weren't *Gingles* 1
25 districts. When I drew the *Gingles* 1 districts in Michigan,

1 life would have been probably easier to use CVAP rather than
2 VAP, but I used VAP there.

3 Q So I think you testified earlier that you aren't saying
4 that CVAP is always inappropriate to use. What is your
5 ultimate conclusion about plaintiffs' use of CVAP in this case?

6 A So the problem with using -- there's a couple of problems
7 with how CVAP is used here.

8 There's a problem in that -- we've talked about block
9 group lines don't line up with district lines. And so you have
10 to use an estimation technique that we'll probably get into.
11 The second issue is you can't forget that there's error
12 margins. It's a poll. Polls have error margins, and those
13 error margins are very real.

14 And so when you have a district that's drawn right up to
15 the 50 percent threshold, those error margins erode our ability
16 as social scientists to say, yes, this district is 50 percent
17 plus 1 CVAP.

18 Q So we've talked about the ACS being a sample. Is using a
19 sample of the population a limitation relevant here?

20 A It is. It's a limitation. I'm not saying that the ACS is
21 a bad source of information or anything like that and never at
22 least intended to take that position.

23 It's just you have to remember it's a poll and has error
24 margins.

25 Q Is there inherent uncertainty with using a sample rather

1 than an actual count for enumeration?

2 A Yes. So one thing that I -- people talk about good
3 pollsters and bad pollsters. And there are techniques you can
4 use as a pollster that are good or bad.

5 But sampling error or error margins are inherent to the
6 fact that we aren't talking to the entire population.

7 When the people say, oh, you're only talking to 500
8 people, you know, of the millions of people in America, they're
9 not entirely wrong. That does introduce some uncertainty.
10 It's a lot less. The mathematics are a quite good -- that's a
11 lot less than they expect, but that uncertainty is inherent in
12 the fact that we don't talk to everyone.

13 Q Could you provide a real world example of the sampling
14 error that you are talking about?

15 A So as I said, we just had an election where the polls were
16 off a little bit. There's kind of a famous example now with
17 Ann Selzer's poll, the Selzer poll of Iowa. We know now that
18 the votes have been counted in Iowa that Vice-President
19 Harris's support in Iowa was 43 percent. That is a fixed known
20 quantity now.

21 And so when pollsters go into Iowa, they talk to a sub
22 sample of the population. They aren't talking to everyone, so
23 it's not likely going to land right on 43 percent. That
24 43 percent is going to produce the more polls you take of kind
25 of a bell-shaped distribution of poll results around that known

1 population of 43 percent. It's only known now because we had
2 the election. It wasn't known at the time.

3 So Ann Selzer who is an extraordinarily good pollster goes
4 into the field, and she comes back with a sample Harris's
5 support is 47 percent. There's an error margin around it plus
6 or minus 3.5 percent. So what she's saying is that 95 percent
7 of the time, that error margin is going to contain the true
8 population value.

9 So she's saying my sample -- my estimate is 47 percent.
10 I'm 95 percent confident the result is somewhere between 43.5
11 and 50.5 percent. How do we know whether she's the one poll
12 out of 20 that doesn't include that true population value?
13 Well, at the time she takes the poll there's no way of knowing.
14 We know today it didn't include the true population value. It
15 was that one poll. She had no way of knowing it at the time.

16 Now, at the same time, Emerson goes into the field in
17 Iowa. It says Vice-President Harris's support in Iowa is
18 43 percent. Dead on.

19 InsiderAdvantage goes into Iowa. It says Vice President
20 Harris's support is 46 percent with an error margin of plus or
21 minus 3.5 percent. So 42.5 percent to 49.5 percent.

22 They weren't dead on, but their confidence interval
23 included the true population value.

24 That's how these polls work. And that's why -- actually
25 why it's called frequentist, because the idea is that as you

1 repeat the survey or you repeat the experiment, you keep taking
2 samples, over time you're going to get a nice bell-shaped
3 distribution over the true population value.

4 Q And so error margins or confidence intervals are how we
5 quantify the uncertainty associated with using a sample?

6 A That's right. When we say Vice-President Harris's support
7 in Iowa, or when Ann Selzer says Vice-President Harris's
8 support in Iowa is 47 percent, what she's staying is statistics
9 talk is that Vice-President Harris's support being 47 percent
10 is the most likely value that would have produced this poll
11 result.

12 That doesn't mean it's more likely than not 47 percent.
13 It's just the most likely value to produce the point estimate
14 that we see.

15 But how sure -- what is the most likely estimate -- or
16 most likely value mean, the maximum likelihood estimate? Well,
17 we don't really know. We know the uncertainty. That's
18 expressed through the error margins.

19 The error margins tell us how good we think that estimate
20 is. And so when she says 95 times out of 100, the true
21 population value will be somewhere within this error margin,
22 that's the real expression of the uncertainty or how confident
23 we can be about the poll results.

24 Q Can we divorce the confidence interval or error margins
25 from our point estimate?

1 A We can't. The -- there will -- as long as you are
2 conducting a sample, there will always be confidence intervals.
3 If the best pollster in the world surveys 500 people and the
4 worst one samples 500 people, the sampling error will be the
5 same.

6 There may be other things, techniques, you know, maybe the
7 worst pollster in the world doesn't reach all the relevant
8 populations, that's -- you know, that a different type of
9 error. Maybe people lie. That's measurement error.

10 The sampling error is purely an outgrowth of the fact that
11 we don't talk to everyone when we're doing a sample. There's
12 nothing you can do about it.

13 Q And so our confidence interval, does that depend on the
14 degree of confidence that we set?

15 A That's right. Just like there's a 95 percent confidence
16 interval, there are 90 percent confidence intervals. If we are
17 satisfied with the lower degree of confidence, as social
18 scientists, we almost always use the 95 percent confidence
19 interval.

20 Sometimes you will see -- I know a lot of Dr. Oskooii's
21 work is used 90 percent confidence interval. But you rarely
22 see results published lower than that. That's the degree of
23 confidence that we need in our findings as social scientists to
24 be able to report them out as reliable.

25 Q What is the typical confidence interval used for polls?

1 A So when you see a poll produced with plus or minus 3.5
2 percent, that is typically the 95 percent confidence interval.

3 Q What confidence interval is used for ACS CVAP data?

4 A So the ACS CVAP data uses 90 percent confidence intervals.
5 You can derive the 95 percent confidence interval knowing the
6 90 percent. It's actually pretty simple algebra. But so you
7 can calculate your different confidence interval pretty -- and
8 transform them pretty easily.

9 Q So let's go through an example with these confidence
10 intervals. So let's use 90 percent confidence, and we're
11 looking at President Biden's current approval rating.

12 And we took -- we took 100 polls of President Biden's
13 approval rating. Would a 90 percent confidence interval mean
14 that 90 of those intervals would contain President Biden's
15 actual approval rating?

16 A Well, we can't be sure, but that's our expectation is that
17 90 percent -- if you take 100 polls of President Biden job --
18 let's say his job approval in the U.S. population is 45
19 percent. Of those 100 polls, 90 of the confidence intervals
20 should include 45 percent in the range.

21 Q So let's say we got a point estimate of 45 percent. Would
22 people report his approval rating to be 45 percent?

23 A So this is where it gets tricky. Because after waxing
24 poetic about the virtues of the confidence interval, the truth
25 is that people get sloppy. So you might just say, yeah,

1 President -- his job approval in the poll is 45 percent.

2 That's often how people talk about it.

3 Q What if someone asks you if President Biden's approval
4 rating was above 43 percent?

5 A So now you're talking about a slightly different
6 situation. Now you're asking me a precise question. Do I know
7 whether his job approval is more than 43 percent or not? The
8 answer should be no, I mean, assuming the error margin is
9 greater than 2 percent. We don't have enough confidence to
10 state that the -- that his job approval based on this poll is
11 higher than 43 percent.

12 Q Are people always as careful as you're being here today?

13 A No, no. People get sloppy.

14 Q Does the error margin still exist regardless of how
15 careful the reporter is being?

16 A Yes. And that's the important thing to remember is that
17 even if people kind of say, well, his job approval is
18 51 percent so he's above 50 percent, they're just not being
19 precise. The confidence intervals are there whether you talk
20 about them or not.

21 Q Okay. So back to our approval rating example.

22 And we've just taken one poll and gotten a point estimate
23 of 45 percent.

24 Do we know whether that poll is one of the ten that
25 doesn't contain the true approval rating?

1 A No. And that's kind of the frustrating thing about public
2 opinion polling or surveys in general, is that for your one
3 sample, you can't know -- unless you have a situation like an
4 election where shortly thereafter the true population is
5 revealed.

6 Generally speaking, you can't know. We'll never know
7 exactly what President Biden's job approval is or which polls
8 were outliers and which won't.

9 What we do know is over the course of repeated sampling,
10 you will get that nice bell curve distribution around the true
11 population value.

12 That's why sites like 538 or Real Clear Politics work is
13 because we know how samples will be distributed, and we know
14 that you can average the results of multiple polls and get a
15 better estimation of the population than you get from a single
16 instrument.

17 Q So was that Ann Selzer poll that you talked about, was
18 that one of the five that did not contain the vote share of
19 President Trump and Vice-President Harris within the confidence
20 interval?

21 A Right. It's a nice example, because we got to find out
22 what the true value was. And it was just -- it was un -- I
23 think there were some other things that went into the error
24 there, but a large part is just -- it was -- her time was up.
25 It was the short straw, and she got that one sample out of 20

1 that's not going to contain the true population value.

2 Q What is the relationship between the level of confidence
3 that you set and the size of your confidence interval or error
4 margin?

5 A So I won't recite the formula for an error margin. I will
6 spare you that. But the error margin is a function of three
7 things: The degree of confidence you want, the variance of the
8 sample, and then the number of people you interview.

9 You get -- okay.

10 Q Go ahead.

11 A You get to pick the degree of confidence needed so that
12 within social science bounds, if you want to make it considered
13 reliable, but there's a stat -- 1.96 is the number you use for
14 a 95 percent confidence interval, 1.645 or 54 for a 90 percent
15 confidence interval.

16 Q If we lower our level of confidence, does the confidence
17 interval get bigger or smaller?

18 A So if we lower the degree of confidence we need, then your
19 error margin gets smaller because we're more -- we are going to
20 have more errors. We've expressed that we're comfortable with
21 more errors.

22 Q Does the ACS provide error margin for its CVAP estimate?

23 A It does.

24 Q And what level does it report those error margins at?

25 A It reports those error margins at the 90 percent

1 confidence interval.

2 Q And then what level of census geography does it work those
3 error margins at?

4 A So, again, it reports -- well, it reports them at the
5 statewide level. Those have very, very small error margins.
6 It reports them for counties. Those have somewhat larger error
7 margins. The next level down is census tracts. And those will
8 have somewhat bigger error margins, because the number of
9 people you're sampling gets smaller and smaller as you're doing
10 smaller geographic groups.

11 After the census tracts are the block groups. That's the
12 lowest level that the ACS reports the data down. The decennial
13 census will go one several lower to what we call census blocks.
14 Those are very small groups of 10 people, 100 people.

15 Q At the block group level, is there a typical error margin
16 that we see?

17 A It depends. It can vary on the number people being
18 sampled. So in the city of Huntsville, you'll get a smaller
19 error margin for a block group than you would perhaps for some
20 of the rural areas where the block groups have lower
21 populations.

22 Q And you've reported some of those error margins in your
23 report?

24 A I did.

25 Q Let's pull up pages 13 and 14 of DX-7 in those tables.

1 Let's zoom in and put those side by side.

2 Dr. Trende, what do these two tables show?

3 A So these show for the block groups that are contained in
4 whole or in part in Illustrative District 7 for Map 1, what are
5 the block groups that have the smallest error margins, what are
6 the block groups that have the largest error margins.

7 Q And these tables are looking at the total Citizen Voting
8 Age Population in the block group, correct?

9 A That's right. So the smallest confidence interval, the
10 smallest error margin was block group 0014011. They estimated
11 the CVAP of 1,980. Census reports a 90 percent error margin of
12 212 residents.

13 So we're not -- we're pretty -- 90 percent confident is
14 the best way to put it that the true population of citizens in
15 that block group is somewhere between roughly 1,800 and 2,200.
16 That's the best one in Illustrative District 7.

17 Q So looking at the error margins, the percentages at
18 95 percent confidence, I'm seeing 12.8 percent at the low end,
19 and then on the other table 87.6 percent at the high end; is
20 that right?

21 A That's right. So block group 0023003, the CVAP estimate
22 is about 1,170 people. The 95 percent error margin around
23 that, however, is plus or minus 1,025 people. So our
24 confidence here is that the citizen population is somewhere
25 between like 150 people and 2,200 people, much less helpful in

1 this situation.

2 Q Let's go to the next two tables on the following pages.

3 Dr. Trende, what did these two tables show?

4 A So we aren't just interested in the Citizen Voting Age
5 Population. We want to know the share of the Citizen Voting
6 Age Population that is black in these block groups.

7 Because we're typically dealing with small -- you know,
8 it's a subset that's being sampled, we get larger error
9 margins. So the best case scenario for the black Citizen
10 Voting Age Population in a block group is -- is an estimate of
11 1,930 plus or minus 429 using the 95 percent error margin.

12 Q And so the smallest error margin percentage at 95 percent
13 confidence is 22.2 percent?

14 A That's right.

15 Q And then on the other table, the largest -- like I guess
16 there's infinite there, but the largest number is
17 274.4 percent?

18 A Yes. The -- for block group 0023003, the Black CVAP
19 estimate is 15 with an error margin 95 percent confidence of
20 41. So if you want -- I mean, the census instructs that if you
21 produce a negative population estimate, obviously you should
22 truncate it at 0, so our confidence interval would range from 0
23 to 56 black residents who are citizens of voting age.

24 Q We can pull that down.

25 Did you calculate the sampling error margin for the entire

1 Senate District 7?

2 A So because those block groups are truncated, you can't
3 calculate it for the entire senate district.

4 What I do is I calculate it for all the block groups
5 contained in whole or in part within Senate District 7. You
6 know, the actual population of Senate District 7 is lower, so
7 the actual error margin is most likely larger, but that's sort
8 of the best that we can do.

9 Q So are you saying that you included an entire block group
10 in this calculation even if only a small portion of the block
11 group is included in Senate District 7?

12 A That's right.

13 Q Wouldn't that inflate the error margin?

14 A That's the most likely outcome, because error margins are
15 a function of the number of individuals in your sample, it's in
16 the denominator of the formula. So as your number of people
17 sampled increases, your error margin gets smaller. As the
18 number of people in your sample decreases, error margins tend
19 to get bigger.

20 So in this situation, because we're looking at the error
21 margin for whole block groups, some of which are clipped for
22 the district, there's more people sampled than are actually
23 contained within the district.

24 Q And so increasing the sample size generally lowers your
25 sampling error?

1 A That's right.

2 Q What did you calculate the error margin to be for Plan 1?

3 A So there were a couple of different ways that error
4 margins could be calculated. Using the 2018 to 2022 estimate
5 for the BCVAP or the block groups, it had an error margin of
6 2.6 percent at 90 percent and 3.1 percent at 95 percent
7 confidence.

8 Q So how did we get from block groups where the lowest error
9 margin was over 10 percent to now 2 to 3 percent error margin?

10 A Because you aggregate the block groups and as you -- so
11 the block groups, let's say 10 people -- on average, 10 people
12 get sampled in a block group. So you are going to have a lot
13 of uncertainty from that sample.

14 When you put them together to form the district, the
15 number of people in the sample is effectively increased, right?
16 You have one block group with the sample of 10. Now you have
17 merged together two block groups as part of a district, your
18 sample is 20. The error margin is going to get smaller. You
19 add in some other block groups to form the district, the error
20 margin gets smaller and smaller and smaller.

21 Q In the survey methodology context, what is your opinion
22 about reporting point estimates without error margins?

23 A Well, like I said, sometimes people talk about them. You
24 almost never will see it in the peer-reviewed literature where
25 people are sticklers about this. But the point estimate just

1 tells you what the most likely population value that would
2 bring about this survey result is.

3 The error margins are what ultimately tell us how
4 confident we are in that type of prediction or claim.

5 Q Let's pull up page 17 of Defendant's Exhibit 7 and zoom in
6 on that top paragraph.

7 Dr. Trende, during the process of calculating the error
8 margin, did you also estimate the BCVAP percentage of all the
9 block groups included in whole or in part?

10 A Yes.

11 Q What were your findings for Plan 1?

12 A So the BCVAP of the block groups was -- of the entire
13 block groups was 43.3 percent.

14 Q Let's pull up page 5 of Defendant's Exhibit 8 and zoom in
15 on the second to last paragraph.

16 And then did you do the same thing for Plan 2?

17 A Yes.

18 Q What were your findings for Plan 2?

19 A Of the block -- of the block groups wholly or part within
20 the district, 44.35 percent.

21 Q Let's go back to DX-7 on page 19 and let's zoom in on that
22 bottom paragraph.

23 Dr. Trende, did you also determine the average BCVAP
24 percentage of the block groups contained wholly within the
25 district versus those that were split?

1 A Yes. So to kind of better understand what was going on, I
2 took the block groups that were contained in whole or in part
3 within District 7 and broke them out into the block groups that
4 are wholly within the district that we don't have to worry
5 about splitting and then the block groups that are split
6 between within the district and outside the district.

7 You can see on the screen the estimates that I came up
8 with. For the block groups wholly within the district, it was
9 51.7 percent in 2020; 50.5 percent in 2021; 50.3 percent in
10 2022.

11 And, again, that's shorthand for the five-year estimates.
12 So there's five years rolled into there.

13 For the block groups not wholly contained within the
14 district, the ones that we have to somehow split, the BCVAPs
15 are 33.8 percent, 32.3 percent, and 31.2 percent respectively.

16 Q What is the significance of these numbers?

17 A Well, it tells us that a lot depends on how those split
18 block groups end up getting apportioned, because we've talked a
19 lot about these split block groups. How do we handle them?

20 Well, we have to estimate, you know, of the Black Citizen
21 Voting Age Population within this block group, how much of it
22 do we put inside -- allocate to the district, and how much of
23 it do we keep outside of the district?

24 Given that the block groups wholly within the district are
25 right at that 50 percent threshold, there's a lot riding on how

1 that allocation of the split block groups is performed.

2 Q Let's get into that allocation.

3 So the block group is the lowest level at which five-year
4 ACS data is reported?

5 A That's right.

6 Q So how do we know what the CVAP is when we have a split
7 block group?

8 A The answer is we don't really. We have to estimate the
9 number of citizens. So the census will say there's 200
10 citizens in this block group. Of those 200 individuals, we
11 have to decide, are there 60 that go within the district? Are
12 there 30 that go within the district? Are there 110?

13 There is a right answer out there somehow, but we have no
14 way of determining it. There's techniques that we use to try
15 to estimate it, but they're estimations.

16 Q Let's pull up page 20 of Defendant's Exhibit 7 and zoom in
17 on the map in the middle.

18 Is this disaggregation process what you're showing in this
19 image?

20 A Yes. So what I have done here is I've taken a portion of
21 the District 7 boundary. That's outlined in blue. And then
22 I've put census block or census -- yeah, block group 1 in
23 census tract 211.02 on the map.

24 Within block group -- so that's a block group where the
25 Citizen Voting Age Population has to be apportioned. How much

1 of it is within the district? How much of it is not within the
2 district?

3 What I've done here -- and I'm using Voting Age Population
4 to help illustrate this. So this isn't CVAP. What I've done
5 is within that block group, I've taken the census blocks that
6 constitute the block group and shaded them by their BVAP,
7 because, again, BVAP is a census product. It's treated as a
8 whole enumeration. So we know the number of voting age
9 residents who are black, white, Hispanic, and other within that
10 district.

11 So as block groups become more heavily African-American,
12 it becomes -- the shading becomes more heavily blue. I will
13 just say as an aside, I used this weird color scheme first off
14 because I'm color blind, and I can't see red green.

15 Secondly, this has the virtue of printing some of the red
16 green or other schemes that people use don't print as well.

17 Q We can pull that down.

18 So before we get into how to allocate the Citizen Voting
19 Age Population from the block group level to the block level, I
20 wanted to ask you about the starting point. Do we know how
21 many black citizens of voting age to allocate in the first
22 place when dealing with a split block groups?

23 A I think those tables that we had earlier set off a little
24 bit of furor in some of the defendants. The point here is not
25 that you should not rely on census data or CVAP data because

1 the block groups have big error margins. This is to illustrate
2 the fact that they have error margins.

3 But because we mostly aggregate them, that does reduce the
4 overall uncertainty, and that's why I report the error margin
5 for the block groups within the district.

6 Q Let's look at --

7 A Oh --

8 Q Go ahead.

9 A Where this becomes relevant, though, is that when we are
10 allocating the number of black citizens of a block group to
11 those within the district or without the district, if you look
12 at block group 007002 in the bottom right, the census estimate
13 is that there are 100 black residents of voting age.

14 And all of the estimation techniques will take that 100
15 residents and allocate them. How many go within the district?
16 How many go without? I mean, that's the fundamental exercise.

17 And in doing so, they ignore the error margins around
18 them. It's not -- the census, the BVAP is the legal equivalent
19 of holy writ, right? Like that is the number that you use.
20 This 100 that we're allocating is not holy writ. It has an
21 error margin at 90 percent confidence of plus or minus 118.

22 So the actual population we have could be 3, or in
23 reality, it could easily be 162. And we have no way of knowing
24 because we don't talk to everyone.

25 Unlike the Iowa poll example where the true population was

1 eventually revealed, the true population of citizens is never
2 revealed. We just treat that 100 as it's a given when we
3 allocate.

4 But it's a source of uncertainty in our ultimate
5 population -- our ultimate confidence interval or beyond the
6 ultimate confidence interval actually.

7 Q So with this block we were looking at, we are going to
8 allocate 100, but there's a possibility that the true
9 population is zero black citizens of Voting Age Population?

10 A Yeah. It could be very low. For social science purposes,
11 it could be twice what the point estimate is. We don't know,
12 and we don't have any way of knowing. We're just assuming it's
13 100.

14 Q Did you report how many of the block groups in Plan 1
15 include zero BCVAP in the confidence interval?

16 A That is --

17 Q Let's pull up page 15 of Defendant's Exhibit 7, and we can
18 zoom in on the text in the middle.

19 A Okay. Yes. So at 90 percent confidence, 15 of the 119
20 block groups have confidence intervals that include zero. At
21 95 percent confidence, 19 of the block groups have confidence
22 interval that include zero.

23 Q So at 95 percent, roughly one in every six block groups
24 were allocating BCVAP or there could be zero BCVAP?

25 A That's right.

1 Q Let's pull up pages 17 and 18 of Defendant's Exhibit 7.

2 And this is where you have a section titled, The ACS CVAP
3 Data Produces Bizarre Outcomes.

4 Can you describe your findings in this section as to the
5 block groups that are included in whole or in part, and could
6 you focus in on 2020?

7 A Yes. So if you -- again, we know the Voting Age
8 Population of the districts as of the 2020 census. And so we
9 can compare -- we also know that citizens of voting age are --
10 should be a subset of the Voting Age Population. Total
11 population residents who are at least 18, that's the VAP. And
12 then residents who are at least 18 who are citizens, that's the
13 Citizen Voting Age Population.

14 In District 7, using the 2022 -- the 2020 data, 33 of the
15 block groups have Citizen Voting Age Population that exceeds
16 the census Voting Age Population.

17 If you look at 2021, there's 44 such block groups; 2022,
18 there's 50 such block groups.

19 Because of most of this data is coming from before the
20 decennial census, I suppose if you really wanted to, you can
21 tell a story about population growth or decline, but the
22 Occam's razor is just -- it's a survey. There's error margins
23 involved with it. And in this case, it produced point
24 estimates that were higher than the actual Voting Age
25 Population.

1 Q We can pull that down.

2 So we talked earlier about how aggregating block groups
3 decreases the margin of error by increasing the sample size.

4 Does that same effect apply when we are disaggregating
5 block groups?

6 A Yes and no. I mean, we're reducing the population that
7 we're looking at, right? Let's say the block groups have
8 200,000 resident citizens in them of voting age, and you're
9 going to trim part of those split block groups out. So you go
10 from 200,000 to 190,000, let's say.

11 So in that sense, you're decreasing your end, your number
12 of observations that should increase the error margins.

13 The problem is there is good solid math on how to estimate
14 your error margins when you aggregate samples. So when we
15 combine these block groups together and build up, the math is
16 well established, well respected, *Daubert* proof on how to
17 aggregate.

18 There's no known way to calculate the error margin for
19 disaggregating. So we don't know exactly the effect of cutting
20 out these individuals when we split the block groups.

21 Q Is there an agreed-upon method for estimating how the
22 Citizen Voting Age Population is distributed when splitting a
23 block group?

24 A And I think in a very high level there's some agreement
25 about how it should be done, but when you get down into the

1 weeds, there's a bunch of different ways that well-respected
2 people have gone about it.

3 Q Do all of these methods rely on untestable assumptions?

4 A Yeah. It's the same -- it's the same problem, because we
5 never get to see the actual citizen population. We don't know
6 how good these techniques are. We think they're pretty good.

7 They make some degree of sense, but if you ask me, you
8 know, with a high degree of precision when you have a
9 50.16 percent BVAP district, how much of that 50.16 percent
10 could be ascribable to these aggregation -- or these
11 disaggregation techniques, no, there's no known failure rate.

12 Q So we talked about the sampling error. How does this
13 disaggregation error relate to the sampling error? Is it
14 encompassed within the sampling error?

15 A No. The sampling error is just the function of the
16 sample.

17 The disaggregation error is saying when we estimate how
18 many of those 100 citizens to put within the district or
19 outside the district, it's an estimate, and we could be wrong.
20 And there's no quantifiable way to say how wrong we are.

21 Q Are you endorsing any one disaggregation method as the
22 right one to use?

23 A No. I employed three different -- well, six different
24 methods. And they all gave mostly the same answer, which is
25 unsurprising, because they're mostly the same techniques with

1 variations on a theme.

2 Dr. Oskooii had a couple of other suggestions. I think
3 it's fine. There's different ways to do it. But the ones I
4 looked at tended to give similar answers.

5 Q Does your ultimate opinion in this case depend on what
6 disaggregation method is used?

7 A It really doesn't. Because no matter what we came up
8 with, it was within the error margin. And, frankly, the core
9 of the opinion is just that you have to take -- you have to
10 take account of this certainty somewhat.

11 And if it becomes difficult to calculate the error margin,
12 the uncertainty doesn't go away. It's still there. We're
13 still using census samples. And it goes to the reliability of
14 your testimony.

15 If you don't know what the degree of uncertainty for your
16 statement that it's 50.16 percent BVAP is, I mean, that's a
17 problem.

18 Q Do you know how Mr. Fairfax and Dr. Oskooii disaggregated
19 the block group level data to the block level?

20 A So my understanding is that Mr. Fairfax used a program
21 called Maptitude. There's also data that you can download for
22 -- from Redistricting Data Hub. At the time we did these
23 reports, it was available for 2020 and 2021. It went up for
24 2222 on Redistricting Data Hub June 28th, I think, of this
25 year.

1 But those are the metrics -- or the approaches they
2 suggested.

3 Q And so at the time you submitted your reports, you
4 wouldn't have been able to use Redistricting Data Hub's data to
5 do the 2022 estimates, correct?

6 A That's correct.

7 Q Do you have a problem with either of Mr. Fairfax's use of
8 Maptitude or Dr. Oskooii's use of Redistricting Data Hub?

9 A No, not at all. It -- from what I've seen, none of it
10 produces point estimates that come within the error margins of
11 50 percent. So you still can't say consistent with social
12 science standards that the BCVAP of the district is above
13 50 percent, no matter which you're using.

14 Q Just to be clear, you're saying the error margins
15 associated with their point estimates include 50 percent?

16 A Yes. No matter what, I haven't seen an -- you know, I
17 think we had the error margin at 90 percent at 2.6. I don't
18 think I've seen estimated BCVAP of these districts above
19 52.6 percent, which is what you would need to confidently say
20 as a social scientist, yes, it's above 50 percent.

21 Q Mr. Fairfax testified on redirect that he used two methods
22 of calculating CVAP, and he said that you apparently included
23 these in your reports. So I wanted to get your thoughts on
24 those methods.

25 So he first testified that he just looked at the block

1 groups that were wholly contained in the district. Did you use
2 this method to calculate SD7's BCVAP?

3 A No. No. That was something that we discussed earlier on.
4 I was -- I did break out the BCVAP for the block groups wholly
5 within and partially split. That wasn't to produce a point
6 estimate for the district. That was to illustrate that it
7 actually is kind of important how the black population in these
8 low BCVAP split block groups are allocated. That wasn't a
9 point estimate.

10 Q So we then looked at the whole block groups plus those
11 block groups that had greater than 50 percent of their
12 population contained within the district.

13 Did you use this method to estimate SD7's BCVAP?

14 A No. Again, that was a way to look at the BCVAP and you
15 saw it was below 50 percent -- again, this illustrates that to
16 get to 50 percent .16 or whatever the estimate Mr. Fairfax
17 comes up with, it depends how these split block groups get
18 allocated and the technique -- how confident we are in the
19 techniques that get used.

20 I used whole block groups to get the closest approximation
21 to an error margin for the district itself that I could come up
22 with, but not to produce a point estimate.

23 Q So I believe you testified earlier that you looked at the
24 racial demographics of the whole block groups versus the split
25 block groups and found that for the whole block groups, it was

1 about 50 percent, and for the split block groups, it was about
2 32 percent?

3 A That's right.

4 Q So for these two methods that we're talking about, is
5 Mr. Fairfax undercounting the split block groups with the lower
6 black percentages?

7 A Yeah. If he is only looking at the block groups within
8 the district or only looking, you know, using these techniques
9 to split it, then yes.

10 Q So that 2.6 margin of error at 90 percent confidence that
11 we have talked about for Senate District 7 in Plan 1, does that
12 account for the disaggregation error?

13 A Again, no, it doesn't. Any error -- any mistakes or poor
14 estimations as a result of the disaggregation process is a
15 source of error in addition to the sampling error.

16 Q Does that 2.6 percent account for the error associated
17 with having an incorrect starting point before a block group is
18 split?

19 A No. Again, everything with the disaggregation is in
20 addition to the uncertainty that comes from the fact that we're
21 taking a sample.

22 Q Is your opinion that the margin of error can only be
23 larger than 2.6 percent once you account for these two
24 additional sources of error?

25 A So you can tell -- again, it's one of these things that

1 you can tell a story that perhaps the block groups that you are
2 -- or the population that you're taking out, the variance is so
3 different that it overwhelms the reduction in population. It's
4 possible, I suppose. But the Occam's razor, the more commonly
5 used rule of thumb is that you go with the -- or the sample
6 size is the main driver of population. Maybe the part that's
7 cut out is radically different, but not likely.

8 Q Would that variance issue get the margin of error small
9 enough to exclude 50 percent from the confidence interval?

10 A Again, I haven't seen any estimate of an error margin that
11 suggests that the confidence interval would ever not include
12 50 percent plus 1 or would not include 50 percent.

13 Q Do you have any sense of how much additional error is
14 caused by disaggregation?

15 A Again, it's an unknowable source of error. This technique
16 doesn't have a known failure rate. So we just know that we're
17 taking an estimate, and we're hoping our assumptions are true.

18 Q Do you know how many block groups are split in
19 Mr. Fairfax's plans on average?

20 A I believe it was around 30. It varies from plan to plan.

21 Q So for each of these approximately 30 splits, are we
22 having to guess at how citizens are distributed in a split
23 block group?

24 A I'd prefer to say estimate. It's not a dart board, right?
25 Give it its due. It's a technique that seems reasonable, but

1 you are making assumptions that you can't test.

2 Q And so we don't have any way to know how good of an
3 estimate we've made?

4 A That's right.

5 Q Is the disaggregation error always this much of a concern
6 during redistricting?

7 A Not really. So we use this technique if we're --
8 sometimes precincts are split, and we want to know what, you
9 know, how -- we want to know how a district voted for Donald
10 Trump or Kamala Harris. And sometimes precincts are split, and
11 so you have votes, and you try to allocate those votes between
12 the districts.

13 At least in that situation, the number of votes you're
14 allocating is a known quantity, right? Donald Trump gets 600
15 votes in a precinct. That's not an estimate that has an error
16 margin associated with it like the Black Voting Age Population
17 in a block group.

18 The other thing is it's sometimes -- again, it's a
19 function of a number of block groups or precincts being split
20 and the overall size of the district. If you're looking at a
21 congressional district and one block group is split, it's
22 probably not going to have that big of an impact unless you're
23 like at 50.0001 percent BCVAP.

24 So, again, this is not intended to be a full frontal
25 assault on these different techniques. But when you're drawing

1 a district to 50.1 percent BCVP, it's close enough that this
2 uncertainty is important.

3 Q I'd like to go back to our earlier discussion from page 16
4 of Defendant's Exhibit 7. And if we could zoom in on that
5 table at the top.

6 Let's focus on that third -- that third block group
7 0023003.

8 What can we say about the true CVAP value based on the
9 point estimate of 15?

10 A Well, that's the most likely estimate or most likely value
11 that would produce the survey result that we saw. But there's
12 a lot of uncertainty around that estimate. About 90 percent of
13 the time, that range between 0 and 50 is going to include the
14 true population value somewhere within it.

15 Q Do we have more than one survey here?

16 A I'm sorry. What?

17 Q We've only run the ACS one time, correct?

18 A Right. So in the example I was using from Iowa or from
19 Real Clear Politics, we have multiple polls, which is what
20 allows us to get a better estimate of what the true population
21 value is.

22 Here, the census runs this -- what we'll conduct the
23 sample, and it reports one value. It's not going into the
24 field multiple times where you get, you know, nice things like
25 the law of large numbers or central limit theorem that help us

1 better estimate the true population value.

2 Q Can we rule out the possibility that this block group
3 contains zero CVAP?

4 A We can't entirely rule it out nor -- I mean, you can never
5 entirely rule something out. It's like when I'm teaching
6 sampling, I buy a large bag of Skittles, and we pass it around
7 the class, kids put on gloves, they can keep the Skittles and
8 eat them. But they pull out examples of seven Skittles.

9 Now, through a lot of experience, I have learned that the
10 colors of Skittles are about evenly distributed within a bag of
11 Skittles.

12 And what you see is -- you will generally get -- I want to
13 know how many yellow Skittles they have. And so the first
14 student will actually pull something out that has zero yellow
15 Skittles. Then the second student, their sample of seven
16 Skittles will pull two, and then the third student will pull --
17 have one in it.

18 And we kind of track this as it goes along. And as you
19 get more and more samples pulled, you see the average of those
20 samples converge on one.

21 Now, it's entirely possible that a student could reach
22 into the bag -- I have actually never had this happen -- but
23 it's entirely possible that a student could reach into the bag
24 and pull out seven yellow Skittles, just luck. If I do this
25 enough times, it will happen eventually.

1 And so it's possible you could do -- now, that's repeated
2 samples. If you do one sample, if you just plunge your hand
3 into a bag of Skittles and pull out a handful, it's possible
4 you could pull out a handful of 20 or 30 yellow Skittles and
5 nothing else. We'd probably have to do that a trillion times
6 before it happened.

7 The point is you can never really exclude all
8 possibilities on the basis of a single sample, because you just
9 might have gotten extraordinarily lucky in the result you
10 performed. What we do as social scientists is we say, well,
11 it's possible, but there's like possible, and then there's
12 possible.

13 Are we sufficiently confident that the result we got isn't
14 just a result of luck that we would rule out a possibility?
15 And that's what the error margins are trying to capture.

16 Q So with the error margin for this block group that we have
17 been looking at, let's use 90 percent confidence and we have
18 got a margin of error of 35 either way, do we know where the
19 true value is likely to fall within that margin of error?

20 A So within the error margin of 0 to 50 individuals, no, we
21 don't make statements about what's more likely than not the
22 population value within it.

23 15 is the most likely population value that produces the
24 poll result, but it's not the most likely value of the
25 population period.

1 This is where it gets a little counterintuitive. But when
2 you are doing this type of frequentist approach, you are always
3 making statements about the probability of getting this kind of
4 result.

5 How likely is it we would get a CVAP estimate of 15 if the
6 true population value were 175?

7 I mean, it's possible. It's just extraordinarily unlikely
8 that you would effectively draw 20 yellow Skittles at once.

9 But as between 49 or 32 or 1, that confidence interval
10 doesn't tell us anything about where the true population is.

11 Q Do these same statistical principles that we have been
12 talking about apply to the BCVAP point estimates that you got
13 for Senate District 7 in Plans 1 and 2?

14 A Yes. It's the same principle. 50. -- using Mr. Fairfax's
15 estimate, 50.16 percent is the most likely population value
16 that would produce the sample that the census came up with.
17 We're just not real confident in that.

18 Our -- probably between 48 percent and 52 percent roughly
19 is going to contain the true population value. Within that,
20 though, the confidence interval doesn't give you any
21 information about whether it's 48.1 percent or whether it's
22 51.5 percent. That's not how frequentist sampling works.

23 Q Can we just take the midpoint and assume that that's the
24 true value?

25 A So, again, that's tempting, because we kind of think about

1 meeting in the middle. But that's not what the error margins
2 are telling us.

3 Remember, the population is a true value that we don't
4 know that we're trying to basically conduct an experiment about
5 by taking a sample.

6 Our survey results will have a nice bell curve around the
7 true population value. It's not that the true population value
8 is bell curved distributed around the point estimate. A lot of
9 people make that mistake. But the true value is something
10 fixed out there that we can't know because we can't talk to
11 everyone -- usually can't know. And we're taking the sample,
12 and our samples will be distributed about it.

13 Within that error margin, no, you can't just take the
14 middle. Part of it, too, is that the error margins are
15 constructed by way of assumption of being bell curved shaped.
16 It doesn't tell us -- or being symmetric. That's a function of
17 the math of error margins, not the true population.

18 Q So using Mr. Fairfax's point estimate of 50.16 and your
19 lower error margin of 2.6 percent at 90 percent confidence,
20 does that error margin contain values below 50 percent?

21 A Yes.

22 Q Is it statistically consistent with the data to say that
23 SD7's true BCVAP percentage is below 50 percent?

24 A Yes. That's the problem is that because you're so close
25 to 50 percent and because of the error margins, as a matter of

1 social science, you can't say with sufficient confidence this
2 district is above 50 percent BCVP.

3 Q Dr. Trende, I would like to run you through a few things
4 that plaintiffs' experts testified to and see if their
5 statements comport with the statistical principles that we have
6 been talking about.

7 So in the context of racially-polarized voting, Dr. Liu
8 was asked whether he would be willing to conclude that there is
9 majority support for a candidate based on a point estimate of
10 51 percent. He responded that uncertainty could make that
11 support below 50 percent and that he would lack sufficient
12 empirical evidence to conclude racially-polarized voting?

13 MR. GENBERG: Objection, Your Honor. This witness
14 isn't here to talk about racially-polarized voting.

15 MR. SEISS: We are not talking about
16 racially-polarized voting. We are talking about statistical
17 principles.

18 MR. GENBERG: In the context of racially-polarized
19 voting, Your Honor, this witness hasn't been qualified as an
20 expert or submitted any opinions in this case on that.

21 THE COURT: So he can answer the question as to the
22 statistics, but not anything about the substance of
23 racially-polarized voting based on his qualifications.

24 THE WITNESS: That's right. That's Dr. Liu. I am
25 assuming he did a frequentist analysis. That's Dr. Liu saying

1 the exact same principle, the error margin includes a value, so
2 he can't rule out the possibility that that value or lower is
3 the true population value.

4 BY MR. SEISS:

5 Q Let's pull up page 8 of Defendant's Exhibit 5, which is
6 Dr. Hood's report.

7 Now, on cross, Dr. Burch was asked -- or sorry --
8 Dr. Burch was comparing Alabama's white high school attainment
9 rate of 89.8 percent with Louisiana's rate of 90 percent.

10 Do you see those two numbers in the chart, Dr. Trende?

11 A I do.

12 Q And Dr. Burch said that these values could be within the
13 error margin of each other, so they could be statistically the
14 same. Do you agree with her?

15 A Well --

16 MR. GENBERG: Your Honor, this isn't in his report,
17 either. And this material was available earlier, and he hasn't
18 opined on it.

19 THE COURT: I take it to be a question about
20 statistical testimony or testimony about statistical matters.

21 MR. SEISS: Yes, Your Honor. And that is the entire
22 subject of his report. This is clearly within the scope.

23 MR. GENBERG: He didn't disclose any of his opinions
24 in his reports.

25 THE COURT: I mean, I don't think he was asked to

1 offer any of these opinions. I think he is being asked now to
2 comment on testimony that's come in based on his qualification
3 as an expert. And you can certainly go into it on cross and
4 impeach it or come back at it in some way.

5 MR. GENBERG: Okay. Thank you, Your Honor.

6 THE WITNESS: So I see this is U.S. Census Bureau ACS
7 five-year data, which means it is a statewide sample. It is
8 going to have very small error margins. And if those error
9 margins -- but if those error margins do overlap the various
10 point estimates, then, yes, you wouldn't be able to say as a
11 matter of sound social science that there's a distinction.

12 BY MR. SEISS:

13 Q Let's pull up pages 10 and 11 of Plaintiffs' Exhibit 8,
14 and let's look at paragraph 19, which is going to span those
15 pages.

16 Perfect.

17 Dr. Trende, I will give you a minute to read this
18 paragraph.

19 Dr. Trende, have you seen this paragraph before?

20 A Yes.

21 Q Do you know where it's from?

22 A I believe it's from -- it's either from Mr. Fairfax's or
23 Dr. Oskooii's report. I think it's Fairfax's.

24 Q Do you agree with this paragraph?

25 MR. GENBERG: Your Honor, again, this not in his

1 report, and this was in Mr. Fairfax's report and his opinion on
2 this. This isn't in Dr. Trende's supplemental report, his
3 opinion.

4 THE COURT: So I've allowed him to testify about
5 statistical matters that are within the range of expertise that
6 he has been qualified in.

7 So I think if you want to ask the question about this
8 report, it has to be targeted to that specifically if he didn't
9 on the front end disclose an opinion about this paragraph.

10 BY MR. SEISS:

11 Q Dr. Trende, did you disclose an opinion about the
12 substance of this paragraph?

13 A Well, I believe my deposition I was -- this is from Dr. --
14 Mr. Fairfax's rebuttal, so I didn't really have in the
15 scheduling order an opportunity to respond to it. But at
16 deposition, we talked quite a bit about the meaning of a
17 maximum likelihood estimate, whether it would mean that a
18 district that's 50 percent plus 1 BCVAP was more likely than
19 not in fact 50 percent plus 1 BCVAP.

20 So to that extent, I talked about it extensively. But...

21 Q In your rebuttal report discusses whether we can make
22 probability statements based on our point estimate when -- when
23 the value that we care about is contained within the confidence
24 interval?

25 A That's right. So in the rebuttal report or in my

1 supplemental report, while I don't go directly head on to
2 Mr. Fairfax's conclusions, you know, there is a discussion
3 about what the meaning -- Mr. Fairfax cannot say with a
4 reasonable degree of scientific certainty Maptitude has a
5 majority Black CVAP which goes into some of this analysis.

6 MR. GENBERG: Your Honor, I move to strike that. He
7 says he didn't include this in his supplemental report. He did
8 have an opportunity to respond. He did submit a supplemental
9 report after his rebuttal report, and that opinion is not in
10 there.

11 THE COURT: Well...

12 MR. SEISS: This is entirely consistent with
13 everything Dr. Trende has said.

14 THE COURT: So Dr. Trende gets to testify about
15 matters that are within his expertise if they're -- if the
16 questions are specifically targeted to this expertise, which I
17 take this question to be.

18 I also gather that if it was discussed at the deposition
19 that there is no surprise about what he's about to say. Am I
20 right about that? I mean, that's part of why I made --

21 MR. GENBERG: Your Honor, I don't recall this
22 specifically being asked or there being discussion about
23 Mr. Fairfax's opinion.

24 MR. SEISS: This was briefed entirely in the *Daubert*
25 motions, the subject of summary judgment. This is not remotely

1 a surprise.

2 THE COURT: Well, and that's why I had the question
3 reframed from do you agree with this to something more specific
4 that was within the realm of his statistical analysis.

5 But I think for so long as he's been so qualified as an
6 expert in this area, he can answer questions fairly about the
7 statistical aspect of it and particularly if it's no surprise.

8 MR. GENBERG: Okay. Thank you.

9 THE COURT: Okay. But would you like a standing
10 objection?

11 MR. GENBERG: Yes, please.

12 THE COURT: Okay. Do you need the question again,
13 Dr. Trende?

14 THE WITNESS: Please. Thank you.

15 BY MR. SEISS:

16 Q Well, I'm happy to rephrase my question, but my question
17 was: Do you agree with this paragraph?

18 THE COURT: Well, but you do need to rephrase it to
19 the statistical matters that you're asking about.

20 BY MR. SEISS:

21 Q Okay. So let's break this down into the relevant
22 sentences.

23 So I see on the screen that Mr. Fairfax says that the
24 BCVAP of a majority-black district stands at a greater chance
25 of being larger than 50 percent than it is being lower than

1 50 percent.

2 Dr. Trende, is that correct as a matter of statistics?

3 A So this goes to -- to tie it into my previous testimony, I
4 had said that when you get a point estimate, that point
5 estimate is not a direct statement about the population. What
6 the point estimate -- what the point estimate is and what we
7 mean when we talk about the maximum likelihood estimate or the
8 best guess, is that it's the most -- it's the best -- it's the
9 most likely value that would produce the survey result that we
10 see.

11 You're not making direct statements about the population
12 ever in the frequentist analysis. This is something we went
13 through in great detail, painful detail at the deposition.

14 And so as you go from 50.1 to 50.2 to 50.3 in your result,
15 you're not making it more likely than not that the true
16 population is 50.1, 50.2, 50.3. You're saying, well, that's
17 the best guess of the population that would bring about this
18 survey result, but we have this error -- what do we mean by
19 best guess?

20 These error margins are how social scientists express the
21 degree of confidence. So, no, consistent with what I have
22 testified to before, it's not a question of more likely than
23 not.

24 The other thing is that the idea -- to tie it in again,
25 the idea of it being more likely than not based upon a point

1 estimate is tied into this thing that people sometimes can get
2 confused about that when you say 50.1 percent the population is
3 just as likely to be higher as it is to be lower.

4 No. The population is a fixed value, and it's the poll
5 results that come out around the population estimate. And so
6 the next poll is just as likely to be above the true population
7 value as it is below the true population value. That's
8 correct. It's not the case that increasing the point estimate
9 gives us a sense of where that population value itself is more
10 greater or less.

11 Q So we have one point estimate from the ACS, correct?

12 A That's right.

13 Q And there's a true value out there for the BCVAP of
14 Mr. Fairfax's Senate District 7?

15 A Yes.

16 Q Do we know which side of the true value that we've hit
17 with our poll estimate -- point estimate?

18 A No. Like I said, the proper interpretation of the error
19 margin is that the value is somewhere in that range of the
20 error margin, but we don't know or make probability statements
21 about where within that error margin the true population is.

22 We say we're pretty sure it's somewhere between, you know,
23 I think I said 48 -- call it 48.1 percent and 52.1 percent. It
24 falls somewhere in that range. But as social scientists, we
25 can't say more than that.

1 Q Dr. Trende, at the bottom of that paragraph, Mr. Fairfax
2 refers to any small estimated margin of error. In this
3 context, do you consider about a 3 percent margin of error to
4 be acceptably small?

5 A Well, it depends on what you're trying to do with it. If
6 you have a poll -- a survey result that comes out at 54 percent
7 or 57 percent in that, you know, the 50 percent threshold is
8 what's important, yeah. 3 percent error margin will get you
9 where you need to be.

10 If a district had been drawn up to 53 percent or
11 54 percent BCVP, I wouldn't be able to give this opinion,
12 because as a matter of social science, we would say with a
13 3 percent error margin, we're sufficiently confident it's above
14 50 percent. It's possible it's still not 50 percent, because
15 it is a survey sample. But for social sciences purposes, we're
16 sufficiently confident.

17 When you are only a couple of tenths of a point off of
18 50 percent though, even a three-tenths of a point error margin,
19 which is very small in the context of surveys, doesn't get you
20 where you need to be.

21 Q So we've -- we have about half a dozen point estimates for
22 Senate District 7 in Plan 1 for its BCVP percentage just using
23 the 2021 five-year data. Are all of those point estimates the
24 best approximation?

25 A No. They are given the techniques being used, the most

1 likely population value that would bring about the results that
2 we see. But they're all bounded by error margins.

3 Q But we can get a different point estimate depending on the
4 disaggregation method we use?

5 A Yes. So, again, we talked about how some of the census
6 blocks are within the district and some of them are without.
7 There's different ways you can use the census blocks to try to
8 estimate the true BCVAP.

9 Q And those are point estimate change depending on what
10 five-year ACS data we use?

11 A Yeah. So you get different answers for 2020 or 2021 or
12 2022 because some of it could be that the population is
13 changing, but they're also samples with error margins, and so
14 we expect them to come up different. Even if the population
15 had been unchanged, we would expect different results from the
16 different samples.

17 Q So Mr. Fairfax's estimate of the BCVAP for Senate District
18 7 was above 50 percent. Do you know what dataset he used for
19 that?

20 A So, again, my understanding is that he's using Maptitude
21 for redistricting and that, I believe, uses the Redistricting
22 Data Hub sample. But it's the Maptitude dataset.

23 Q What year ACS data was he using?

24 A I believe he uses 2021.

25 Q Did you notice a trend with the estimates for Senate

1 District 7 in Plan 1 using 2021 versus 2022 five-year data?

2 A Yeah. I noticed that in my point estimates the trend
3 tended to be that the BCVAP was declining in the district.

4 Q Did you opine about whether it would be likely that the
5 2022 data would produce a point estimate below 50 percent for
6 Plan 1?

7 A For Plan 1, I think that was consistent with trend.

8 Q Do we know how good of an approximation the best
9 approximation is?

10 A No. So it's technically true you can talk about the
11 maximum likelihood estimate or the point estimate as the best
12 guess. But saying that it's the most likely value that would
13 bring about the poll result we get is not the same thing as
14 saying it's more likely than not that's what the population is.

15 Q Do you think it is sufficient to rely on just a point
16 estimate above 50 percent to conclude that Senate District 7 is
17 more likely than not above 50 percent?

18 A It's really not consistent with social science. There may
19 be applications where we just don't -- like I said, there may
20 be some applications where we don't care about the error that
21 much because it's just not going to make a difference on our
22 conclusion. But for saying it is 50 percent plus 1 for making
23 that specific comparison, that hypothesis test, yes, it's
24 important.

25 MR. SEISS: Your Honor, I am at a good stopping point

1 if we want to take a break. I'm happy to keep going.

2 THE COURT: I think that sounds great. All right.

3 It's 10:33. Let's come back at 10:50.

4 (Recess.)

5 THE COURT: Please be seated. You may proceed.

6 BY MR. SEISS:

7 Q Welcome back, Dr. Trende.

8 A Thank you.

9 Q I would like the shift gears and talk about the section of
10 your report where you discuss people with disqualifying felony
11 convictions.

12 Why did you include this section in your report?

13 A So this was solely because Mr. Fairfax hadn't mentioned as
14 a justification for CVAP trying to get to the eligible voting
15 population. And the eligible voting population as used in
16 elections research includes non-disenfranchised citizens of
17 voting age.

18 So if the goal is really to get to the eligible
19 population, then you would have to come up with a way to
20 account for the felony disenfranchisement rate.

21 It also was relevant to me because I knew that Dr. Burch
22 had provided some work in her expert report about
23 disenfranchisement rates in Alabama that I assumed was relevant
24 to the areas under discussion in this case.

25 Q Are you asserting that the goal should be to only assess

1 the eligible voting population?

2 A No. No. The point here is just that if you are really
3 going to justify something with the voting eligible population,
4 you need to use the full voting population, which takes into
5 account disenfranchisement rates.

6 Q And what did you calculate the adjusted BCVAP value to be
7 when accounting for disenfranchised felons?

8 A So I used the rate from the date of the -- Dr. Burch was
9 using to estimate that if you -- so Dr. Burch reports that
10 8.6 percent of the voting eligible population is barred, but
11 for eligible black voters is higher at 14.7 percent. If you
12 were to apply those ratios, it would end up being 46.8 percent
13 for District 1.

14 Q Do you acknowledge that the actual disenfranchisement
15 ratio in Senate District 7 may be different than those
16 statewide ratios?

17 A Yes. That was intended as an illustration of the type of
18 analysis that you would have to do if you were trying to get at
19 the voting eligible population.

20 Like I said, I thought it was safe to use Dr. Burch's
21 numbers even though they were statewide, because I had presumed
22 it had something to do with the area being challenged. But at
23 the end of the day, it was offered as an illustration.

24 Q Are you offering the opinion that Senate District 7 in
25 Plan 1 is minority BCVAP when accounting for disenfranchised

1 felons?

2 A I don't think we have sufficient evidence to conclude that
3 one way or another. If we're trying to get to the voting
4 eligible population, though, that's something you have to
5 account for.

6 Q So Mr. Fairfax looked at registration data. If Senate
7 District 7 is above 50 percent black registered voters, would
8 that resolve your concern about disenfranchised felons being
9 included in the CVAP?

10 A I mean, that certainly gets at some of the eligibility
11 issues. It raises other ones that I think are more legal
12 concerns, but if nothing else, the registration numbers shift
13 over time and don't encapsulate all eligible voters.

14 Q What is your ultimate conclusion about whether
15 Mr. Fairfax's Senate District 7 in Plans 1 and 2 satisfy the
16 numerosity requirement?

17 A I don't think there's sufficient evidence as a matter of
18 social science to justify the claim that it's above 50 percent
19 plus 1.

20 The ACS data are polls. They're samples. And given the
21 uncertainty and the proper interpretation of that uncertainty,
22 you can't justify the claim based on the results that we see.

23 Q I will represent to you that Mr. Fairfax calculated the
24 BCVAP percentage for SD7 in Plan 2A to be 50.19 percent.

25 Do your conclusions apply to Plan 2A?

1 A So the error margins that we've seen across these
2 districts are consistently well above that two-tenths of a
3 point.

4 Regardless, that's something that he has to wrestle with
5 when he's proffering survey data to justify his claims. So
6 unless he has shown some error margin lower than .2 whatever
7 percent, then, no, as a matter of social science, you couldn't
8 make that type of claim.

9 Q Okay. So we've been talking about numerosity, but I would
10 like to shift gears to your analysis of various traditional
11 redistricting principles for Senate District 7 and the various
12 plans.

13 What does it mean for a district to be reasonably
14 configure?

15 A Well, that's -- that is a good question. It's something
16 that I think as an expert you wrestle with all the time. But
17 so my kind of hornbook answer that I know is that it's
18 reasonably configured when it comports with traditional
19 redistricting principles.

20 Q As a map drawer, do you think a district is reasonably
21 configured if race predominates?

22 A Again, as a hornbook law understanding having drawn maps,
23 no. The phrase predominates it's not reasonably configured.

24 Q What are traditional districting principles?

25 A So that's another good question where there's not

1 necessarily consensus. I think there's consensus on some
2 things. Your districts have to be contiguous. They have to be
3 compact. They have to be roughly equi populace.

4 Some people would add district cores. Some people would
5 add communities of interest. But the core understanding
6 compactness, contiguity, equi populace are probably the most
7 commonly agreed upon. Oh, and not splitting jurisdictions.

8 Q Did you offer the conclusion that Senate District 7 in
9 Plan 1 was unreasonably configured?

10 A For Senate District 7 in Plan 1, I did not.

11 Q What did you conclude at a high level about Senate
12 District 7 in Plan 1?

13 A So Senate District 7, obviously, there's the critique of
14 the numerosity requirement. There are some concerns that have
15 been raised about population compactness. I know this is a
16 disputed legal principle, but it was something I was asked to
17 look at.

18 Q And did you also look at the racial makeup of the
19 precincts included in Senate District 7 in Plan 1?

20 A Yeah. So there's two different looks at the -- two
21 different techniques I used to describe the dispersion of the
22 population when looking at the senate districts.

23 The first is choropleth maps. And the second are dot
24 density maps.

25 Q Okay. We will come back to those in more depth in a

1 little bit.

2 What about for Senate District 7 in Plan 2, did you
3 conclude that that district was unreasonably configured?

4 A Yes. Senate District 7 in Plan 2 starts to get a little
5 more far afield. You start to get compactness concerns about
6 the way it's drawn. The population within the district gets
7 very distended to the extent it's just -- its shape is
8 justified by traditional redistricting principles. You then
9 have to ask, well, why wasn't that included in District 1? So
10 these subsequent districts have, you know, become increasingly
11 distorted and less reliant on traditional redistricting
12 principles.

13 Q So do these analyses of redistricting principles provide
14 support for an argument that Senate District 7 is unreasonably
15 configured, but you don't offer that ultimate conclusion?

16 A Yeah. I have a thing -- and I know it's -- different
17 courts and different people take different approaches. I try
18 to avoid testifying to the ultimate conclusion.

19 I'm -- I'm more comfortable giving an opinion that things
20 are consistent with the conclusion or support a conclusion, but
21 that ultimate -- and maybe it's just having come up in
22 Virginia, but that ultimate testimony I was always taught was
23 the province of the courts.

24 Q So you did not directly analyze Plan 2A, correct?

25 A That's right.

1 Q Do the same -- does the same support for the argument that
2 Senate District 7 in Plan 2 is unreasonably configured apply to
3 Senate District 7 in Plan 2A?

4 A They're almost identical maps. So I don't see why it
5 would be any different.

6 Q Okay. And then for Senate District 7 in Plan 3, did you
7 conclude that there was support for the argument that that
8 district is unreasonably configured?

9 A Yeah. For Senate District 7 in Plan 3, we'll get some --
10 yeah. It is not -- I think it's -- there's substantial support
11 for a conclusion that it's not reasonably configured.

12 Q Is it correct that you did not analyze many of the
13 traditional districting principles that you talked about
14 earlier?

15 A That's right.

16 Q Do you feel comfortable concluding that there's support
17 for an argument that a district is unreasonably configured
18 without analyzing every traditional districting principle?

19 A Yeah. I mean, again, how to balance these factors is
20 ultimately I think -- it's a factual question for the fact
21 finder. But a district is always -- any competent map maker is
22 going to draw a contiguous district, I mean, or we aren't even
23 going to get to a trial phase.

24 Any competent map maker is going to draw a district that's
25 more or less equi populace. From an analytical perspective, I

1 don't see why you would get points for doing that on a
2 traditional redistricting principle. Your map is illegal if
3 you don't do that.

4 When you get to balancing compactness and communities of
5 interest, things like that, we start to have more of a
6 discussion. But I've never approached it and never previously
7 seen it approached as kind of like a box checking or
8 counting-up exercise.

9 Sometimes a map is so distorted that I don't think the
10 other things matter. I mean, the *Shaw vs. Reno* district was
11 equi populace. It was contiguous. It -- from a communities of
12 interest perspective, it followed roadways, which is one of the
13 -- one of the common justifications for communities of
14 interest. That district followed the roadway too well, because
15 for a long stretch of it, it was only I-85.

16 So, yeah, I think at a certain point, for example,
17 something becomes so badly compact that it becomes hard
18 whatever other its virtues to justify it as reasonably
19 configured.

20 Q Does a map drawer have to make tradeoffs between
21 traditional districting principles when drawing a map?

22 A Of course. That's inherent. And it becomes somewhat the
23 job of the fact finder I think to sort them out and see which
24 justifications are post-hoc rationalizations and which ones
25 hold water.

1 Q So how do you know that a traditional districting
2 principle that you did not analyze, how do you know that that
3 doesn't explain a low score on, say, compactness that you did
4 look at?

5 A Well, again, for these maps, it's kind of a unique
6 situation where you have an initially proffered district, and
7 there's a complaint about where the BCVAP is or the BVAP is,
8 and it becomes -- throughout these different variations, the
9 district becomes increasingly distended. The BVAP goes up.

10 If you are going to justify it from a communities of
11 interest point of view, say, well, that's not really racist.
12 This is communities of interest. In this unique situation, the
13 question is, well, why didn't you include those communities of
14 interest in the district the first go around? I mean, it's
15 really hard I think in this situation to do that.

16 Q Let's say you did report scores about splitting
17 communities of interest. Would you be able to tell if that was
18 a justification for a low compactness score just by looking at
19 those objective numbers?

20 A No. It's more fact intensive than that. We had an
21 instance in Virginia -- the Shenandoah Valley is a
22 long-standing community of interest in Virginia, and it's a
23 valley. So it's long. It results in a kind of distended
24 district.

25 It also was the case that splitting up the Shenandoah

1 Valley -- because it's heavily Republican. Both Republicans
2 and Democrats have used it as parts of gerrymanders. So there
3 were other reasons for trying to keep it together. But it's a
4 fact-intensive inquiry.

5 Q Mr. Fairfax testified that he's always balancing
6 traditional districting principles with complying with *Gingles*
7 1.

8 Is that something you can verify?

9 A I can't get in Mr. Fairfax's head. I just know the data
10 that I see before it and the progression of the maps. And I
11 draw my conclusions. I know he sat up here and gave his
12 accounting of what's going on. I can see the data. And it's
13 ultimately a question for the fact finder.

14 Q Can you verify Mr. Fairfax's opinion that his plan adheres
15 to traditional districting principles generally?

16 A Again, I'm not in his head, and he has some numbers that
17 he's put forward. But there's also this progression of the
18 district becoming increasingly distended as he's reaching out
19 to get other black residents included within the district that
20 I think is tough to square that circle.

21 Q I'd like to start by having you give an overview of the
22 three versions of Senate District 7 that you analyzed.

23 So let's pull up page 34 of Plaintiffs' Exhibit 6.

24 Dr. Trende, can you tell what this map shows?

25 A Yeah. So this is the Plan 1, Senate District 7. So it

1 starts in Huntsville, west Huntsville and Madison County, kind
2 of loops downward, goes to the west to Limestone County, and
3 then crosses over the river into Decatur to pick up the
4 population there in Morgan County.

5 Q Okay. Let's pull up page 16 of Plaintiffs' Exhibit 8.

6 Okay. Dr. Trende, can you tell what this map is?

7 A Yeah. So this is Illustrative Plan 2. You know, it
8 starts with -- it looks like it starts with the Illustrative
9 Plan 1, but it adds that kind of tail. It kind of reminds me
10 of a scorpion with a sting that kind of loops around and grabs
11 a population up there.

12 Q Does this district look similar to Senate District 7 in
13 Plan 1?

14 A The plan is similar. Senate District 7 in Plan 1 is --
15 again, it doesn't have that kind of appendage up at the top.

16 Q Lastly, let's pull up page 27 of Plaintiffs' Exhibit 8.

17 What is -- can you tell what this map is showing,
18 Dr. Trende?

19 A Yeah. So I hope the Court will excuse me. When you do
20 this long enough to keep your sanity, you kind of like see
21 shapes like clouds. So this is Illustrative Plan 3, District
22 7. And this looked to me -- I think I called it a baby dragon
23 with an overbite in flight. You can kind of see it has the
24 tail that we saw on the last version, and it loops around. You
25 have now this kind of wing pointing up towards Athens, and then

1 you can kind of see the right wing going down in Decatur as
2 we've seen before. Then it has this head now attached to it --
3 another appendage that goes out into Lawrence County.

4 Q Okay. We can pull that down.

5 Dr. Trende, I'd now like to examine your specific
6 conclusions on various traditional districting principles. And
7 let's start with population compactness.

8 What are you analyzing in your discussion of population
9 compactness?

10 A So with population compactness, again, this is -- I
11 understand there to be a legal disagreement between lawyers who
12 say, you know, you look at the population itself. Some lawyers
13 say, well, it's really a question of whether the district
14 itself is compact. And if the district itself is reasonable,
15 then by definition, the populations within it are compact. I
16 have no dog in that fight. That's for you all to fight about
17 and the courts to decide.

18 I'm going about it, you know, if we really are looking at
19 the distribution of the minority population within the
20 district, if that's important, what do we see.

21 Q So could you have a district that's shaped the same way
22 but the minority population is distributed in vastly different
23 ways?

24 A Yeah. So one way to think about it is this courtroom.
25 This courtroom is a nice square. It will have a Reock score of

1 .637 and a Convex Hull score of 1. I mean, the boundaries of
2 this room are compact.

3 But for the people within this room, you can imagine a
4 situation we're all clustered around the podium. And so the
5 people within the room are very compact. You can imagine a
6 situation like we have now, where the people are more evenly
7 distributed.

8 The compactness of the boundary doesn't change, but the
9 compactness of the population does. It's less compact.

10 You can imagine a situation where we divide up into
11 quarters, and we all each go into a corner of the room. Again,
12 the courtroom is just as compact as it was before, a Reock
13 score of .637, it's R-E-O-C-K, and a Convex Hull score of 1.
14 But now you have these like four distinct clusters of
15 individuals within the courtroom that aren't as compact as when
16 they were all around the podium. That's the idea.

17 Q How did you go about analyzing population compactness?

18 A So population compactness is -- you can look at it through
19 choropleth maps, which we'll see an example of, I imagine. I
20 think the better way for population compact -- I think the
21 choropleth maps are better for looking at what the intent of
22 the map drawer was.

23 The dot density maps are the better illustration of the
24 distribution of the population.

25 Q Is your opinion that choropleths and dot density maps

1 should be read in conjunction?

2 A Yeah. They tell you different things. The choropleth
3 shows kind of -- the choropleth shows you percentages, how
4 black or how white an area is. The dot density map shows you
5 the distribution of individuals within the district.

6 So they're telling you different complementary things.

7 Q Let's pull up page 25 of Defendant's Exhibit 7.

8 Is this the choropleth that you are referring to?

9 A That's right. So this is a choropleth map of Illustrative
10 Plan 1. And what I have done is fill in the precincts or VTDs
11 by their -- they're shaded by their BVAP.

12 So you can see there's this heavy cluster of black
13 residents in Huntsville that kind of gets carved out. There's
14 this tail that's not included in the district to the northwest,
15 but is kind of a hold that thought.

16 There's another group kind of in the center of the
17 district, and then a heavier concentration of black residents
18 or heavily black precincts in Decatur.

19 Q So I see the yellow color shows 30 percent next to it.
20 Are all those yellow precincts 30 percent?

21 A No. That's a limitation of the software. It should be or
22 less. These maps, I truncate the color schemes at 30 and
23 70 percent. Because from experience, I have found if you just
24 let it run from 0 to 100, you get a lot of -- the map kind of
25 gets overwhelmed by 100 percent or 10 percent precincts. That

1 tends not to be what we're interested in.

2 You lose -- if you don't truncate, you lose the
3 granularity in that 45 to 55 percent range where we tend to be
4 more interested.

5 Q So what does this map tell us about the compactness of the
6 black population in Senate District 7?

7 A So, again, I think it's not the best way to illustrate it.
8 It does show the kind of amount of carving up that's going on
9 here. But it also shows these kind of distinct groupings.
10 These are percentages, so it shows us these distinct groupings
11 of heavily -- of black residents mostly in Decatur and in
12 Huntsville.

13 Q Did you analyze the BVAP percentages of the precincts that
14 Mr. Fairfax included in Senate District 7 in Plan 1?

15 A Yeah. So if you look at the three counties here and you
16 count up the VTDs, every precinct in these three counties with
17 the BVAP in excess of 38 percent is included in the district.
18 And all but five BVAPs in excess -- all precincts with BVAPs in
19 excess of 25 percent are included within the district.

20 Q What should we conclude about the selection of those
21 precincts?

22 A I suppose it's possible to end up with that by chance, but
23 it strikes me as exceedingly unlikely that there was -- there
24 had to have been -- to me, had to have been heavy racial intent
25 on selecting which precincts go into the district and which

1 ones don't.

2 Q Let's pull up pages 26 and 27 of Defendant's Exhibit 7.

3 MR. GENBERG: Your Honor, we would strike that answer
4 to the extent he gives an opinion on racial predominance in
5 Plan 1. It's not included in his report, and he's already
6 testified he didn't have an opinion on that.

7 THE COURT: His answer was: I suppose it's possible
8 to end up with that by chance, but it strikes me as exceedingly
9 unlikely that there was -- there had to have been -- to me, had
10 to have been heavily racial intent on selecting which precincts
11 go into the district and which ones don't.

12 Mr. Seiss?

13 MR. SEISS: I don't remember the exact language in his
14 report on this.

15 MR. GENBERG: Your Honor, we believe it's only
16 population compactness analysis and not a racial predominance
17 plan for Plan 1.

18 MR. SEISS: Well, he certainly analyzes these
19 precincts. I'm trying to find that exact conclusion. But he
20 definitely looks at the precincts that are included in Senate
21 District 7.

22 That's fine, Your Honor. He does not offer that
23 conclusion in his report. So that's fine.

24 THE COURT: All right. I will strike that last
25 answer.

1 BY MR. SEISS:

2 Q Okay. Let's pull up pages 26 and 27 of Defendant's
3 Exhibit 7.

4 Dr. Trende, are these the dot density plots that you were
5 referring to?

6 A That's right. So one problem with the choropleth maps is
7 that they only give percentages. So you can have an area that
8 is, say, 100 percent white, but there's only one resident in
9 it. And that's important knowledge.

10 So the way -- or only ten residents let's say. That's
11 important to know. So the way we tried to account for that is
12 with dot density maps. And so with these dot density maps what
13 I've done is every -- or what the computer has done is every
14 dot that's blue represents ten black residents of voting age.

15 And every orange X -- the white population -- represents
16 10 white residents of voting age. The orange X is only
17 included to kind of illustrate where the overall population is.
18 So you can see -- sorry -- Redstone Arsenal that's quite a
19 large precinct, but it's actually almost entirely unpopulated.

20 The same is true with the Wheeler National Wildlife
21 Refuge.

22 So when we're looking at the choropleth maps of precincts,
23 not all precincts are built equally.

24 What you see with the choropleth -- or with the dot
25 density map is it illustrates more straightforwardly what was

1 suggested by the choropleths, that there's a heavy
2 concentration of black residents in Huntsville, there's kind of
3 a lighter concentration just to the west of the Redstone
4 Arsenal, and then it's more or less unpopulated territory as
5 the district winds through to connect all that up with the
6 black population of Decatur.

7 Q With dot density plots, do you have to decide what
8 population to layer first?

9 A You do. The way the software works is it goes through a
10 series of commands, and it will layer on the population. And
11 so since what we're most interested in, in this case is the
12 distribution or compactness of the minority population, that's
13 what I put on top so that you could actually see it.

14 The white population, again, just helps to illustrate,
15 well, there are people who live here. It's a populated area,
16 or no, it's completely unpopulated.

17 I probably should have mentioned the map on the left is
18 just for the district itself. The map on the right includes
19 the populations that are not within the district.

20 Q Let's pull up pages 11 and 12 of Defendant's Exhibit 8.

21 What do these maps show, Dr. Trende?

22 A So what these maps show is that this is -- this is Map 2
23 Illustrative District 7. And so what you can see now is that
24 tail that was added -- remember I said to kind of hold the
25 thought of that -- those precincts just to the northwest that

1 had 35 percent BVAP. Now that appendage has come out and
2 grabbed that black population northwest of Huntsville.

3 Now, that's the map on the left, which is the way that I
4 did in the first report.

5 There were objections in the rebuttal reports that said,
6 well, you know, you -- by putting the black population on top,
7 you make it I think more prominent and cover up what's going on
8 with the white population. And it's true. You get
9 overplotting when you do this.

10 Dr. Oskooii wanted to draw the map with the white
11 population on top.

12 Now, the question as I understand it is whether the
13 minority group is sufficiently compact. So I don't know how
14 much this map necessarily tells you. But I also produced the
15 map with the white population on top just to cover my bases.

16 Q Let's focus on the map on page 9 of Defendant's Exhibit 8.
17 And if we could zoom in on that.

18 Okay. So what does this map tell us about the compactness
19 of the black population in Senate District 7 in Plan 2?

20 A So it's exactly the same as with Plan 1. You have a black
21 population in Huntsville, the empty Redstone Arsenal, another
22 black population included next to the airport, some lightly
23 populated areas around the wild life refuge, and then a
24 population in Decatur.

25 All that really changes in this map is that that

1 appendage, that tail reaches up and now grabs a different
2 population northwest of Huntsville.

3 Q Did you also provide these dot density plots for Plan 3?

4 A I did.

5 Q Let's pull -- focus on the map on page 21 of Defendant's
6 Exhibit 8.

7 Now, does this map have the black population layered on
8 top of the white population?

9 A Yeah. So for the maps -- for the populations -- in the
10 report, I actually do a map, too, that just has the black
11 population laid out. But this has the black and white
12 populations, and it shows Map 3 District 7.

13 And so now you have got kind of the original
14 configuration, heavy population in Huntsville, black population
15 to the west of Redstone Arsenal, black population in Decatur,
16 kept the tail up to the north.

17 Now there's an arm that juts out to get to the black
18 population in Athens. And then that head in, you know, it's
19 kind of a racially-mixed area, but it picks up black residents
20 now out in the head, and I think that's Lawrence County.

21 Q Is there one compact black population in Senate District 7
22 in any of Mr. Fairfax's plans?

23 A I don't think you look at these maps and say that it is or
24 that there is. It's -- depending how you want to count it, two
25 or three populations at best stitched together. This map,

1 which is the one that actually does get above 50 percent plus 1
2 BVAP that avoids the CVAP problem, the sample problem, has
3 multiple populations that are sometimes separated by completely
4 unpopulated areas or by some heavily white areas in between.
5 Not one.

6 Q Let's pull up page 29 of Defendant's Exhibit 7.

7 And let's zoom in on that map.

8 What does this map show, Dr. Trende?

9 A Yeah. So this is the Montgomery district that was drawn.
10 And so you see kind of the same thing. There's a heavily
11 compact area in Montgomery itself. But then you get out into
12 the rural areas, and it's really just picking up, you know,
13 black populations here or there often amongst heavily white
14 areas.

15 Q We can pull that down.

16 Dr. Trende, plaintiffs and their experts have criticized
17 your population compactness analysis as being subjective and
18 standardless. Do you have a response to that?

19 A I mean, I think to a certain degree it is an eyeball test.
20 I have done enough work here to know that the Supreme Courts
21 identify -- or has endorsed eyeball tests in this context. It
22 doesn't have a nice clean statistical number like a Reock
23 score.

24 But at the end of the day, the Reock score is
25 standardless. All the Reock score is you draw a circle around

1 the district, what percentage of that circle would the district
2 itself fill? Reock score .25 tells you it files 25 percent of
3 that district.

4 What about a Reock score of .24, .23, filling 23 percent
5 of the district? I don't know. And you even get into this
6 some with Mr. Fairfax's report where he says, oh, the
7 compactness is, is lower, but it's, you know, comparable.
8 What's comparable? I don't know.

9 Now, I think there are extreme cases where you could say,
10 okay, it's a 60 percent Reock score versus a 30 percent Reock
11 score, but even that's kind of a gut intuition. It's not like
12 a 95 percent confidence interval where social science has kind
13 of established the bounds.

14 Q Let's talk about your analysis of the compactness of the
15 districts in Mr. Fairfax's plans.

16 How did you measure the compactness of the districts?

17 A So there are hundreds of different ways to measure
18 compactness. I used three. I used Reock, Polsby-Popper,
19 P-O-L-S -- okay -- and cut edges.

20 Q Let's pull up pages 12 and 13 of DX-8.

21 So I think you just explained what the Reock score was.

22 Could you explain your findings for the Reock measurement
23 for Plan 2?

24 A Yeah. So the Reock findings -- there's a couple of ways I
25 think you can do this. I know Mr. Fairfax relies heavily on

1 the plan-wide average. So the Enacted Map Reock is .395. On
2 average, those districts fill 39.5 percent of the minimum
3 boundary circle.

4 The mean Reock score for Mr. Fairfax's Map 2 is .38. And
5 Reock scores range from 0 percent -- range from 0 to 1 with 1
6 being more compact.

7 Q So the Enacted Plan is more compact by Reock on a
8 statewide basis?

9 A That's right.

10 Q What about just focusing in on the districts in northern
11 Alabama?

12 A Okay. So this is one where I didn't think it through. I
13 talked about northern Alabama without thinking that that's
14 actually like a physio geographic region. So when I talk about
15 northern Alabama, I mean, like the districts that Mr. Fairfax
16 changes in the northern portion of the state to separate it
17 from the changes that he makes around Montgomery. So I don't
18 -- I don't mean like where the current fifth district is or
19 something like that.

20 So if you look at just Districts 1, 2, 3, 6, 7, 8, 9, 10,
21 and 17, those are the districts he actually changes to make
22 this work around Huntsville.

23 Those districts, the mean Reock score on the Enacted Map
24 is .422. The mean Reock score on Mr. Fairfax's Map 2 for those
25 districts is .354. So it's a more pronounced change than the

1 plan-wide metric, which makes sense because plan-wide, he keeps
2 a majority of the districts the same.

3 If you keep a bunch of districts the same, if you don't
4 change them, you are not going to effectuate a large difference
5 in the average, because a lot of the values are going to be the
6 same.

7 And that's a problem. Because you might have one district
8 that you change radically and make its Reock score much worse.
9 That's going to be covered up by 20 districts that don't get
10 changed that are identical.

11 Q So do you find the regional mean to be more useful in this
12 context?

13 A Well, it depends what the Court's interested in. But if
14 we're focusing more around the area where the alleged Voting
15 Rights Act violation occurs, then it makes sense to me that you
16 in focus there. You look at the districts that Mr. Fairfax
17 changes, and there's a more substantial difference in the Reock
18 scores.

19 Q Let's pull up the Enacted Plan, which is page 2 of
20 Plaintiffs' Exhibit 58 side by side with Plan 2, which is on
21 page 14 of Plaintiffs' Exhibit 8.

22 How did the Reock scores change in northern Alabama at the
23 individual district level?

24 A Well, so for example, you can see that District 7 is made
25 .03 points more compact under the Reock score in District 1,

1 which is in the Lauderdale County, the far northwest, doesn't
2 really change that much. It's made a little bit more compact.

3 Then you can compare something like what Mr. Fairfax does
4 with District 3, which goes from a Reock score of .59 to -- in
5 the Enacted Plan to .23, which is a substantial difference, I
6 think, by any definition in the compactness of the district.

7 District 2 goes from one with a Reock score of .664 to
8 .505.

9 Q Can we zoom in -- there we go.

10 Could you just discuss visually why Districts 2 and 3
11 become less compact moving from the enacted to Plan 2?

12 A So if you look at districts -- is this -- this isn't the
13 enacted.

14 Q No.

15 A I'm sorry.

16 Q That's right. Yes. On the left one, could you go to page
17 2 of Plaintiffs' Exhibit 58?

18 Page 14 of Plaintiffs' Exhibit 8 and then zoom in on that
19 top portion.

20 Dr. Trende, can you talk about why Districts 2 and 3 score
21 low on the Reock?

22 A So Reock scores punish how distended a district is.
23 Again, it's the percentage of a circle surrounding the district
24 that it fills. And so with District 3 -- and I know I'm not
25 supposed to use hand gestures because the court reporter can't

1 write it down, but you can imagine the circle around District 3
2 that inscribes the circle, and there's a lot of that area, you
3 know, that circle around District 3 is going to go up into the
4 7 and 9 and down into Cullman and Blount Counties.

5 A lot of that circle is going to be empty. And so that's
6 how you get that poor Reock score because of how stretched out
7 District 3 becomes to accommodate that shape of District 7.

8 Q Okay. Let's pull that down and talk about the
9 Polsby-Popper metric. What does Polsby-Popper measure?

10 A So if Reock scores measure how distended or oval'ish a
11 district is for lack of a better word, Polsby-Popper says, no,
12 what we're really -- it captures a different aspect of
13 compactness.

14 Polsby-Popper looks at the perimeter of the district. The
15 idea is as the district gains more arms or inlets, that might
16 not affect the Reock score that much, but from a common sense
17 perspective of compactness, it's probably become more or less
18 compact.

19 So as you get more arms and inlets, the perimeter of the
20 districts will increase. And so the ratio -- the relevant
21 ratio here is the percentage of a circle with the same
22 perimeter as the district that the district itself would fill.

23 Q So you can imagine a district, and we stretch that out to
24 create a circle; is that right?

25 A Exactly. You kind of pop the district out until it's

1 circular shaped, measure the area of that circle, and compare
2 that to the area of the district itself.

3 Q Let's pull up page 14 of Defendant's Exhibit 8.

4 What were your findings as to Plan 2 regarding
5 Polsby-Popper?

6 A So this is a situation where the average Polsby-Popper
7 score of the plan declines from .257 to .245. But if we focus
8 in on the districts that Mr. Fairfax actually changes -- call
9 it northern Alabama, call it -- to make the Huntsville map work
10 -- it's a more substantial decline. It goes from .306 to .24.

11 Again, District 3 goes from a Polsby-Popper of -- well,
12 it's not even in the ten least compact districts in the Enacted
13 Plan to being the fourth least compacted in the proposed 1.
14 The Polsby-Popper score of District 7 itself declines from .14
15 to .134.

16 Q And is District 9 now in the top ten least compact?

17 A Yeah. Again, District 9 wasn't in the least compact
18 districts in the Enacted Map. And now it appears as one of the
19 ten least compact districts in the state.

20 Q And then lastly, what is the cut edges metric?

21 A So this is a newer metric. It's one proposed by Dr. Moon
22 Duchin. I know it was used in the congressional case, but the
23 idea is that all the blocks can be connected -- all the census
24 blocks in a map can be thought of as being connected by lines
25 or edges as they're called in graph theory.

1 And the way that you form a district, you can
2 conceptualize it as removing those edges until there are no
3 edges connecting one group to the rest. That's the idea behind
4 -- it's pretty abstract.

5 Long story short, under this metric, the fewer edges that
6 you remove, the more compact a map is thought to be. And since
7 it was used in the congressional, I thought it was appropriate
8 to reference it here.

9 Q And cut edges can be measured at both the block and the
10 precinct level?

11 A That's right.

12 Q And what were your findings regarding Plan 2 as to the cut
13 edges metric?

14 A So when you're using census blocks, the Enacted Map
15 removes 8,862 edges, Fairfax Map 2 removes 9,059. And if we
16 are looking at those northern Alabama districts or, you know,
17 around the Huntsville the districts that were changed in the
18 Huntsville cluster, the Enacted Map removes 1,652 edges,
19 Fairfax Map 2 removes 1,974.

20 Q Let's pull up Plan 3 now, which is on page 25 of
21 Plaintiffs' Exhibit 8.

22 And if you could zoom in on the top third of the state.

23 Dr. Trende, at a high level, what did you find about the
24 compactness of the districts in Plan 3?

25 A So in Plan 3, I mean, District 7 has become very

1 non-compact to the extent you can make any claim about -- put
2 any type of vary on compactness.

3 But overrule, the mean Reock score of the map goes down
4 from .395 to .377.

5 If you are looking in just the districts that are changed
6 in that northern Alabama cluster, it goes from .422 to .345.

7 District 7 itself now appears as the third least compact
8 district on the entire map using Reock and the second least
9 district on the map -- second least compact district on the map
10 using Polsby-Popper.

11 Q What do you think explains this additional decrease in
12 compactness?

13 A Well, it's obvious if you imagine the minimum -- the
14 circle that goes around the district. Now it's going to go up
15 into Tennessee and go well down into Cullman County. And
16 because that district is so stretched out and Reock scores
17 punish stretched-out districts, that's going to hurt the
18 compactness of it.

19 And, again, because it has appendages that tail, that arm
20 -- or that wing going up into Athens, the head of it, the
21 perimeter of the district is increased quite a bit, as well.
22 It has become more narrow, less stocky, and with more
23 appendages, and all those things are punished by the metrics
24 that are used.

25 Q So did District 3 become less compact -- sorry.

1 Did Plan 3 become less compact than Plan 2 in terms of
2 Polsby-Popper and cut edges, as well?

3 A Yeah. So the cut edges -- sorry. The Polsby-Popper
4 declines from .257 to .249 overall. Focusing just in on
5 northern Alabama, it goes from .306 to .259. As I said,
6 District 7 is now the second least compact district on the map.

7 Using Polsby-Popper, the Enacted Map removes 8,862 edges
8 whereas Fairfax 3 removes 8,978. At the precinct level, it's
9 the same story. And it's the same story precincts or blocks
10 focusing in on the northern districts that are changed.

11 Q Now, Mr. Fairfax analyzes the Convex Hull metric in his
12 report. What does that metric analyze?

13 A So the Convex Hull metric is -- the best way to think
14 about it -- well, Convex Hull says -- you remember I used the
15 example of this courtroom and said the Reock score would be
16 .637. What Convex Hull would say is, well, what's so special
17 about circles? This is a nice blocky area with straight lines.
18 Why would we say this is not compact?

19 So the best way to think about Convex Hull is snapping a
20 rubber band around the district, and you ask how much of that
21 rubber band would the district fill. So if you snap a rubber
22 band, a big rubber band around this courtroom, the courtroom
23 would fill 100 percent of it because there aren't any arms and
24 outlets.

25 But as, you know, if you were to somehow pull that wall in

1 and push this wall in, the rubber band would stay the same, but
2 the courtroom would fill less of it. So the Convex Hull score
3 would decline.

4 It measures -- we already have two measures of how dimpled
5 or extended a district is with Convex Hull and Polsby-Popper.
6 So it just seemed kind of cumulative, and I don't think it
7 gives a different answer.

8 Q But you don't have a problem with that compactness metric?

9 A No. There are literally hundreds of different ways to
10 measure compactness. Polsby-Popper and Reock are probably the
11 most popular.

12 Q Okay. I'd now like to move on to your -- and we can pull
13 that map down.

14 I'd now like to move on to your conclusions about racial
15 predominance in Mr. Fairfax's Plans 2 and 3.

16 How did you assess racial predominance?

17 A So, again, racial predominance is often -- you look at the
18 shape of the district and how it's carved out. I think racial
19 predominance is best examined with the choropleth maps.

20 I think it's a little easier here because you have this
21 progression of maps where there's an objection to the BCVAP
22 being too low, and Mr. Fairfax comes back with another district
23 that's a little more distorted, adds an appendage. That
24 increases the BCVAP. Adds another one that adds another
25 appendage that gets the VAP up.

1 I think the story line that these are race-neutral
2 decisions are not heavily driven by race is difficult to tell,
3 especially when you look at the overall shape of the district
4 and how it was drawn.

5 Q Let's pull up page 16 of Defendant's Exhibit 8.

6 Are these the choropleths that you're referring to?

7 A That's right.

8 Q What do these choropleths show us?

9 A So these choropleth maps show you how Mr. Fairfax drew the
10 district. Again, they are shaded by the BVAPs of the district.

11 So you can see the original demonstration or illustrative
12 District 7 didn't have that kind of scorpion's tail at the top.
13 You can say, well, why, why would you do that? I mean, it
14 wasn't included the first time. So it's hard to say that there
15 was some critical community of interest that justified them
16 together, and then you say, oh, those were two of the five
17 precincts with the BVAP above 30 percent that weren't included
18 the first time around. Now they are.

19 And you have this district that really -- I mean, with
20 surgical prevision, cuts out the heavily black precincts in
21 Morgan, Limestone, and Madison Counties.

22 Q And that bottom map shows the same thing at the block
23 level?

24 A Yeah. The bottom map is census blocks. It's a little bit
25 more granular. It still allows us to see empty census blocks

1 because they're shaded white. But, again, you can see just how
2 precisely things are carved out here.

3 Q What is your ultimate conclusion about racial predominance
4 for Senate District 7 in Plan 2?

5 A I mean, I think you have to look at everything overall and
6 say race -- I can't say with 100 percent confidence because I'm
7 not in Mr. Fairfax's head, but almost certainly predominated in
8 the drawing of these district lines.

9 Q Did you come to that same conclusion as to Plan 3?

10 A Yeah. I think Plan 3 is even more straightforward.

11 Q Let's pull up the choropleths for Plan 3, which are on
12 pages 27 and 28 of Defendant's Exhibit 8.

13 And if we could zoom in on those two.

14 Or we can just focus on the first one. That's fine.

15 What do these choropleths show us, Dr. Trende?

16 A So this is the district as drawn for demonstration Map 3,
17 this is illustrative map 7. And it shows now the district has
18 extended over into Lawrence County to take in most of the black
19 population over there. It has almost every -- it takes in
20 every precinct with a BVAP over 30 percent in the three
21 counties before and almost every precinct with a BVAP above
22 30 percent in Lawrence County.

23 Q What did you report regarding the specific precincts that
24 were included in Senate District 7 in Plan 3?

25 A Yeah. So I took all the precincts in the four counties

1 and ranked them by BVAP percent, highest Black Voting Age
2 Population, second highest, third highest, and so forth.

3 You know, by the time you get down to the 40th, you're
4 down to like 25 percent BVAP. So adding those precincts would
5 actually lower a 50 percent BVAP district.

6 And Mr. Fairfax's map includes almost all of the precincts
7 with the highest BVAPs in those four counties. The only
8 exceptions were the ninth highest BVAP, which is actually --
9 there was a small blue dot on the previous map far away from
10 the district boundary that didn't get included. And then
11 you're into the 17th, 22nd, 36th, 38th, 39th, and 40th. Again,
12 it's really a surgical cutting out of the heavily black
13 districts while avoiding the heavily white precincts.

14 Q You can pull that down.

15 Did you look at the precinct splits in this plan?

16 A Yeah. So he does have four split precincts. And so where
17 he chose to split precincts, I treated them as separate
18 precincts.

19 Q How does the BVAP percentage change if you make any of
20 those precincts whole?

21 A The precincts are made whole, the BVAP for the district
22 falls below 50 percent.

23 Q And that is for any one of the four precinct splits?

24 A That's right.

25 Q Are there many ways to draw Senate District 7 to be

1 majority BVAP?

2 A I mean, you can look at the map, and you can see it's
3 included -- there's much left -- there's an infinite -- a near
4 infinite number of maps that can be drawn, so I can't exclude
5 the possibility. I don't think there's another -- and you can
6 do some nibbling around the edges that change a precinct here
7 or precinct there. But this is the basic configuration it has
8 to be to get to 50 percent plus 1 BVAP.

9 Q Let's pull up Figure 4 on page 30 of Defendant's Exhibit
10 8.

11 Is this what you're showing here, Dr. Trende?

12 A Yeah. So what I have done is I have shaded every precinct
13 with a BVAP above 25 percent that is not included in the
14 district. And so you can see way down at the bottom, there was
15 a heavily black precinct, the ninth heaviest in the four
16 counties that wasn't included, but it's far away way from the
17 district boundary.

18 There are some other precincts you could have added and
19 subtracted one elsewhere that would have worked. I'm not
20 saying there's no other way to do it. There's just not many.

21 Q The district would have the same basic shape; is that
22 fair?

23 A Yeah. I don't see how you'd do it because especially like
24 once you remove the Redstone Arsenal which has no population
25 and you start going through Madison, heavily white precincts in

1 Madison, I just don't see how you do it.

2 Q Okay. We can pull that down.

3 Mr. Fairfax testified that he looked at socioeconomic data
4 and linked similar areas together. Does that change your
5 opinion on racial predominance?

6 A No, not really for kind of two reasons.

7 The first is that socioeconomic status in this country
8 correlates with race. And so if you draw a map heavily on the
9 basis of race, you're going to have distinctions, or you're
10 going to find commonalities in education level and income
11 because of the way our society is structured.

12 The other thing is that it's hard to draw a map on the
13 basis of median household income or home value. Those values
14 are reported to the census tract level, not even down to the
15 block group level.

16 So you don't get -- even the rough degree of granularity
17 you get with the CVAP data, as opposed to the precincts, which
18 give us for Voting Age Population precise detail on what the
19 racial makeup of your district is going to be for BVAP.

20 MR. SEISS: Your Honor, just to give an update, I am
21 pretty close to the end, and I think we should push through
22 instead of breaking for lunch at 12:00.

23 THE COURT: That's certainly fine by me.

24 BY MR. SEISS:

25 Q Okay. Next, Dr. Trende, did you analyze the counties that

1 were split in Plan 3?

2 A Yeah. So one thing that stood out -- and, again, this
3 goes to why was that head of the dragon added to the district?

4 Fairfax Map 3 District 7 splits an additional county. It
5 now splits four counties, and it's the only district in the map
6 that does that.

7 Q Then how did the number of county splits compare in Plan 3
8 versus the Enacted Plan?

9 A Well, there's some -- in Plan 3, there's more county
10 splits. There's also some -- yeah. More splits.

11 Q 21 versus 19?

12 A 19.

13 Q Does that sound right?

14 A 21 versus 19. That's right.

15 Q Let's pull up a side by side of the Enacted Plan and Plan
16 3. And the Enacted Plan should be on page 2 of Plaintiffs'
17 Exhibit 58. And then Plan 3 is on page 25 of Defendant's
18 Exhibit 8.

19 While we have these two -- so what do these two maps show?
20 Which maps are these two?

21 A Let's see. On the left, it's Illustrative Plan 3; on the
22 right, the District 7 doesn't have a tail, so that would be
23 Illustrative Plan 1.

24 Q Can you tell what additional counties are split moving
25 from Plan 1 on the right to Plan 3 on the left?

1 A Well, you can tell that Lawrence County is now split
2 between district --

3 Q 6?

4 A Yeah, District 6 and District 7. The other county that
5 gets split is Lauderdale County up in the northwest is now
6 split between Districts 1 and 6.

7 Q We can pull those or -- we can pull those maps down.

8 Dr. Trende, what did you find regarding Senate District
9 7's composition regarding county splits?

10 A It's the only district in the state that splits four
11 counties. It also doesn't have any whole counties within it,
12 which I believe all except one or two of the illustrative plans
13 -- if they're in multi-county districts, they're anchored in a
14 whole county.

15 It's -- it increases the number of county splits.

16 Q Okay. The last thing that I want to talk about are your
17 effectiveness analyses.

18 Let's pull up page 28 of Defendant's Exhibit 7.

19 Dr. Trende, can you just talk generally about what this
20 analysis is?

21 A So what this does is it takes the ecological inference
22 estimates for a district and then kind of perturbs the BVAP
23 level to see how many races would be won at different levels of
24 BVAP.

25 So, for example, Illustrative District 7 performs well

1 down into 20 percent of BVAP at current levels of support for
2 democratic candidates before it starts to drop off.

3 Q Are these findings consistent with your analyses for Plans
4 2 and 3?

5 A Yes.

6 Q Is there any reasonable dispute about whether
7 Mr. Fairfax's Senate District 7 will perform for the
8 black-preferred candidate at BVAP percentages below 50 percent?

9 A I don't think so. I mean, there was some -- at least
10 based on the record, there was some shifts in black voting
11 rates in the 2024 elections, but that's not in this record and
12 probably not enough to make a difference here.

13 Q Okay. We can pull that down.

14 Dr. Trende, what is your ultimate opinion regarding
15 whether Mr. Fairfax's Senate District 7 satisfies *Gingles* 1?

16 A I think in Maps 1 and 2, there are serious problems with
17 using the CVAP estimates in this context. I don't think you
18 can say with reasonable degree of scientific certainty that
19 these districts are 50 percent plus 1 CVAP.

20 As to Districts 2 and 3 specifically, there are problems
21 with the way that they're configured, and there are deviations
22 from traditional redistricting principles that I think can only
23 be explained by subordinating them to racial considerations,
24 particularly in Map 3, which adds in additional county splits,
25 and is basically at that point one long appendage.

1 Q Thank you, Dr. Trende. I have no further questions.

2 THE COURT: All right. This seems like a natural time
3 for our lunch break. It is 12:03. Let's come back at 1:15.

4 (Recess.)

5 THE COURT: Good afternoon, everybody. Please be
6 seated.

7 You may proceed.

8 MR. GENBERG: Thank you.

9 CROSS-EXAMINATION

10 BY MR. GENBERG:

11 Q Good afternoon, Dr. Trende.

12 A Good afternoon.

13 Q I'd like to quickly clarify a few points in your
14 background.

15 You received your Ph.D. last year; is that correct?

16 A Yes.

17 Q And apart from the one article you've listed in your CV
18 under the heading of publications, are there any other articles
19 of yours that have gone through the double blind peer-reviewed
20 process where an editorial board has determined the article is
21 suitable for publication in a journal?

22 A No.

23 Q Do you hold a tenure track faculty position with the
24 university?

25 A No.

1 Q Let's discuss data from the American Community Survey or
2 ACS.

3 You don't think ACS CVAP data is unreliable, correct?

4 A Not as a general matter, no.

5 Q And you think it's fine to use CVAP data, right?

6 A Yes.

7 Q In your report, you found the ACS reports more CVAP than
8 decennial census reports VAP in certain block groups, but in
9 the illustrative districts, you found that VAP was larger than
10 CVAP, correct?

11 A I think that's right, yes.

12 Q In your previous redistricting work as an expert and
13 Special Master, you have never expressed a concern that issues
14 with 2020 ACS data collection compromised the reliability of
15 2021 or 2022 ACS five-year estimates, correct?

16 A No. No. In the context in which they were being used, it
17 wasn't an issue.

18 Q And you are not aware of any CVAP data that is more
19 reliable than the data produced by the Census Bureau and the
20 American Community Survey, correct?

21 A That's correct.

22 Q And you're also not aware of any alternative to the ACS
23 for Citizen Voting Age Population data, correct?

24 A That's right.

25 Q Okay. Let's talk about Black CVAP.

1 What you have seen in other cases is that CVAP has
2 typically been applied to large Hispanic populations, correct?

3 A That's right.

4 Q And you have no opinion about whether when it's proper to
5 apply outside of that scenario, correct?

6 A That's right.

7 Q Okay. Let's pull up PX-336, please.

8 Did you write this memo?

9 A So as long as we assume that you could be in the plural, I
10 will say yes. It was a coauthored piece between me and
11 Dr. Grofman.

12 Q Okay. Who did you cowrite this memo for?

13 A Dr. Grofman. Oh, we co-wrote it for the Chief Justice and
14 Justices of the Supreme Court of Virginia.

15 Q And you wrote this memo as a Special Master redrawing
16 Virginia State House and State Senate districts, correct?

17 A That's right.

18 Q Okay. If we could go to page 8, the third paragraph.

19 Dr. Trende, could you please read that?

20 A Yeah. We also observe that the NAACP memo has called
21 attention to differences between CVAP estimates of
22 African-American proportions taken from 2019 ACS data and VAP
23 estimates taken from the 2020 census.

24 We would simply note that, A, we have examined both VAP
25 and CVAP data, and, B that the presence of non-citizen Latinos

1 and Asian Americans in a district can raise the Black CVAP
2 share above the black VAP share, making it a useful metric for
3 assessing a district's actual electorate.

4 Q And you co-wrote this memo with the statement and signed
5 the memo, sent the memo to the Supreme Court of Virginia
6 containing this statement?

7 A Yes.

8 Q And you -- if we could got to the bottom of page 26.
9 Yeah, and 27, too, please.

10 And could you read what's on the screen starting with "as
11 above?"

12 A As above, we now report the BVAP populations to better
13 align our numbers with numbers being used by other groups. We
14 note, however, that the actual electorate would probably be
15 slightly more heavily African-American due to higher rates of
16 non-citizenship among Hispanic and Asian American populations.

17 Q And your memo offered that statement to the Supreme Court
18 of Virginia, correct?

19 A Oh, sure. It's not a *Gingles* 1 analysis. We were doing a
20 performance analysis. I think that's entirely correct.

21 Q Let's talk about -- we can take that down -- thank you.
22 Let's talk about your opinion regarding disqualifying felony
23 convictions.

24 You calculated that eligible voting population for a
25 district refined by excluding those with disqualifying felony

1 convictions by referencing a figure in Dr. Burch's report,
2 right?

3 A That's right.

4 Q If we could pull up PX-11 and go to the final paragraph on
5 page 18.

6 The estimates you relied upon come from data from the
7 Sentencing Project, correct?

8 A Correct.

9 Q And you are aware that those estimates are for the state
10 of Alabama as a whole, correct?

11 A That's right.

12 Q And other than speculating about Dr. Burch's intentions,
13 you had no reason to believe the statewide percentages are
14 equivalent in the greater Huntsville area, correct?

15 A That's true.

16 Q And you did no analysis yourself to ascertain these
17 figures at the local level?

18 A Oh, that's right.

19 Q Let's pull up your CV that's DX-7, page 31 of the report.
20 And scroll down to previous expert testimony, and this
21 continues for multiple pages.

22 In your previous redistricting work as an expert or
23 Special Master, you have never expressed the opinion that the
24 eligible voting population should be refined by applying
25 statewide data ratios to a district level, correct?

1 A Can you say that again a little slower?

2 Q Sure. In your previous redistricting work as an expert or
3 Special Master, you have never expressed the opinion that the
4 eligible voting population should be refined by applying
5 statewide data ratios to a district level, correct?

6 A That's correct.

7 Q And in your previous redistricting work as an expert and
8 Special Master, you have never removed disqualifying felony
9 convictions from the CVAP or VAP count of an illustrative
10 district, correct?

11 A That's correct.

12 Q You also did not analyze voter registration data by race
13 and ethnicity in this case, right?

14 A That's correct.

15 Q Okay. Let's turn to your effectiveness analysis.

16 You concluded that Illustrative Districts SD7 and SD25
17 would elect black-preferred candidates in all three maps,
18 correct?

19 A That's right.

20 Q And you testified that 2A is an almost identical map to
21 Map 2?

22 A That's right.

23 Q Do you have any reason to believe that 2A would also not
24 be effective --

25 A No.

1 Q -- for black voters?

2 Your report says you relied on Dr. Liu's statewide race
3 data to determine white votes for black-preferred candidates,
4 correct?

5 A I don't know that I did that because I ran my own
6 ecological inferences.

7 Q Do you want to look at page 25 of your initial report?

8 A Yes.

9 Q The report page.

10 A Yeah. Maybe I misunderstood your question, because I
11 don't see anything here that's what you just asked me about. I
12 used the races that he used, but I don't use his estimates. I
13 first performed the EI -- I first performed the ecological
14 inference analysis that Dr. Liu performed.

15 Q And you don't contest the accuracy of Dr. Liu's analysis;
16 is that correct?

17 A That's correct.

18 Q So you did not look at voting patterns and turnout for
19 black and white voters outside of illustrative districts,
20 correct?

21 A That's right.

22 Q In order to lower the Black Voting Age Population from
23 over 50 percent to 25 percent, you would have to move black
24 people out of the district and move white people in from
25 outside the district, correct?

1 A Yeah, that's right. This is just a theoretical exercise
2 that I -- a Court had signed off on had roughly -- in North
3 Carolina at roughly the same time I was doing this report, and
4 so it was included in the report, as a kind of theoretical
5 exercise to see exactly where the threshold is that the
6 district would perform, I think it's useful. But you're right,
7 to actually lower the BVAP to 25 percent, it would have to be a
8 different district.

9 Q Okay. And so you did not look at whether the white people
10 coming in would have the same voting patterns and turnout as
11 white people moving out?

12 A That's right. It's the threshold at which the district
13 had drawn as drawn would perform.

14 Q And you did not look at whether the black people who you
15 would be moving out would have the same voting pattern and
16 turnout as the black people remaining, correct?

17 A That's correct. The exercise as I understand it just
18 looks at the district as drawn to determine the threshold at
19 which it would perform.

20 Q Okay. And in fact, there is a district with a 29 percent
21 Black Voting Age Population, Senate District 2 on the Enacted
22 Plan that's in the Huntsville-Decatur area, you didn't assess
23 whether that district has been performing for black voters, did
24 you?

25 A I did not.

1 Q And there's a 23 percent Black Voting Age Population
2 district, SD7 in the Huntsville-Decatur area, and you didn't
3 assess whether that district has been performing for black
4 voters either, correct?

5 A No, I did not because -- I did not.

6 Q And in the Montgomery area, there is a 29 percent BVAP
7 district, SD25, and you didn't assess whether that district has
8 been performing for black voters, correct?

9 A That's right.

10 Q Okay. All right. Let's talk about point estimates.
11 You agree that the point estimate is the maximum
12 likelihood estimate of CVAP in a district, correct?

13 A That's right.

14 Q What percentage confidence do you believe is appropriate
15 to declare Illustrative District 7 to be majority Black CVAP in
16 your opinion?

17 A I mean, using the standards traditional in the discipline,
18 it would be either 90 or 95 percent.

19 Q In your view, a plaintiff using CVAP for an illustrative
20 map must produce a supermajority district, correct?

21 A It depends on what the error margin is.

22 Q Well, in all cases, it would be higher than 50 percent?

23 A Well, right. Supermajority, at least when I did stuff in
24 elections, is like 60 or 66 percent. And, no, you could draw
25 out here around 53 percent CVAP, and it would -- you would have

1 sufficient confidence that it's, in fact, majority CVAP. But
2 that's just baked into the fact that you are relying on survey
3 data instead of the direct apportionment or enumeration from
4 the actual census data.

5 Q So for argument's sake, let's assume you can both
6 calculate a confidence interval in this case, and you correctly
7 calculated the confidence interval here, okay?

8 The only two confidence intervals you did calculate
9 purport to tell us that we can have either a 90 percent or
10 95 percent level of confidence that the true number is
11 somewhere between the confidence intervals you calculated,
12 correct?

13 A Yes.

14 Q If we had a confidence interval at 98 percent, then the
15 confidence interval would be even wider and include more
16 numbers on either side of the point estimate, correct?

17 A That's right.

18 Q And on the other hand, if you had a confidence interval of
19 75 percent instead of 90 percent, your band would be narrower
20 and tighter around the point estimate, correct?

21 A That's right. It also wouldn't be in keeping with the
22 standards of the discipline. We wouldn't consider it reliable.

23 Q What discipline is that?

24 A Political science. Basically every social science.

25 Q Here, the only confidence intervals you attempted to

1 calculate are confidence intervals of 90 percent or 95 percent,
2 correct?

3 A That's right.

4 Q Okay. And let's pull up DX-5, page 8.

5 You were asked about this data on your direct, Dr. Hood's
6 report.

7 Dr. Hood did not report error margins or confidence
8 intervals around these ACS data point estimates, correct?

9 A That's right.

10 Q Okay. Let's go back to the CV, DX-7, page 32, 33, and 34.

11 Is it possible to do side by side? Three pages -- let's
12 do 32 and 33.

13 Other than this case, you cannot identify any cases that
14 are contained in your CV in which you criticized an expert for
15 failing to calculate margins of error associated with minority
16 CVAP data, correct?

17 A That's right. Yeah. Most of them that are trying to --
18 most of these cases involve Voting Age Population where there
19 isn't error margin involved, or they involve situations -- if
20 they do involve the CVAP, they involve situations where the
21 error margins or the confidence intervals just aren't really
22 relevant.

23 Q And how did you determine the confidence intervals weren't
24 relevant in those cases?

25 A Well, they aren't *Gingles* 1, so you aren't doing a direct

1 comparison. The only one that was *Gingles* 1 was the Coca case,
2 which is on the next page. And like I said, maybe I committed
3 expert malpractice by not looking to verify that that
4 70 percent district that Dr. Oskooii drew didn't have a
5 21 percent confidence interval.

6 But it is what it is.

7 Q Did Dr. Oskooii draw any districts in that case,
8 illustrative districts that were less than 70 percent?

9 A Yeah. But it didn't matter, because he only needed one.
10 It was a challenge to a multi-member district. And you only
11 need one *Gingles* district to get your districts, your
12 single-member districts as I understand it.

13 Q So because it didn't affect the result, you didn't bother?

14 A Like I said, maybe I should have. But we didn't look at
15 numerosity at all in that case.

16 Q You did not report error margins when you presented
17 minority CVAP percentages to the Arizona Independent
18 Redistricting Commission, correct?

19 A That's right. So like I said, there were experts for the
20 map drawers that were doing any demonstrations districts or
21 anything of that nature.

22 For our purposes, we were past that. We were looking at
23 final maps that were implemented. There was some discussion
24 that I can't entirely go into about how to present this, and
25 the way that it comes out is that we do point out that the

1 point estimates have error margins, but because we aren't at a
2 *Gingles* 1 stage, it's not as crucial as it is here to establish
3 the districts are 50 percent plus 1. That has to be done
4 otherwise.

5 Q And in that instance, you did not report the error margin
6 for a 50.4 percent Hispanic CVAP state legislative district,
7 correct?

8 A We did not. That's right.

9 Q And you told the Arizona Independent Redistricting
10 Commission that this district was majority Hispanic, correct?

11 A We did. We also said the districts had error margins
12 associated with them.

13 Q You didn't believe that the commission needed to know the
14 confidence intervals even though that's what you do in all
15 social sciences?

16 A Oh, that's right. Because if we were doing -- if we were
17 doing a *Gingles* 1 illustrative map where we were trying to
18 prove numerosity for purposes of the Voting Rights Act, I think
19 that that would be a major weakness possibly fatal of that
20 memo.

21 But we were dealing with a final map, and there is not
22 agreement on whether the final districts need to be 50 percent
23 plus 1. I think most people take the view they just have to
24 perform. And so, no, we did not report those.

25 Q Now, in the *Palmer* case in Washington, you drew a district

1 with a Hispanic CVAP point estimate above 50 percent as part of
2 your proposed remedial districting plan in that case, correct?

3 A Right. We were at the remedial phase. The Court had
4 already ruled on *Gingles*, and there was a lengthy record of
5 using point estimates, so...

6 Q And you calculated Hispanic CVAP estimates of 50.3 percent
7 and 51.1 percent for your proposed remedial district, correct?

8 A That's right.

9 Q And in that case, your counsel wanted you to draw a
10 majority Hispanic CVAP district, correct?

11 A Yes.

12 Q And you testified to the *Palmer* court that this district
13 that had a Hispanic CVAP point estimate only .3 percent and
14 1.1 percent higher than 50 percent was indeed a majority
15 Hispanic district, correct?

16 A That's right. Like I've said throughout this, it really
17 depends on the context in which you are. We were way past
18 *Gingles* 1 numerosity inquiries at that point. And from what I
19 could see, the 50 percent threshold didn't have the legal
20 significance that it has as we sit here.

21 Q Is it your view that the remedial phase you can make
22 representations to the Court that you don't know to be
23 accurate?

24 A No. But if you have a lengthy history that's been
25 established of using the point estimates in a case, the

1 remedial phase is a little late -- amount of collateral attack
2 on the data.

3 Q Even though that's what you would do in the social
4 sciences?

5 A If it were a key conclusion in a peer-reviewed literature,
6 yeah, you would report it.

7 Q And there wasn't a key conclusion in the *Washington* case?

8 A No, because it was a remedial district. We had already
9 established numerosity, or they had. I wasn't in the case at
10 the point, I guess.

11 Q You didn't think that it was a key conclusion even though
12 you were asked specifically, was it a requirement that your
13 remedial district was over 50 percent, and you testified that
14 that was correct, you didn't think it was critical?

15 A No. I actually didn't understand the defense attorney's
16 interest in the 50 percent threshold, but I don't -- sometimes
17 to my dismay, I don't get to dictate the legal strategy, so...

18 Q And in that case, you testified that your counsel wanted
19 the number to be above 50 percent, you said that to the Court,
20 right?

21 A Yeah. He did.

22 Q You said that to the Court, correct?

23 A I did. The counsel wanted it to be above 50 percent.
24 That's absolutely correct.

25 Q And you testified to the Court that that was the case, and

1 you still don't think it was critical?

2 MR. SEISS: Your Honor, objection. Asked and
3 answered.

4 THE COURT: You could -- how much more do you have on
5 this?

6 MR. GENBERG: Last question.

7 THE COURT: You can answer that one.

8 THE WITNESS: It wasn't critical. It was something my
9 lawyer was interested in. The case had been going on for over
10 a year using point estimates, and we were we well beyond
11 *Gingles* numerosity. I don't think there's any legal
12 significance to whether that district is 50.1 or 49.9 percent
13 Hispanic because it's a remedial district. Everyone agreed it
14 would perform in the performance is what was really important.

15 BY MR. GENBERG:

16 Q In fact, the *Palmer* court in Washington issued an opinion
17 in March that described your maps of population shifts as,
18 quote, misleading, closed quote, correct?

19 A Yeah. So there were maps that were introduced that showed
20 the number of individuals -- so this is something completely
21 different than the line of questioning you've been pursuing.

22 But the -- there were maps introduced that had the census
23 blocks that were moved in each district shaded in. And the
24 Court made the point, which is true, that area doesn't -- land
25 doesn't vote, individuals do.

1 The next table on the next page in my expert report had
2 the count of the number of individuals who were moved. So I
3 don't know if the lawyers arguing it didn't put that table up
4 and close, I don't know. But I completely agree that from that
5 map, you can't deduce the number of people being moved.

6 Q And the *Palmer* court also went on to note that Dr. Oskooii
7 had provided the Court with, quote, a more apt representation
8 of the magnitude of the population shift, closed quote; isn't
9 that true?

10 A Yeah, that's right.

11 Q And Courts have found your testimony to be unpersuasive
12 before, correct?

13 A Oh, yeah.

14 Q You were an expert in a Kentucky congressional
15 redistricting case *Grand v. Adams*, correct?

16 A That's right.

17 Q And you offered opinions there about the pairing of
18 certain communities in districts, correct?

19 A That's right.

20 Q And the Court there found your testimony self-serving and
21 unreliable, correct?

22 A It did.

23 Q You agree that there is uncertainty in calculating a
24 margin of error for the illustrative district because the
25 district's boundaries split block groups, correct?

1 A That's right.

2 Q And your estimation of the error margin is based on the
3 block groups included in the district in whole or in part?

4 A That's correct.

5 Q For the partially contained block groups, you did not
6 account for the split in those block groups, correct?

7 A Well, like I said, there's no way to -- we know the math
8 for aggregating error margins. There isn't math for
9 disaggregating it.

10 Q Let's talk about how you calculated the margin of error.

11 For all of your Black CVAP calculations you coded using R,
12 correct?

13 A That's right.

14 Q What commands did you put into the software?

15 A I don't remember. It's several hundred lines of code, if
16 not thousands. I don't remember.

17 Q You import libraries?

18 A Yes.

19 Q Commands to reading data?

20 A That's right.

21 Q Commands to interpret data?

22 A Yes.

23 Q What data did you input?

24 A I used the data from the Census Bureau for the Citizen
25 Voting Age Population. The Voting Age Population is taken from

1 the Census Bureau through its API. Shape files I think are
2 also taken from the Census Bureau in this case.

3 Q And you wrote original code to perform some of your
4 analysis of Black CVAP?

5 A Some of it, yeah.

6 Q And it took you approximately five hours to write the code
7 for all of your Black CVAP calculations, correct?

8 A Yeah.

9 Q And there's a potential for error in those steps that
10 could change the results, correct?

11 A Sure.

12 Q Your code has not been peer-reviewed, correct?

13 A I don't think -- yeah. I don't think any code in these
14 cases ever gets peer-reviewed. But, no, it hasn't been.

15 Q After filing your report in this case, you calculated
16 margins of error in the *Pierce* case in North Carolina, correct?

17 A That's right.

18 Q And, in fact, every Black CVAP margin of error number you
19 presented in your August 16, 2024, report in the *Pierce* case
20 was wrong because of coding errors you made, correct?

21 A It was two districts, but, yeah. That was different code.
22 You can bet that the first thing I did was go back and check
23 this after I checked the code in that case.

24 Q And your error in the North Carolina case in calculating
25 the Black CVAP margin of error, that was in your client's

1 favor, correct?

2 A It was.

3 Q And you calculated Black CVAP margins of error in this
4 case, correct?

5 A Yes.

6 Q Let's pull up the code.

7 Does this appear to be a true and correct copy of the code
8 you provided to counsel?

9 A I believe so.

10 Q Now, let's turn to page 9 at the bottom of the page.

11 What is the code that starts with 1 over Y calculating?

12 A I believe that is the error margin.

13 Q And you learned that this was the formula you should use
14 from the Census Bureau's ACS handbook, correct?

15 A I think so, if that's what this is. It's not annotated,
16 so...

17 Q Let's pull up the ACS handbook, chapter 8 and turn to page
18 6.

19 In the sentence beginning, "If we define the proportion."

20 A Yes.

21 Q Is this the formula that you used in your code?

22 A Yes.

23 Q Let's put the ACS handbook and your code side by side.

24 Does your code have a plus sign where the ACS has a minus
25 sign?

1 A Yes.

2 Q Would changing a minus -- changing a minus sign to a plus
3 sign would inflate your error margin calculation, correct?

4 A No. Because you are taking the square root, and you're
5 squaring decimals.

6 Q Changing a minus sign to a plus sign would change your
7 margin of error calculation, correct?

8 A It would change it.

9 Q Okay. Let's discuss your Black CVAP estimates.

10 First, you have relied on the Redistricting Data Hub in
11 your work as an expert, correct?

12 A That's correct.

13 Q And you agree that the Redistricting Data Hub is a
14 reliable source for redistricting data, correct?

15 A Yeah. I think it's where I get the political data for
16 this case from.

17 Q And you are not aware of any errors in the way
18 Redistricting Data Hub carries out its methodology to
19 disaggregate CVAP data down to the block level, are you?

20 A No. The disaggregation is something where there's
21 differences of opinion about how to do it, but I don't think
22 there's any flat out errors in it.

23 Q You don't have any reason to question the accuracy of
24 Maptitude's Black CVAP point estimate calculations, correct?

25 A Well, like I said, there's always uncertainty we can't

1 quantify in how the aggregation disaggregation works, but
2 within that bound, I think it's -- with that kind of caveat, I
3 think it's fine.

4 Q But you have no reason to question the accuracy of the
5 data they use?

6 A I don't understand the difference between what you asked
7 this time and last time or what my answer was.

8 Q Okay. You used the same black CVAP estimation methods for
9 estimating Black CVAP in Fairfax Plans 1 and 2, correct?

10 A Yes.

11 Q If we could pull up your supplemental report, DX-8. I
12 think page 4 of the report, 4 of the report.

13 Does this chart list the six methods you used for
14 estimating Black CVAP in the Illustrative District SD7 for
15 Plans 1 and 2?

16 A Yes.

17 Q And are the percentages, your point estimates of Black
18 CVAP in Plan 2's Illustrative District SD7?

19 A I'm sorry. Can you repeat that?

20 Q Are the percentages listed, your point estimates of Black
21 CVAP in Plan 2's Illustrative District SD7?

22 A Yes.

23 Q So all of your point estimates are Plan 2's Illustrative
24 District SD7 are over 50 percent with the exception of the
25 Capped Method 1 using the 2021 five-year ACS data, correct?

1 A Yeah, that's right.

2 Q Okay. Let's start with Full Method One. In this method,
3 you applied an overall citizenship rate for all races and
4 ethnicities in your calculation, correct?

5 A Yeah. I got the citizenship rates at the block group
6 level and applied those to the census blocks.

7 Q And using the total Citizen Voting Age Population
8 percentage, you are assuming for the purpose of your
9 calculation that the citizenship rate is the same regardless of
10 the race, correct?

11 A It's the same across the district.

12 Q And you have no opinion about whether the citizenship rate
13 for non-Hispanic white people and people with Hispanic ancestry
14 in the Huntsville region is similar, correct?

15 A I haven't looked at it, so, no.

16 Q And you have no opinion about whether the citizenship rate
17 for black people and people with Hispanic ancestry in the
18 Huntsville region are similar, correct?

19 A That's right.

20 Q Assuming the black citizen rate were significantly higher
21 than overall citizenship rate in the Huntsville region, then
22 the Black CVAP point estimate would be at least somewhat higher
23 than your estimate using this overall citizenship rate method,
24 correct?

25 A I don't think so. Especially since these other metrics

1 break it out separately by race and are actually lower than
2 what we get here. I don't think that's right.

3 Q So your testimony is that the Black CVAP point estimate
4 would not be even at least somewhat higher if the black
5 citizenship rate were higher than the overall citizenship rate?

6 A My testimony is I know that Method 2 in the EI expand
7 approach calculate the black citizenship rate different --
8 separate from the overall CVAP citizenship rate, and they end
9 up with lower point estimates generally than Full Method One.

10 So I'm not going to say with certainty one way or another
11 what would happen if you did Full Method One in some
12 hypothetical different way.

13 Q Okay. Let's look at the deposition transcript.

14 PX-29, page 89, line 24.

15 You were deposed in this case, correct?

16 A That's right.

17 Q And in May of this year?

18 A That's right.

19 Q Starting with line 24 to page 90.

20 And you were asked at the deposition: Assuming the black
21 citizenship rate was significantly higher --

22 You were asked at the deposition: Assuming the black
23 citizenship rate was significantly higher than the overall
24 citizenship rate in the Huntsville region, what effect would
25 that have on your calculations? And you answered: Ah, the

1 BCVAP point estimate would be at least somewhat higher than
2 using this technique.

3 I asked that question. You gave that answer, correct?

4 A Yes.

5 Q Let's turn to your Method 1 Capped. If you would turn
6 back to page 4, DX-8.

7 This method uses the overall citizenship rate like the
8 Full Method 1, correct?

9 A Right.

10 Q And then it caps CVAP in those block groups, which report
11 higher CVAP than VAP so that the total CVAP number does not
12 exceed the total VAP, correct?

13 A I'm sorry. Your co-counsel was talking, so I couldn't
14 hear your question.

15 Q The Cap Method caps CVAP in those block groups, which
16 report higher CVAP than VAP so that the total CVAP number does
17 not exceed the total VAP, correct?

18 A That's right.

19 Q Okay. Let's turn to Method 2 population weighted. That's
20 page 4 of DX-8, page 4 of the report.

21 A Yes.

22 Q This method uses Black CVAP at the block group level and
23 total VAP at the block level, correct?

24 A Correct.

25 Q Not block level BVAP data, correct?

1 A Can you --

2 Q This method uses Black CVAP at the block group level and
3 total VAP at the block level?

4 A This method weights -- Method 2 population weighted looks
5 at the overall CVAP rate and applies it across groups.

6 Method 2 weights separate looks at the citizenship rate
7 overall in the block group, and then it looks at the
8 citizenship rate for black individuals in the block group and
9 weights that way.

10 Q Okay. I'm just talking about the block level data that
11 Method 2 population weighted uses. That's total VAP, correct?

12 A When they're weighted -- in Method 2, when it's population
13 weighted, it's weighted by the black -- or by the total
14 population. When it says they're weighted separately, it's
15 weighting the black population calculating the rates
16 differently.

17 Q Okay. And when you're using total VAP, you're assuming
18 the race is the same in each block within the block group,
19 correct?

20 A Yeah. So I'd just gotten out of that *Washington* case with
21 Dr. Collingwood, and he had done it using the overall
22 citizenship rate without calculating separately for each
23 individual minority group.

24 So I -- I kind of anticipated an objection to that. So I
25 did it both ways to see if I would get a radically different

1 answer, and I didn't.

2 Q In your analysis of Map 1's Illustrative District SD7, you
3 did not include the racial category black and combination with
4 American Indian or Alaskan native in your Black CVAP estimate,
5 correct?

6 A For Map 2, I don't think that's right. When I --

7 Q My question was Map 1.

8 A Okay. I'm sorry. I had Map 2 in front of me.

9 So when I did Map 1, the first time I ran it, I ran it
10 with American Indian included. Then I looked at Dr. Fairfax's
11 appendices, and I didn't see -- unlike for Map 2 and 3 what we
12 got later, I didn't see the column for American Indian
13 included. So I actually took it out of my code for Map 1 to
14 match up with what it appears that Mr. Fairfax had done for Map
15 1.

16 I happen to know because the first time around that I ran
17 it, I included the black and American Indian category that it
18 doesn't change the answer, but the reported numbers don't
19 include that category because that's what I believe Mr. Fairfax
20 was using.

21 Q Well, including the black and American Indian or Alaskan
22 native CVAP in your Black CVAP estimate would have increased
23 the number at least marginally, correct?

24 A Well, sure. That's why I did it that way the first way
25 around until I looked at Mr. Fairfax's appendices, and it

1 didn't look like he was including the black and American Indian
2 category or subcategory.

3 Q And that increase in Black CVAP could be approximately
4 half a percent, correct?

5 A I mean, it could be. I was just following Mr. Fairfax.
6 If you look at his appendices for Maps 2 and 3, it's obvious
7 that he then does include those categories.

8 Q Let's discuss your opinions regarding the compactness of
9 the black population within the illustrative districts.

10 Your determination that the black population in Huntsville
11 and Decatur are discrete groups does not include a mathematical
12 computation of the distance between these -- to use your words
13 -- discrete groups, correct?

14 A That's right. There's not a really great metric that at
15 least scales from 0 to 1 that can be used for this.

16 Q So your determination that the block -- black population
17 in Huntsville and Decatur are discrete groups is not based on
18 anything other than your eyeball assessment at their location
19 on the map, correct?

20 A Yeah. Like we discussed in my testimony at the
21 deposition, the Supreme Court's blessed eyeball tests in this
22 area, and I would like for there to be a more potentially
23 rigorous answer. But, again, even using Reock scores or
24 Polsby-Popper scores that have numbers, those differences
25 between .25 and .24 and .23 don't have a 95 percent confidence

1 interval or something like that that's a widely-accepted
2 cutoff.

3 Q Are eyeball tests blessed in the social sciences?

4 A No. But the Supreme Court gets its say.

5 Q Now, you tried to represent minority population
6 compactness using the moment of inertia method in the recent
7 state legislative redistricting case in Louisiana, correct?

8 A Yeah. That didn't go so well.

9 Q And the Court find your population compactness analysis to
10 be, quote, fundamentally flawed, closed quote, correct?

11 A Yeah. The exact word was "useless," which is a good
12 reason not to try it here.

13 Q Let's pull up your report, DX-7 at the bottom of page 23,
14 the report, page 23, the report, and discuss your visual
15 assessment, and continue on to page 24.

16 Beginning with "as you can see," could you read what's on
17 the screen?

18 A As you can see, the district picks up a substantial,
19 compact black population in Huntsville. It then bypasses the
20 populated heavily white portions of Madison to cut across the
21 unpopulated Redstone Arsenal before picking up another cluster
22 of black residents to the west of the arsenal.

23 It then cuts across additional lightly populated areas
24 around the Wheeler National Wildlife Refuge before turning
25 southward and picking up additional black residents in Decatur.

1 In other words, the district is a collection of three
2 compact clusters of black residents separated by a corridor
3 containing empty or mostly white areas of the counties.

4 Q Okay. Let's break this down bit by bit starting with the
5 district including a substantial compact black population in
6 Huntsville.

7 When you conducted your analysis in this case, you did not
8 consider that the senate map drawer, Mr. Hinaman, had testified
9 that the community in the center of Huntsville is a community
10 of interest, correct?

11 A No.

12 Q And you are not aware that the black community in
13 particular in the center of Huntsville was determined by
14 Mr. Hinaman to be a community of interest, correct?

15 A No. I can believe that it was. It's a compact black
16 population in Huntsville.

17 Q You then write that the district bypasses Madison.

18 The Enacted Plan places Madison in a district separate
19 from Decatur and downtown Huntsville, but you did not examine
20 whether the state's Enacted Plan united Madison with downtown
21 Huntsville, correct?

22 A No, I didn't analyze the Enacted Plan at all because it's
23 not a *Gingles* demonstration district.

24 Q In fact, the Enacted Map has much of downtown Huntsville
25 in District 7 and Madison in District 2, correct?

1 A Yeah.

2 Q You then criticized the illustrative district for
3 including the Redstone Arsenal. I'll represent to you that
4 there has been testimony in this case that Huntsville and
5 Decatur residents commute to the Redstone Arsenal for work, but
6 you did not consider connections between Huntsville, Decatur,
7 and the Redstone Arsenal in your analysis, correct?

8 A That's right.

9 Q You then criticize the illustrative district for including
10 the Wheeler National Wildlife Refuge.

11 The Enacted Plan sandwiches the wildlife refuge between
12 populations in a single district. It must be placed into some
13 district, correct?

14 A Yeah. I don't know that I am criticizing it for including
15 the Wheeler National Wildlife Refuge as such, but, yeah, it has
16 to be placed somewhere.

17 Q Lastly, you criticize the illustrative district for
18 including black residents in Decatur. You did not assess
19 whether the black population in Huntsville and Decatur may
20 share a community of interest, correct?

21 A I didn't. Like I said, I'm involved in the congressional
22 case where Huntsville and Decatur are often separated, but, no,
23 I didn't consider that.

24 Q And your determination that the black population in
25 Huntsville and Decatur are, quote, discrete group, closed

1 quote, does not include an assessment of whether the black
2 population in Huntsville and Decatur have similar areas of
3 interest whether those be shared ethnic, economic, tribal,
4 social, geographic, or historical identities, correct?

5 A Yeah. That's right. This is -- this is a -- an analysis
6 of the geography of individuals in the district. It's not a
7 cultural compactness argument or anything like that.

8 Q You also agree that similar household income in an area
9 can be a data point in favor of finding that an area is a
10 community of interest, correct?

11 A That's right.

12 Q And that similar housing values in an area can provide a
13 data point in favor of finding that area as a community of
14 interest, as well, correct?

15 A It can be, yeah.

16 Q And you did not analyze the household income or housing
17 values of Huntsville and Decatur residents, correct?

18 A That's correct.

19 Q While it's not a bright-line rule, there can be times when
20 a community of interest is something that might trump a concern
21 about district compactness, correct?

22 A Yeah, that's right.

23 Q And you did not analyze any of Mr. Fairfax's illustrative
24 plans' respect for communities of interest, correct?

25 A Yeah, that's right. I mean, communities of interest -- I

1 think the example I gave of communities of interest trumping a
2 compactness concern was in my direct with the Shenandoah
3 Valley, although that's also mixed in with the way the
4 Shenandoah had been used for gerrymandering historically in
5 Virginia. So that's like a well-defined 200-year old community
6 of interest there.

7 And if there's testimony about the Decatur and Huntsville
8 populations forming a community of interest together in the
9 case, then that's something for the Court to consider.

10 Q So you're not -- so you are not aware of any communities
11 of interest in the greater Huntsville area, correct?

12 A That's right. I'm not doing the communities of interest
13 analysis.

14 Q And likewise, you are not aware of any communities of
15 interest in the Montgomery area?

16 A That's right. This is just an analysis of the geography
17 of residents of the districts.

18 Q And you are not aware of any communities of interest that
19 Mr. Fairfax's illustrative plans have failed to preserve?

20 A That's right.

21 Q Now, the *Nairne* opinion that we discussed and you
22 testified the Court found to be useless or quote, completely
23 useless, close quote in their words, that Court also criticized
24 your analysis for failing to consider communities of interest,
25 correct?

1 A Yeah, it did.

2 Q And, Dr. Trende, you also rendered an opinion on
3 compactness in a state legislative case in Maryland, correct?

4 A That's right.

5 Q And the Maryland Supreme Court found that your number
6 crunching had the appearance of rigor, but contributed little
7 to its analysis, correct?

8 A Yeah. I kind of agree with the Court's criticism in that
9 case. I mean, that's an example of you don't always get to run
10 the legal strategy. I think at some point elsewhere in that
11 opinion they say there wasn't even an opinion, which is true.
12 All the lawyers wanted in that case was a calculation of the
13 Reock and Polsby-Popper scores and maps of the districts, and
14 so that's what I did.

15 Q You did not produce a minority compactness analysis in
16 your work as a Special Master in Virginia or as a consultant to
17 the Arizona Independent Redistricting Commission, correct?

18 A I did not produce a minority -- that's right. We didn't
19 do *Gingles* 1 analysis in either of those cases.

20 Q Let's look at one of your dot density maps of the
21 Illustrative District SD25, if we could turn to DX-7, page 27,
22 please.

23

24 Now, you're aware that the portion of the district in
25 Crenshaw County merely replicates the state's Senate District

1 25, correct?

2 A That's right.

3 Q But you did not mention that in your report, correct?

4 A The state's not doing a *Gingles* 1 district there. There's
5 no requirement for populations to be compact outside of the
6 Voting Rights Act to my knowledge.

7 Q Your dot density plot at the bottom of the screen, it
8 says, one blue dot represents ten black citizens, one orange X
9 represents ten white citizens. That should say VAP instead of
10 citizens, correct?

11 A That's right.

12 Q And this map does not include any dots for Asian American
13 or Hispanic population, correct?

14 A That's right. What we were mostly interested in is the
15 distribution of the minority group that you're purporting to
16 show as having a compact population sufficient to be a majority
17 in a reasonably configured district. So that's population that
18 gets highlighted these maps.

19 The white population is mostly there just to give an idea
20 of overall population distribution, not as a comparator or
21 anything like that.

22 Q Your dot density maps include rounding, correct?

23 A That's right.

24 Q If there were between 5 and 14 black people in a census
25 block, your plot would show one blue dot in that plot, correct?

1 A That's right.

2 Q And if you have two blue dots, that could be anywhere
3 between 15 and 24 black people in that census block?

4 A That's right. Well, residents of voting age, but, yeah.

5 Q That census block with two orange Xs and one blue dot
6 could have 15 White VAP and 14 Black VAP, correct?

7 A That's right.

8 Q And don't you agree it will be misleading to portray the
9 white population in a geographic area as twice the size of
10 black population if in fact they nearly be the same number?

11 A Well, I think that confuses what's going on here. I think
12 if you were trying to compare white population compactness to
13 black population compactness, that would be an issue. But the
14 only question here is the compactness of the minority group
15 within the illustrative district. The white population is just
16 kind of to illustrate overall population distribution.

17 That's part of why in the second -- in the supplemental
18 report, I kind of threw my hands up and said, fine, we can also
19 look at maps that just have the black population in them so
20 there's not even any question of comparison. Or if Dr. Oskooii
21 prefers, we can put the white population on top.

22 There's a bunch of different ways you can do this.
23 They're all going to lead you to the same answer about the
24 compactness of the black population, though.

25 Q Well, then, likewise, wouldn't it be misleading in your

1 opinion to portray the black population where if there were
2 between 5 and 14 black people in a census block, the plot would
3 show just one blue dot in the census block?

4 A Why?

5 Q I'm asking your opinion. If 5 black people get one dot
6 and 14 black people get one dot, isn't that portrayal of black
7 population misleading?

8 A No. No.

9 Q Let's talk about your analysis of traditional
10 redistricting criteria.

11 You agree that what makes a district reasonably configured
12 is whether it adheres to traditional redistricting criteria,
13 correct?

14 A That's right.

15 Q And you don't believe that population compactness is a
16 traditional redistricting criterion, although it's mentioned by
17 Justice Kavanaugh as *Milligan* concurrence, correct?

18 A That's right.

19 Q And you didn't draw any of your own maps in this case,
20 correct?

21 A That's right.

22 Q You just reviewed Mr. Fairfax's maps, right?

23 A Of course.

24 Q And you agree that while drawing a map adhering to one
25 redistricting criterion often comes into conflict with adhering

1 to others, correct?

2 A It can, yes.

3 Q In other words, trade-offs between redistricting criteria
4 are inevitable in redistricting, right?

5 A That's right.

6 Q So let's talk about the traditional redistricting criteria
7 you did not analyze, in addition to the communities of
8 interest.

9 You did not analyze contiguity in Mr. Fairfax's
10 illustrative plans, correct?

11 A That's right. I didn't look at contiguity.

12 Q And did you not analyze the number of city and town splits
13 in Mr. Fairfax's illustrative plans, correct?

14 A That's right.

15 Q And you do not offer an opinion that any of Mr. Fairfax's
16 illustrative plans do not respect city and town lines, correct?

17 A That's correct.

18 Q And you did not analyze whether any of Mr. Fairfax's
19 illustrative plans avoid the split of census designated places,
20 right?

21 A That's correct.

22 Q And you did not analyze whether any of Mr. Fairfax's
23 illustrative plans avoid the split of landmark areas, correct?

24 A Yeah, that's right.

25 Q And you did not analyze whether any of Mr. Fairfax's

1 illustrative plans avoid the split of voter tabulation
2 districts, correct?

3 A That's correct.

4 Q And other than opining about a handful of split precincts
5 in Senate District 7 in Plan 3, you did not analyze whether
6 Mr. Fairfax's illustrative plans avoid precinct splits,
7 correct?

8 A That's correct.

9 Q And you do not analyze whether any of Mr. Fairfax's
10 illustrative plans observe natural boundaries, such as rivers,
11 right?

12 A That's correct.

13 Q And you did not analyze socioeconomic data, such as
14 housing patterns and income quintiles?

15 A Yeah, that's correct.

16 Q And you did not analyze the illustrative plans
17 preservation of cores of prior districts, correct?

18 A That's correct.

19 Q And you did not analyze the extent to which the
20 illustrative plans minimize population deviation, correct?

21 A Well, that's right.

22 Q And you did not analyze the compactness of illustrative
23 District 25 in the Montgomery area, correct?

24 A Yeah, that's right.

25 Q And you did not analyze whether the illustrative plans

1 avoided the appearing of incumbents, correct?

2 A That's true.

3 Q And isn't it true that you are not entirely sure that
4 avoiding incumbent pairing qualifies as a traditional
5 redistricting principle?

6 A That's true. We have gotten different answers on that.

7 Q And you did not analyze county splits in Plans 1 or 2,
8 correct?

9 A That's right.

10 Q And you did not analyze the geographic compactness of
11 illustrative District 7 in Plan 1, correct?

12 A Can you repeat that?

13 Q You did not analyze the geographic compactness of
14 illustrative District 7 in Plan 1, right?

15 A That's right.

16 Q And Alabama's redistricting guidelines did not affect the
17 analysis in your reports, correct?

18 A Yeah, that's correct.

19 Q You don't disagree with Mr. Fairfax's opinion that his
20 Illustrative Plan 1 has reasonably geographically compact
21 districts, correct?

22 A That's right. I don't -- yeah. For Plan 1.

23 Q You don't disagree with his opinion that the two
24 illustrative districts in Plan 1st, Districts 7 and 25, are
25 more compact than the analogous districts in the Enacted Plan?

1 A That's correct.

2 Q You don't disagree with Mr. Fairfax's opinion that all
3 majority-black districts in the Illustrative Plan 1 are
4 reasonably compact?

5 A I don't think I gave that opinion, no.

6 Q So you don't disagree with his opinion that all
7 majority-black districts in the Illustrative Plan 1 are
8 reasonably compact, correct?

9 A Yeah. I don't think I give an opinion on that.

10 Q You don't disagree with Mr. Fairfax's opinion that
11 Illustrative Plan 1 sufficiently preserves cities, towns, and
12 census designated places, correct?

13 A Yeah. That's right. I don't agree or disagree on that.

14 Q You don't disagree with his opinion that his Illustrative
15 Plan 1 minimizes voter tabulation in district splits, correct?

16 A Yeah. I don't agree or disagree on that one.

17 Q You didn't disagree with his opinion that his Plan 1
18 minimizes county line splits, correct?

19 A Yeah. I don't agree or disagree on that one.

20 Q You don't disagree with Mr. Fairfax's opinion that his
21 Illustrative Plan 1 performs satisfactorily when minimizing
22 incumbent pairings, correct?

23 A Yeah, that's right. I didn't look at that, so I don't
24 agree or disagree.

25 Q You don't disagree with his opinion that Illustrative

1 Plan 1 has a lower population deviation than the Enacted Plan's
2 population deviation?

3 A That's right. I don't agree or disagree.

4 Q Do you agree with his opinion that illustrative District 7
5 follows a natural boundary of the Tennessee River from the
6 Redstone Arsenal to the city of Decatur, correct?

7 A Yeah. So that's one that looking at the map it's obvious
8 it does that.

9 Q And you don't disagree with his opinion that Illustrative
10 Plan 1 wholly contains Alabama A&M University within
11 illustrative District 7?

12 A That's right.

13 Q And you don't disagree that Alabama A&M is a notable
14 community of interest?

15 A Yeah, that's right.

16 Q And you don't disagree that Huntsville and Decatur are
17 part of the same combined statistical area?

18 A That's correct.

19 Q And you don't disagree that Mr. Fairfax's Illustrative
20 Plan 1 fares equal to or better than the Enacted Plan using the
21 State's redistricting criteria?

22 A Yeah. I don't agree or disagree with that.

23 Q And you don't offer the opinion that race predominated in
24 the drawing of Map 1, illustrative District 7, right?

25 A That's correct.

1 Q So I know you analyzed district compactness for Plan 2.
2 Other than district compactness, you don't disagree with
3 Mr. Fairfax's same Plan 1 conclusions for Plan 2, right?

4 Just to save us time or I can go through them all.

5 A No, let's not go through them.

6 I don't agree or disagree with them.

7 Q Okay. You did not analyze whether it is possible to draw
8 illustrative District 7 in Plan 2 with the higher Black CVAP,
9 correct?

10 A That's right.

11 Q Although you did not issue a response directly to
12 Mr. Fairfax's Plan 2A, you saw -- you testified earlier that
13 Plan 2A looked almost identical to Plan 2, correct?

14 A Yes.

15 Q Okay. Okay. Let's discuss Plan 3.

16 If we could pull up the supplemental report, DX-8, page 28
17 of the report.

18 Figure 24 shows certain precincts included and excluded
19 from the illustrative District SD7, correct?

20 A Yes.

21 Q Now, Mr. Fairfax's decision to exclude the 60 percent BVAP
22 precinct and include the 21 precinct -- 21 percent BVAP
23 precinct below it makes the illustrative district more compact
24 than if he had done the reverse, right?

25 A Yes.

1 Q Okay. We can take that down.

2 Now, you don't disagree that Illustrative Plan 3
3 sufficiently preserves cities, towns, and census designated
4 places, correct?

5 A Yeah. I don't have an opinion on that one way or the
6 other.

7 Q And you don't disagree with his opinion that Illustrative
8 Plan 3 minimizes voter tabulation district splits, correct?

9 A That's right.

10 Q You don't agree or disagree with Mr. Fairfax's opinion
11 that Illustrative Plan 3 minimizes voter tabulation districts?

12 A Yeah, that's more precise. Thank you.

13 Q You don't agree or disagree with his opinion that
14 Illustrative Plan 3 has a lower population deviation than the
15 Enacted Plan's population deviation?

16 A Yeah, that's right. And on that VTD question, I think we
17 earlier separated out VTDs from precincts. Obviously he has
18 the precinct splits in Map 3, so that's a different
19 consideration.

20 Q And you agree with Mr. Fairfax's opinion that Illustrative
21 District 7 follows the natural boundary of the Tennessee River
22 from the Redstone Arsenal to the city of Decatur?

23 A Again, that's from the map. No sense denying things that
24 can't sensibly be denied.

25 Q And you don't disagree that Alabama A&M is a notable

1 community of interest kept whole within Illustrative District 7
2 in Plan 3?

3 A That's right.

4 Q And you don't agree or disagree with his opinion that
5 Illustrative Plan 3 performs satisfactorily when minimizing
6 incumbent pairings?

7 A Yeah. I don't have an opinion one way or the other on
8 that.

9 Q And you don't agree or disagree that Mr. Fairfax's
10 Illustrative Plan 3 fares equal to or better than the Enacted
11 Plan using the State's redistricting criteria?

12 A That's correct.

13 MR. GENBERG: If I can have a moment to confer.

14 THE COURT: You may.

15 MR. GENBERG: Just shortly.

16 BY MR. GENBERG:

17 Q Could we pull up the Legislature's 2023 plan and the
18 2020 -- oh. The Legislature's 2023 congressional plan and the
19 2023 plan enacted by the Court in *Milligan*?

20 You mentioned a moment ago that you believe Huntsville and
21 Decatur are separated in the congressional map?

22 A No. The demonstration districts. There's like 15 of them
23 in that case.

24 Q In the congressional map demonstration districts?

25 A Yeah.

1 Q You agree that they're in the same district in both these
2 maps, Huntsville and Decatur?

3 A Yes.

4 MR. GENBERG: No further questions. Thank you.

5 THE COURT: Thank you.

6 All right. Any redirect?

7 MR. SEISS: Just briefly, Your Honor.

8 REDIRECT EXAMINATION

9 BY MR. SEISS:

10 Q Dr. Trende, is this the first time you recall testifying
11 in a case where CVAP numerosity was relevant to whether an
12 illustrative plan met *Gingles* 1?

13 A Yes, maybe I should have looked into it more in Coca,
14 maybe it was relevant there. But this is the first case, yes.

15 MR. SEISS: No further questions.

16 THE COURT: All right. Is there any reason I may not
17 excuse Dr. Trende?

18 MR. SEISS: No, Your Honor.

19 MR. GENBERG: No, Your Honor.

20 THE COURT: Dr. Trende, thank you for being with us
21 today. You're excused.

22 MR. SEISS: Our next witness should be here and
23 they'll be coming in, in a minute.

24 THE COURT: Thank you.

25 Mr. Davis, the defendant's next witness?

1 MR. DAVIS: Your Honor, Ms. Messick and our next
2 witness are on their way from the break room.

3 THE COURT: Oh, great. Thank you.

4 MS. MESSICK: Misty Messick for the Secretary of
5 State, and the Secretary calls Josh Roberts.

6 JOSH ROBERTS
7 having been first duly sworn by the Courtroom Deputy Clerk, was
8 examined and testified as follows:

9 THE COURTROOM DEPUTY CLERK: If you would please
10 adjust your microphone and state and spell your first and last
11 name for the Court.

12 THE WITNESS: My name is Josh Roberts. J-O-S-H,
13 R-O-B-E-R-T-S.

14 THE COURTROOM DEPUTY CLERK: Thank you very much.

15 DIRECT EXAMINATION

16 BY MS. MESSICK:

17 Q Good afternoon. What county and state do you live in?

18 A I live in Montgomery County, Alabama.

19 Q Have you lived in other places?

20 A I have. I was born in Nashville, raised in Memphis. I
21 went to college in Washington, D.C., back to Memphis for
22 graduate school. Then I worked in both Memphis and Madison
23 County, Tennessee before coming to Montgomery, Alabama for
24 work, then Nashville, Tennessee for work, and then back to
25 Montgomery, Alabama.

1 Q Great. Where did you go to high school?

2 A I went to White Station High School in Memphis, Tennessee.

3 Q Was that a public school or a private school?

4 A It was public, part of the Memphis city school system.

5 Q And was that a majority white school?

6 A No. It was not.

7 Q Was it majority black?

8 A Yes. It was at the time, yes.

9 Q And when did you graduate from high school?

10 A 2000.

11 Q Did you attend college?

12 A I did. I went to George Washington University in

13 Washington, D.C.

14 Q And did you get a degree?

15 A I did. A bachelor of arts in political science.

16 Q And what year did you graduate with that degree?

17 A 2004.

18 Q And you mentioned graduate school in Memphis, I think, you
19 said?

20 A I did. I went to law school. I went back home to Memphis
21 for graduate school. I went to law school there from '04 to
22 '07.

23 Q And did you graduate with a JD?

24 A I did, yes.

25 Q And have you done any additional advanced coursework?

1 A Yes. I took several courses in the College of
2 Professional Studies at Lipscomb University as part of my job
3 there as the Dean of Students at Lipscomb.

4 Q You took some courses. You did not earn a master areas,
5 right?

6 A No, I did not achieve a degree in that, no.

7 Q Okay. Are you a licensed attorney in Alabama?

8 A No, not in Alabama. I do have an inactive law license in
9 the state of Tennessee.

10 Q Thank you. Can you please tell me where you have worked
11 and what position you have held since law school?

12 A Yes. Out of law school, I began working at a law firm
13 called Waldrop & Hall. I was an associate attorney there.
14 We -- primarily it was an insurance defense litigation firm.
15 We primarily worked with -- or my practice group rather
16 primarily worked with education in school systems, county
17 boards of education.

18 After that, I took a job at Faulkner University's Thomas
19 Goode Jones School of Law in Montgomery as their director of
20 admissions and got to work with student services and the
21 admissions functions of the law school there.

22 After that, I was recruited to be the Dean of Students at
23 Lipscomb University in Nashville. I served there for four or
24 five years before moving back to Montgomery as the Dean of
25 Students, Diversity and Inclusion at Auburn University's

1 Montgomery campus.

2 In 2000 I took a job at Alabama Christian Academy as the
3 associate head of school and was recently as of June 1 of this
4 year was named the president and head of school at ACA.

5 Q Congratulations.

6 A It's been fun. Thank you.

7 Q May I refer to Alabama Christian Academy as ACA?

8 A Please do.

9 Q Are you here because ACA has any kind of official position
10 on what Alabama's State Senate lines should look like?

11 A No. Neither ACA nor myself has any type of opinion on
12 State Senate lines.

13 Q Can you tell us a little bit about ACA?

14 A Sure. We are a K12 through -- yeah, a K2 through 12th
15 grade Christian school. We were founded in 1942 as Montgomery
16 Bible school. We expanded and grew quite a bit over the next
17 couple of decades. And then in 1981, we split and Alabama
18 Christian College took over a large part of our campus. That
19 then subsequently was renamed Faulkner University to reflect
20 some donor benevolence.

21 And then Alabama -- the kindergarten through 12th grade
22 function operates as Alabama Christian Academy. And so we took
23 over the other part of campus.

24 Q Okay. Great. Thank you.

25 During what time period did you serve as the associate

1 head of school for ACA?

2 A I began in the summer of 2020 and concluded that
3 particular role at the end of May 2024.

4 Q And what were your responsibilities as associate head of
5 school?

6 A I oversaw the day-to-day operations of our school, so that
7 included our admissions office, our marketing and PR office,
8 our service operations team, building stewardship. I oversaw
9 our retail operations, our spirit store, our lunch operations.
10 I oversaw the financial management of our school, as well as
11 the IT department.

12 Q You mentioned --

13 A Yeah. I'm confident there are other elements, but those
14 are the big rocks of what that particular position entails.

15 Q Great. Thank you.

16 You mentioned marketing and public relations. Can you
17 tell me a little bit more about your responsibilities there?

18 A Yes. So marketing and public relations. At ACA, we exist
19 in a very tight education market. We educate everyone we can
20 in the city of Montgomery and the river region. So we do that
21 through both large scale marketing, radio, advertisements in
22 magazines, and circulars. We do a lot of work with some
23 marketing firms that put up advertisements on flat screen
24 monitors at Maxwell Air Force Base or a lot of our local
25 restaurants and eateries, YMCAs, things of that nature.

1 We do a lot of specific admissions marketing, and so we
2 will put together, you know, brochures, information that
3 highlights our -- our school introduces people to us. We also
4 do marketing in the form of providing annual reports to our
5 stakeholders. That's a pretty heavy or thick publication that
6 includes highlights from last year, almost like a yearbook
7 without the student pictures. It just highlights events
8 throughout the year.

9 And then we do a lot of communications in marketing with
10 our own -- with our own families. We will have at any given
11 year between 720 and 750 students. That is a lot of families.
12 And so we're constantly marketing to grandparents, families,
13 aunts and uncles. That's a general overview of kind of our
14 marketing PR.

15 Q Thank you.

16 You said you became head of school earlier this year.

17 What are your responsibilities as head of school?

18 A Well, we actually restructured our executive team. So our
19 responsibilities include all of what I was doing as our
20 associate head of school, but in addition to that, I also
21 oversee our athletic department. I oversee all of our hiring
22 and personnel decisions, oversee the academic side. Both of
23 our principals will report to me. And I oversee our senior
24 leadership team.

25 Q You mentioned both principals. How is the school set up?

1 A Our senior leadership team includes the head of school,
2 our upper school principal and lower school principal and
3 athletic director, a director of student life and director of
4 operations.

5 Our school -- our school is really set up into three
6 parts. We have an upper school, a lower school, and a NEST
7 school. The NEST school is what we have branded our K2 through
8 K5 program. The eagle's nest is a pretty fun way to reach out
9 to our little ones, give them a sense of identity, and it's an
10 acronym for the commitment we have with our parents. NEST
11 stands for nurturing, educating and spiritual training. And
12 the commitment that we make to our parents is that everything
13 we do with that age group is going to further one or more of
14 those three educational objectives.

15 Q And what grades are in the lower school?

16 A First grade through fifth grade.

17 Q And what grades are in the upper school?

18 A Sixth grade through 12th grade.

19 Q Does ACA compete with anyone?

20 A Yes. We compete with a lot of different schools. We
21 primarily compete with what we refer to as the Capital City
22 Conference. That comprises five schools that are the
23 traditional private school model schools in our city. When I
24 say "traditional," I mean, Monday through Friday schools that
25 both embrace, you know, education involving fine arts and

1 athletic components.

2 So those five schools will be Alabama Christian Academy,
3 Montgomery Catholic, Montgomery Academy, Saint James and
4 Trinity Presbyterian School.

5 Q Do you know when any of those schools were founded?

6 A I do. Catholic celebrated their 150th anniversary last
7 year, so that would be 1873. Saint James School was founded in
8 1955. ACA was founded in 1942. And I don't know the other
9 two.

10 Q In what ways does ACA compete with the other Capital City
11 Conference schools?

12 A Well, students is the first thing that comes to mind, but
13 we also have a pretty healthy competition for faculty and
14 staff.

15 Q Can you slow down a little bit?

16 A Yes.

17 Q I'm sorry. Thank you.

18 Let's start over. In what ways does ACA compete with the
19 other Capital City Conference schools?

20 A I mentioned students and hiring with faculty and staff.
21 We also compete athletically, of course. There's pretty
22 tremendous rivalries when it comes to our sports. We compete
23 for sponsorship dollars from our community. There's certainly
24 a finite amount of money in Montgomery to invest in supporting
25 our schools. And so competition for those dollars is pretty

1 intense. We compete with community partnerships and working
2 with different non-profits when it comes to them partnering
3 with our schools for service days. We compete for -- with one
4 another for transportation more often than we ought to because
5 the transportation is so scarce when it comes to charter buses
6 and things of that nature.

7 Q Does ACA have its own buses?

8 A We do. We have three buses. But at the same time, when
9 we're -- I guess the context for those kind of competitions is
10 if we're moving our football team and our band and our
11 cheerleaders and our color guard to away events, our fleet
12 won't be able to take all of our students, and so we'll need to
13 charter transportation. All of the other schools are in the
14 exact same boat, and so we will very frequently be, as soon as
15 those schedules coming out, running to the same group of
16 charter vendors, and conversely, if as sometimes is sadly the
17 case, if our football season ends before some of the other
18 ones, those same schools will be asking us if they can rent our
19 buses or if we can help provide them transportation in the
20 event that they aren't able to secure otherwise.

21 Q So that sounds like an example of cooperation between the
22 schools. Do you -- do the heads of schools communicate
23 regularly?

24 A Yes. There's a -- I'd say a high level of collegiality
25 between all of the heads of schools in Montgomery or certainly

1 at least the among the five that I have just shared.

2 We are regularly talking via text or e-mail or phone
3 calls. We see each other at virtually every one of our varsity
4 level sports events. We are collaborating on -- collaborating
5 is too strong of a word. We are getting information from one
6 another when we set our school calendars when we are looking at
7 important dates or break dates.

8 We talk very frequently about inclement weather, about any
9 type of alterations to the school system calendar, whether it's
10 delayed starts or early dismissals. We'll talk and
11 collaborate -- that is a good word. We'll collaborate and
12 discuss when it comes to hiring. I've been blessed at ACA to
13 hire two great employees in the last six months that were
14 previously at some of those other schools. And so there's been
15 conversation with those other presidents. I'm interested in
16 speaking to one of your faculty about a teaching position. I
17 wanted to let you know. So we work pretty hard to maintain
18 strong relationships with one another.

19 Q Were you a part of any of these conversations when you
20 held the role of associate head of school?

21 A Yes. So when I came in as associate head of school in the
22 summer of 2020, it was the summer of COVID. And so part of my
23 responsibilities at ACA was to oversee our COVID safety plan.

24 On the other campuses, their presidents were almost always
25 the ones that were kind of the face of that plan, so I had a

1 pretty instant introduction to those individuals. And so we
2 worked a lot together that summer talking through the many
3 issues, what to do about things. When there was, you know,
4 conflicting information coming from federal agencies, the State
5 of Alabama with quarantine dates or quarantine times or what
6 would or would not constitute social distancing or what did and
7 did not constitute being a member of a household, things of
8 that nature, as we were trying to work hard to maintain trust
9 with our families, but also see how different schools were
10 interpreting some of those state and federal regulations.

11 We also would talk a lot about some of the challenges that
12 we were having to go through when it came to distance learning,
13 when it came to operating summer camps, when it came to hosting
14 athletic tryouts. Transportation was another theme a lot with
15 that first year back from COVID, things of that nature. I
16 spoke to all the other heads -- I'm sorry. I'm going too fast.

17 I spoke to and informed those relationships initially
18 through COVID. And then -- and maintained those in the years
19 following. They have ramped up in the last 6 months as I've
20 serve as ACA's head of school.

21 Q In what way do those communications normally happen?

22 What -- are those in-person conversations or are they
23 impersonal e-mails?

24 A Yes, to both of those. There's a text thread that we use
25 that's typically most active for weather delay information and

1 what we're seeing, that's really helpful so we can make sure
2 that everyone's getting the same information and the most
3 up-to-date forecast.

4 A lot of that is done over the phone and phone calls. A
5 lot of it is done in person, particularly as we see one another
6 at athletic events. We'll get together occasionally. Last
7 week, for instance, the head of school at Montgomery Catholic
8 was sworn in as a Montgomery County Commissioner and so prior
9 to that ceremony, we got together and held a celebration lunch
10 and got to thank him for his civic service, let him know we
11 were excited about the success of that election for him, and
12 then we wished him well and got to joke with him about how we
13 had no idea how he had the time to run a school, as well as
14 serve on the County Commission.

15 Q And you said he was the head of which school?

16 A Montgomery Catholic.

17 Q And what is his name?

18 A Justin Castanza.

19 Q Do you know anything about Mr. Castanza, outside of
20 Montgomery Catholic, and, obviously, that he has just become a
21 County Commissioner?

22 A We're friends. He's very active advocate of Montgomery
23 Catholic and the Catholic church. He has family that works at
24 Chappy's Deli, which is a very popular family eatery with
25 multiple locations in Montgomery.

1 Got a background in fundraising for children, working with
2 several nonprofits that help children in need, foster care,
3 adoption, things of that nature.

4 Q Do you know how long he has been at Montgomery Catholic?

5 A I believe he's been their head of school for five years.
6 My recollection is that he was named their president head of
7 school just before COVID began.

8 Q It sounds like you're familiar with communications in
9 marketing for ACA from your responsibilities.

10 Do you have a working knowledge of the private school
11 market generally in Montgomery?

12 A Yes. We are constantly working to catalog other school's
13 advertisements, their admissions material. That is really,
14 really helpful for us. Sometimes we'll even provide our
15 admissions material to other schools when they ask and we'll
16 certainly, you know, accept theirs as part of that trade.

17 We really -- we utilize very similar, I'd say, channels of
18 marketing. We utilize a lot of the exact same publications,
19 parents magazines, magazines in our area that are related to
20 faith. These are kinds of magazines that tend to be free
21 outside of grocery stores. But we'll market -- all of our
22 schools will tend to market in the same publications and same
23 thing with -- when it comes to billboards or it comes to flat
24 screen advertisement around our city. So that helps us keep a
25 pulse of things.

1 Social media is a huge part of advertising for all schools
2 and so that's something that is certainly noticed, if not
3 monitored. I think it's fair to say that all of our schools
4 are well aware of what the other schools are doing and the
5 images they're providing, the decisions that they're making,
6 again, it's quite competitive. When one school begins to
7 advertise their number of National Merit semifinalists, we take
8 note. When they begin to advertise their playoff success in
9 sports, then others take note and there does tend to be a
10 little bit of a pattern that can emerge.

11 Q Are you personally paying attention to the way that the
12 other Capital City Conference schools are presenting themselves
13 to the community?

14 A Constantly. I -- if someone does anything well, if they
15 send out a mailer or have an advertisement that is particularly
16 impactful, then I will have multiple parents at ACA that will
17 bring it to me, if I haven't seen it already, and say this was
18 a really good example of something that was effective. So our
19 community is paying very close attention to one another.

20 Q I'd like to show you an exhibit, it's Amended Plaintiffs'
21 Exhibit 19. This is an expert report from Dr. Joseph Bagley,
22 who plaintiffs have offered as an expert in this case.

23 And I want to take you to page 26, the second paragraph.

24 Are you able to see that?

25 A Yes.

1 Q And do you see on the third line where it says, Alabama's
2 first segregation academy -- Montgomery Academy -- was formed
3 in the city in the immediate aftermath of *Brown*. In addition
4 to white flight to that institution and several others, white
5 families have, since that time, been fleeing the city -- and he
6 continues.

7 Do you see that?

8 A I do.

9 Q I'd like you to take a look page 28 of this same report
10 and that first full paragraph.

11 And do you see that there are references there to
12 segregation academies, again, this time in Limestone County?

13 A Yes, I do.

14 Q Do any of the Capital City Conference schools promote
15 themselves or present themselves to the community as
16 segregation academies?

17 A No, not at all. That would be a deeply offensive thing to
18 call any of our Capitol City Conference schools.

19 Q Do the Capital City Conference schools communicate through
20 marketing materials that students are welcome there,
21 irrespective of race?

22 A We do certainly. It's not just marketing materials. I
23 think the accurate depiction of all of our schools demonstrates
24 that. I know that, for instance, on social media the number
25 of -- at ACA -- I can surely speak to the facts this year at

1 ACA. We had an African-American homecoming queen, we have an
2 African-American student body president, and that's obvious for
3 anybody that interacts with our social media accounts.

4 When we go to one another's events, it is my experience
5 that there is not just diversity on display when it comes to
6 the attendance and the composition of those events, but also in
7 the student leadership positions, things like witnessing
8 homecoming courts, seeing who is serving as captain of sports
9 teams, seeing who is representing the school, either as student
10 workers on microphones or leading invocations at events.

11 Q Do you have any reason to believe -- well, you may have
12 just answered this, but do you have any reason to believe that
13 irrespective of how they promote themselves, that any of the
14 Capitol City Conference schools actually limit enrollment on
15 the basis of race?

16 A No. I wouldn't have any reason to believe that. I know
17 that three of the Capital City Conference schools are
18 distinctly Christian in their mission, that being ACA,
19 Montgomery Catholic, and Trinity Presbyterian School.

20 We have a very specific campus unity policy at our school
21 that we speak to our students and incoming families about. We
22 talk about how insensitivity related to race or harassment or
23 discrimination is a tool of spiritual warfare; that's how we
24 introduce it on our campus. My sense is that that is a -- that
25 is the Christian approach to anything regarding discrimination

1 or racial insensitivity, and that Trinity and Catholic would
2 have very similar practices on their campus.

3 Q At your deposition you acknowledged that each of the
4 Capitol City Conferences schools are majority white; isn't that
5 right?

6 A That's my impression, yes.

7 Q What would you estimate the racial demographics are at
8 ACA?

9 A Depending on the year, we tend to have somewhere between
10 25 to 35 percent African-American student population. There
11 will be -- we will be majority white in our campus makeup and
12 we will have a very small number of Latino and Asians,
13 occasionally Native American students that will identify as a
14 member of the Creek Tribe.

15 Q In your work with ACA, have you ever talked to families
16 who are looking to select a school -- a private school in
17 Montgomery?

18 A That is one of the primary duties of my job. As someone
19 who oversees the admission office, I talk to families almost
20 constantly. I hosted a family just Friday night that was on
21 military orders moving into Montgomery at our football game.

22 We have about, depending on the year, 125 to 160 new
23 students every year, probably 50 percent more than that, so
24 something like 180 to 250 applications a year, even more than
25 that with inquiries. I probably get to speak to somewhere

1 around half of those inquiries.

2 And so, yes, I speak constantly to families that are
3 looking to ACA as their school or potential school for their
4 family.

5 Q So over five years -- over the five years of your
6 employment with the ACA, how many families would you estimate
7 you've spoken with?

8 A Hundreds. I mean, 500 would be probably an appropriate
9 estimate. 300 to 600, something like that range.

10 Q Are the families that you talk with already committed to
11 attending ACA?

12 A Some are. I think, like all schools, we'll have some that
13 have come to our school because a parent graduated from our
14 school or they have a sibling at our school.

15 A lot of the people that I speak to are moving in to
16 Montgomery, they don't have a preexisting relationship with any
17 of our schools, and so we're one stop on tours as they compare
18 multiple schools.

19 Occasionally we have parents that are from one of our
20 other schools, but they feel like one of their children might
21 be better served at our school and so I will be speaking to
22 them.

23 So it really runs the gamut. I would say most people that
24 I get to speak to are categorized as free agents, that they are
25 comparing us to other schools.

1 Q And do these families then sometimes share with you what
2 they are looking for in a private school in Montgomery?

3 A They are and it's something that I specifically ask about.
4 We really want to make sure that we are a good fit for them.
5 I'd say the primary driver for why people come to ACA is the
6 comprehensiveness of the way a Christian worldview is presented
7 from -- in every one of our courses. We have parents that are
8 seeking school decisions based upon factors like campus safety,
9 they're looking at class sizes, they're looking at faculty
10 communication, athletic opportunities, fine arts opportunities,
11 commute time, conduciveness with parents' work schedules. A
12 really attractive quality for us is that because we are
13 comprehensive from K2 to 12th grade, families of multiple
14 children can educate all of their children on the exact same
15 campus.

16 Q Thank you.

17 What is the biggest barrier to families in choosing a
18 private school education?

19 A The cost or tuition is usually the primary barrier.

20 Q And what is the tuition cost at ACA?

21 A Our upper school tuition this year is \$12,075. Our lower
22 school tuition, I believe, is \$10,500. Our NEST school tuition
23 is substantially less expensive. I don't recall its rate at
24 the moment.

25 Q Do you know how your tuition rates compare to those of the

1 other Capital City Conference schools?

2 A We're the most affordable private school in the Capital
3 City Conference. Montgomery Catholic is just a little bit more
4 expensive than we are. Trinity Presbyterian is four -- about
5 \$4,000 more than us. Saint James and M.A. are just a little
6 bit more than Trinity.

7 Q Does a family choosing to attend a private school need to
8 pay for an entire school year at the beginning of the school
9 year?

10 A No, they do not. Although, we offer a \$150 discount if
11 they do. But very few families, I mean, less than 1 percent of
12 our families, would pay up front for the school year. We walk
13 through and expect families, new families, to be on -- to elect
14 either a 10-month or 12-month installment plan for that
15 tuition.

16 Q Is financial aid available for, like, K5 through high
17 school, in the same way that it is for college and graduate
18 programs?

19 A In the same way, that's hard to say.

20 Q Okay. Strike that part.

21 I know that financial -- some of us only got through
22 school because of financial aid. Is that something that's
23 available at the K5 through 12th grade school?

24 A In part, it is. We do not offer financial aid for our
25 NEST school, so K5 to K2. However, financial aid at ACA comes

1 in two primary ways. The first is that, as I described, we set
2 our tuition as low as possible so that there is a de minimum
3 possible barrier between a family and the ability for them to
4 afford a Christian education. That's one of the reasons why
5 our tuition is substantially lower than other schools.

6 However, it is a significant financial investment for any
7 family to choose private education. And so we do offer a
8 needs-based financial aid program. It's an application program
9 where families upload financial information to a third party.
10 That third party then provides us with an expected family
11 contribution and estimated family need. We have a financial
12 aid committee that then reviews that information. They pray
13 over it. They're very discerning.

14 We, like every school I would imagine, have far more
15 demand than we have the ability to provide for. And so we work
16 really hard to fund that financial need to the maximum possible
17 extent. And that does help a significant number of our
18 students afford ACA.

19 Q Do you know approximately how many students are attending
20 ACA with needs-based financial aid?

21 A I do actually. We have 142 students that have received a
22 need-based financial aid award this year.

23 Q And you mentioned there was a second way that students
24 might get help affording ACA?

25 A Oh. Well, in addition to our low tuition cost that's set,

1 then our needs-based financial aid. We do offer a couple of
2 other programs. Because of our relationship with Faulkner
3 University, we do give full-time employees at Faulkner
4 University a 25 percent discount on our tuition. We give -- we
5 have multi-child discounts. We accept Alabama Accountability
6 Act funds from a couple of different scholarship granting
7 organizations. That helps a lot of our families.

8 Q What is the -- what is your understanding of the Alabama
9 Accountability Act?

10 A It's a state-driven fund coming out of Alabama citizens,
11 redirecting of some of their state income tax liability to
12 education -- to an education fund.

13 AAA is distributed through what are called SGOs, or
14 scholarship granting organizations, that take funds that people
15 have elected to deposit into AAA accounts. And then they run
16 individual application processes for families in need. They're
17 looking for assistance moving their child from a school system
18 where they're not thriving to a school system that they feel
19 like is a better partner for their family.

20 Q When you said "AAA," what does that mean?

21 A The Alabama Accountability Act.

22 Q Okay. Thank you.

23 Do you know approximately how many students at ACA are
24 benefitting from the Alabama Accountability Act?

25 A I would estimate 35 to 50 students. These awards are

1 anywhere between 4,000 to \$9,000 per year.

2 I've seen them as high as 10,000; however, most of those
3 awards have been reduced over the last few years.

4 Q And do you know how the mechanics of that work? Does the
5 money go from the State or the SGOs directly to the family?

6 A No. So the SGOs are -- they're really privately
7 fund-raising in a lot of respects. They're working through a
8 lot of different marketing tools, but a lot of times, they're
9 having workshops with businesses. Economically speaking, it
10 can actually reduce a business's tax liability. When it comes
11 to individual income tax, there's no change to your tax
12 liability. But it does allow for individuals to keep their tax
13 dollars in the education of their own community.

14 So those scholarship grant organizations are essentially
15 privately fund-raising, and then the Alabama Accountability Act
16 audits that, confirms that the numbers that they are -- of
17 people that are electing portions of their income tax liability
18 to be reinvested into education are accurate. And then they
19 are -- those NGOs are also operating application processes.
20 There is a little bit of room for differentiation in the
21 application process for the different NGOs. Some are able to
22 have slightly different financial requirements. It is
23 typically done at a baseline of a percentage of the federal
24 poverty levels; however, there's a little bit of
25 differentiation allowed for growth of income over time. In

1 essence, some of the NGOs don't ever want a mom or dad to turn
2 down a promotion at work because their income would hit a limit
3 that would then take away an education benefit their family is
4 receiving.

5 Q You said "NGOs" a couple of times. Was that SGOs?

6 A Yes, ma'am. I apologize. SGO, Scholarship granting
7 organizations is that acronym.

8 Q All right. Putting aside how the SGOs get money, how does
9 the money that they have get to the -- to ACA?

10 A Okay. Applicants to those SGOs then enroll at our school.
11 We provide a report to those scholarship granting organizations
12 of satisfactory academic progress, of satisfactory attendance.
13 And then typically twice a year -- usually it's going to come
14 in September and January or February -- we will then receive a
15 lump sum check from that scholarship granting organization with
16 a list of individuals and the amount of scholarship funds that
17 they're receiving from that SGO. We then apply that to their
18 accounts.

19 Q So a family attending -- a family with a student who is
20 attending ACA using a scholarship from the Alabama
21 Accountability Act, that family doesn't have to pay ACA and
22 wait to be reimbursed?

23 A That's correct. Any type of NGO award that has been
24 confirmed, we automatically apply to a family's account,
25 regardless of if we have actually received that award or not.

1 So we have enough trust in that process that it will alter any
2 type of payment arrangements to be able to assume that that --
3 that portion of tuition will be paid at some point during the
4 school year.

5 Q The money that you received from an SGO in September of
6 this year, is that paying for education in the fall of 2024?

7 A Yes.

8 Q Or that's not backdated to the spring. That's right now.
9 They're paying near the beginning of the school year?

10 A That's correct. In fact, because it's perspective paid,
11 if a student were ever to leave, we then have to return a
12 prorated amount of funds for the remaining portion of that
13 semester. So if someone were to get a new job out of state, if
14 someone were to come down with a terrible illness and needed to
15 go to homebound education or if any -- for any reason we are
16 not their family's education partner, then we will return the
17 funds for -- that was earmarked for that student.

18 Q If I were to assume that a family's ability or inability
19 to afford tuition was directly tied to salary, would -- in your
20 experience, would that be a good assumption for me to make?

21 A No, it would not. My experience is -- well, no. I will
22 back up.

23 Naturally the more disposable income a family has, the
24 more things they can afford, including private school tuition.
25 However, in my experience, we have many families that have the

1 trappings or indicators of high household incomes that tell us
2 that they cannot afford private school tuition, and I would
3 characterize it as just that particular household having other
4 priorities.

5 Similarly, there are routinely families that are working
6 incredibly hard in not wealth producing industries and their
7 family, because private school tuition is a priority, do not
8 have -- or they can afford our private school tuition.

9 Q Thinking back about the conversations you have had with
10 families over the years at ACA, can you think of a time when
11 any family has communicated to you explicitly or implicitly
12 that they are looking for a segregated school?

13 A No.

14 MS. MESSICK: I pass the witness.

15 THE COURT: All right. We've been going almost
16 two hours. It's 3:11.

17 Would this be an ideal time for our afternoon break?

18 MR. CAMPBELL-HARRIS: I think so.

19 THE COURT: All right. We do have a hard stop today
20 at 5:00 o'clock, so let's come back at 3:25.

21 MR. CAMPBELL-HARRIS: Sounds great.

22 MR. DAVIS: Your Honor, I can tell you, our next
23 witness, one more witness for the day, is Dr. Carrington. If
24 we finish with him before 5:00, lovely. If not, it will not be
25 a hardship for him to continue in the morning.

1 THE COURT: Okay. Thank you.

2 (Recess.)

3

4 CROSS-EXAMINATION

5 BY MR. CAMPBELL-HARRIS:

6 Q Good afternoon, Mr. Roberts. How are you?

7 A Doing well.

8 Q My name is Dayton Campbell Harris. We met previously. I
9 represent the plaintiffs in this matter. I am going to ask you
10 a series of yes-or-no questions based on your deposition.

11 Do you understand?

12 A Yes.

13 Q Are you ready?

14 A Yes.

15 Q You testified on direct that you are now the president,
16 head of Alabama Christian Academy?

17 A Yes.

18 Q Can we continue to refer to Alabama Christian Academy as
19 ACA?

20 A Yes.

21 Q Okay. And you started working at ACA in 2019?

22 A No.

23 Q When did you start working there again?

24 A 2020.

25 Q 2020.

1 As part of your role, you oversee admissions and finances;
2 is that correct?

3 A Yes.

4 Q And Alabama Christian Academy it was founded in the 1940s?

5 A Yes.

6 Q Would it sound right that the ACA did not racially
7 integrate until the 1980s?

8 A No.

9 Q When did the ACA originally integrate?

10 A I don't have a specific date for you. I also have no
11 knowledge of ACA ever having a racially discriminatory
12 admissions practice.

13 Q Do you know when the ACA had its first integrated prom?

14 A I'm not familiar with the phrase "integrated prom" ever
15 being associated with ACA.

16 Q Let me rephrase the question.

17 Are you familiar with when the ACA had its first racially
18 integrated prom?

19 A ACA has never had a prom. We actually amended our student
20 code of conduct just two years ago to allow for
21 parent-sponsored dances, but we have never sponsored any type
22 of dancing or dancing event.

23 Q Okay. You mentioned segregation academies on direct.

24 Do you recall that?

25 A No, sir. I did not mention that.

1 Q You were asked about segregation academies on direct.

2 Do you recall that?

3 A Yes.

4 Q When you hear the term "segregation academy," do you
5 understand that to refer to the origin of the school?

6 A I understand that it can be used to refer to the origin of
7 a school.

8 Q In your deposition, we discussed the Montgomery public
9 school system.

10 Do you recall that?

11 A Yes.

12 Q The Montgomery public school system has a majority black
13 student population, correct?

14 A Correct.

15 Q Now, ACA -- it's a private school, correct?

16 A Correct.

17 Q And it's not free for all families to attend, right?

18 A It's not free for any family to attend.

19 Q Thank you.

20 Tuition you testified on direct is just over 12,000 for
21 the upper school; is that right?

22 A Yes.

23 Q And the upper school, that's grade 6 through 12th?

24 A Yes.

25 Q Most families who attend a -- with children attending ACA,

1 they pay some level of tuition, correct?

2 A Yes.

3 May I recharacterize that? All families at ACA contribute
4 to tuition, including the president's children.

5 Q Thank you.

6 Would you agree that if around a quarter of a black
7 family's income was the cost of tuition, that could be a
8 substantial burden for that black family?

9 A I really truly wouldn't be able to say. In my experience,
10 there is so many sources of funding. And they're very, very --
11 they're not made available to families in any sort of -- in any
12 sort of predictable manner. I know that we have many families
13 whose grandparents provide substantial financial support. We
14 have other families who have zero financial support from anyone
15 outside their household. We have families that have employers
16 that provide some tuition support.

17 There are so many different factors that I have seen. I
18 know in my experience at ACA tuition is a challenge for
19 virtually every family, and it certainly requires making
20 education a priority of that family's income in order to afford
21 private education.

22 Q But you would agree that a quarter of a family's income
23 being dedicated to tuition would be a substantial burden on
24 that household, right?

25 A Again, because I have seen the way that numbers so often

1 don't tell the full story of what a family's education budget
2 can be, it's hard for me to agree to that in every case. I can
3 certainly agree with that you if that is a family's sole means
4 of household income and expenses, that that would be a
5 challenge for a family.

6 Q Okay. Thank you.

7 You also testified about the Alabama Accountability Act on
8 direct?

9 A Yes.

10 Q Can we call it AAA or Triple A for short?

11 A Yes.

12 Q Okay. Thank you.

13 Now, private schools in Alabama are not required to
14 participate in the AAA, correct?

15 A Correct.

16 Q Alabama Christian Academy chose to participate in the AAA?

17 A Correct.

18 Q And the AAA was never designed to fund most black
19 Alabamian students' ability to have better educational
20 opportunities, correct?

21 A Could you repeat that question?

22 Q I can.

23 You've testified before that the AAA was never designed to
24 fund most black Alabamian students' ability to have better
25 educational opportunities, correct?

1 A No, sir. I do not recall testifying consistent with that
2 statement.

3 Q Did you take a deposition in this case?

4 A Yes, sir.

5 Q And you told the truth in that deposition?

6 A Yes.

7 Q And you were under oath in that deposition?

8 A Yes.

9 Q Okay. Let's pull up page 75, lines 11, to page 76,
10 lines 9.

11 Now, I asked you in the depositions, Mr. Roberts, So you
12 agree that you don't know one way or another whether the rebate
13 voucher --

14 A I'm sorry. Do you mind giving me a line number?

15 Q Yes.

16 A Thank you, sir.

17 Q 75:11, starting there?

18 A Yes, sir.

19 Q And it goes to 76, line 9.

20 And I asked you, So you agree that you don't know one way
21 or another whether the rebate voucher program is affording the
22 vast majority of black students across Alabama better
23 educational opportunities?

24 And you responded -- can you read your answer?

25 A I believe that that sentence is rife with

1 mischaracterization. First, the Alabama -- I should say,
2 first, if that sentence means that the majority of black
3 students in underperforming schools do not benefit from a
4 program, then that is accurate; however, the Alabama
5 Accountability Act was never designed with a -- the ability to
6 fund the majority of black students or any student body in our
7 state. So if that's the way it's meant to read, it certainly
8 mischaracterizes the Alabama Accountability Act's purpose.

9 If it's meant to share that the Alabama Accountability Act
10 does not provide better educational opportunities, then it is
11 patently false. I know of many families that it does fund
12 better educational opportunities for.

13 Q And you told the truth when you answered that question?

14 A Yes. I believe that particular -- I believe that our
15 question and answer was related to a statement from an expert
16 witness. My recollection was he was asserting that -- my
17 recollection is that he used some hyperbolic language and said
18 something to the effect of the AAA did not -- did not make a
19 betterment for the -- he might have used the phrase vast
20 majority. I don't recall.

21 And our colloquy was designed for me to answer that that
22 was a mischaracterization of the AAA, that while in some cases
23 it was -- it is able to fund individual students' and families'
24 transfers of schools. For other students in poor schools, it's
25 able to lower class size, it's able to -- they're able to

1 benefit from having -- from having students that are then no
2 longer additional students in that, and then you get higher
3 student-faculty ratio. There's benefits other than -- there's
4 school-wide benefits, and in that case county-wide, school
5 system-wide benefits, that enure to a school system beyond just
6 the benefit to a specific individual student.

7 Q Thank you.

8 You'd agree, Mr. Roberts, that schools should promote safe
9 learning environments for their students?

10 A Yes.

11 Q Thank you.

12 A school celebrating Robert E. Lee Day, for example, would
13 demonstrate a lack of care for black students?

14 A We discussed this in my deposition and I recall a
15 distinction was made at that time between -- well, first off,
16 to your question, celebrating Robert E. Lee Day, I would agree,
17 does not show care.

18 We did draw a distinction during that deposition between
19 acknowledging a State holiday in the form of a calendar
20 communication versus what I would certainly think of when I
21 think of the word "celebrating," which is, you know,
22 promotions, you know, any type of school-wide function that is
23 celebratory.

24 Q And you testified that celebrating Robert E. Lee Day would
25 show a lack of care to black students because Robert E. Lee is

1 associated with the confederacy?

2 A Yes. I did say that. I still believe that.

3 Q And because the confederacy is closely associated with the
4 enslavement of black people?

5 A Correct.

6 Q Thank you.

7 You'd also be, at a minimum, concerned about having
8 Confederate monuments on school properties, correct?

9 A That's accurate. I shared at the deposition that I think
10 the appropriate place for any type of Confederate-related
11 imagery would be in the form of, you know, cemeteries and
12 museums, but not in a school environment, absent, obviously,
13 photographs in history books and teaching implements.

14 Q You believe changing school names from Confederate leaders
15 to non-Confederate leaders would push the needle in a direction
16 of creating safer learning environments for black children,
17 correct?

18 A Yes.

19 Q And you're aware that there are still schools across
20 Alabama that bear the names of former Confederate leaders?

21 A Yes.

22 Q Let's talk a little bit more broadly about education in
23 Montgomery.

24 You've testified that you don't know one -- you don't know
25 anything about white flight, correct?

1 A I'm familiar with the phrase and concept. In our
2 deposition, I testified that I didn't have the ability to
3 determine the veracity of the experts' assertion about it,
4 absent reviewing the citation and that his statement seemed
5 overly broad.

6 Q You testified that you don't know anything about white
7 flight, correct?

8 A I testified I did not know anything about white flight in
9 the context that the experts' statement that we reviewed
10 together mentioned it.

11 Q But you do know that part of Montgomery's public school
12 funding, it comes from local tax dollars, correct?

13 A Yes.

14 Q And when wealthier families leave a school district, the
15 bucket of tax dollars supporting the schools, it shrinks?

16 A Again, I think that's overly broad. You know, our --
17 Montgomery's tax -- or Montgomery school system is primarily
18 funded through property tax, which is based upon home sales
19 values. If that's correlating the to family income, then I
20 agree with what you're saying.

21 But we're talking about really -- it's not levels of
22 income that's directly correlating to those school system
23 funding, but rather the property values.

24 Q Let's go to line -- page 68 of your deposition, lines 7
25 through 10.

1 My question: So you agree that part of the funding for
2 Montgomery public schools, it comes from local tax dollars?

3 You answered?

4 A Correct.

5 Q And when wealth -- sorry. Line 11 through 15.

6 And then I asked: And you agree that when wealthier
7 families leave a school district, that bucket of tax dollars
8 supporting the schools shrinks, right?

9 A Correct. Maybe I misheard you. I thought you used the
10 phrase "income." I just wanted to draw the distinction that
11 our tax -- wealthier families when they leave any jurisdiction
12 in Alabama, but certainly Montgomery, so long as they're
13 selling property, that would negatively impact the funding
14 of -- the funding of our school system. But it doesn't have to
15 do with income, rather the home sale value.

16 Q Thank you, Mr. Roberts.

17 And less funding per student, that is a fact that can
18 negatively impact a student's educational performance, you
19 would agree?

20 A It can, yes.

21 Q And food insecurity can also negatively impact the
22 student's educational performance?

23 A Yes.

24 Q And transportation can also impact a student's educational
25 performance, correct?

1 A Very broadly. Yes.

2 Q Now, you mentioned that you're familiar with the ACA's
3 leadership team; is that correct?

4 A Yes, sir.

5 Q There are no black members of the ACA's leadership team,
6 correct?

7 A Of our senior leadership team, no. That would just be six
8 individuals and there are no African-American members, correct.

9 Q Okay.

10 MR. CAMPBELL-HARRIS: A moment, Your Honor, to speak
11 with my colleagues.

12 THE COURT: Sure.

13 MR. CAMPBELL-HARRIS: We pass the witness.

14 Thank you, Mr. Roberts.

15 THE WITNESS: Thank you.

16 THE COURT: Any redirect?

17 MS. MESSICK: Yes. Briefly.

18 May I have one moment, please?

19 THE COURT: You may.

20 REDIRECT EXAMINATION

21 BY MS. MESSICK:

22 Q Mr. Roberts, you were just asked about the leadership at
23 ACA.

24 You said earlier that approximately 25 to 30 percent of
25 your students are African-American; is that right?

1 A Correct.

2 Q Have you ever had any Civil Rights leaders associated with
3 your school?

4 A We have. We have a friendly relationship with Fred Gray.
5 He sent his granddaughter to ACA. He served on the Board of
6 Faulkner University for a long time. We are sister
7 institutions and overlap quite a bit together.

8 Q Mr. Campbell-Harris asked you about the ACA -- I'm sorry.
9 The AAA, the Triple A, and pointed out that that is
10 voluntary. So you testified that ACA participates in the
11 Alabama Accountability Act, right?

12 A Correct.

13 Q Do you know if any of the other Capital City Conference
14 schools participate in the ACA?

15 A Yes. My understanding is that all of the Capital City
16 Conference schools participate with partnerships with at least
17 one SGO through the AAA.

18 Q Do you know if the other Capital City Conference schools
19 also make needs-based financial aid available?

20 A Yes. All five of us do.

21 Q Mr. Campbell-Harris asked you some questions about things
22 that can affect student performance and, specifically, he asked
23 you about a lack of funding, about food insecurity, and about
24 transportation.

25 Do you remember that?

1 A I do.

2 Q Can you tell me some other things that affect student
3 performance?

4 A I can. Student performance can be affected, in my
5 experience, by parental support, by engagement of teachers, by
6 opportunities for small class sizes, individually tailored
7 learning environments, peer support. It can be affected by
8 mentorships on campus. It can be affected by maybe curriculum
9 design and learning. Some students perform very, very well
10 under high levels of homework, some students, you know, learn
11 best under lower levels of more flexible scheduling.

12 I'm terribly afraid that there's more -- we don't have
13 enough time in the day to speak of all the different factors
14 that can correlate to student success. There's -- we haven't
15 touched on the social and emotional support of students, about
16 the support systems that can exist both inside a school system
17 and outside a school system in terms of supporting them. The
18 levels of elective courses that are available, the amount of
19 courses that are available to students to meet their different
20 kind of learning capacities in terms of college placement
21 courses or standard level grade courses.

22 Commute time from -- you know, from one part of the
23 building to another affects a student's learning behavior in
24 that class time. We try to locate all of our classes as near
25 as they can be to one another for students so that they're not

1 out of breath and panicked and disheveled when classes begin.

2 Q What about things like student health and sleep schedules?

3 A They certainly correspond to -- you know, a home life,
4 whether it's, you know, eating a good meal, whether it's -- oh,
5 we talk to students regularly about not being rushed. If they
6 wake up with enough time to plan out their day, to put their
7 clothes out, to adequately take care of themselves in waking
8 up, as opposed to just walking through the doors still sleepy
9 eyed, all of -- all of that certainly corresponds to student
10 success.

11 Q Okay. And Mr. Campbell-Harris asked you about celebrating
12 Robert E. Lee day. And you pointed out that a distinction was
13 drawn during your deposition.

14 The Court does not have the benefit of your deposition.
15 Could you explain why it is acceptable for a school to take
16 account of Robert E. Lee day in planning its schedule?

17 A I can try. I believe that the State of Alabama
18 acknowledges a particular day as Robert E. Lee day per
19 legislative act.

20 In a place like Montgomery, we do try to align our school
21 schedule as nearly and practically as possible with that of the
22 state government. Obviously, being in a state capital, we have
23 a significant number of our families that are State employees
24 and that are City employees. And so I would imagine that
25 anytime a business in our city is using the terminology that

1 was passed by the Legislature regarding calendaring functions
2 that that would not be viewed as celebratory. I would
3 certainly agree that -- with the opposing counsel that
4 celebrating Robert E. Lee spending a day to bring Civil Rights,
5 you know, foes to life could be, you know, an element of --
6 anything that is celebratory, educational in nature, that's
7 certainly a foe of the way that we'd seek to develop students.
8 And every school that I know of in Montgomery would certainly
9 be offended if anything they did was characterized that way.
10 But calendaring functions are not celebratory in that same way.

11 MS. MESSICK: Thank you, sir. I don't have any
12 further questions.

13 MR. CAMPBELL-HARRIS: Nothing from the plaintiffs.

14 THE COURT: All right. So there's no reason why I
15 shouldn't excuse Mr. Roberts?

16 MS. MESSICK: None.

17 MR. CAMPBELL-HARRIS: No.

18 THE COURT: Thank you, Mr. Harris, for being with us
19 today. You may be excused.

20 (Witness excused.)

21 MR. GEIGER: Your Honor, defendant calls Dr. Adam
22 Carrington.

23 THE COURT: All right. Thank you.

24 ADAM CARRINGTON

25 having been first duly sworn by the Courtroom Deputy Clerk, was

1 examined and testified as follows:

2 THE COURTROOM DEPUTY CLERK: Adjust your microphone
3 and state and spell your first and last name for the Court.

4 THE WITNESS: Yes. My name is Adam, A-D-A-M,
5 Carrington, C-A-R-R-I-N-G-T-O-N.

6 MR. GEIGER: Your Honor, as has been common so far,
7 may I give him a clean copy of his report and CV, which I think
8 has already been entered as Defendant's Exhibits 3 and 4?

9 THE COURT: You may. I assume there's no objection.

10 MR. ETTINGER: No, Your Honor.

11 THE COURT: Yeah, you may.

12 DIRECT EXAMINATION

13 BY MR. GEIGER:

14 Q Good afternoon, Dr. Carrington.

15 A Good afternoon.

16 Q Could we begin by you explaining to us what you do for a
17 living?

18 A I am an associate professor of political science at
19 Ashland University and a codirector at the Ashbrook Center
20 which is on the same campus.

21 Q And where is Ashland?

22 A Ashland, Ohio.

23 Q How long have you been there?

24 A Since August of this year.

25 Q What did you do before joining the faculty at Ashland?

1 A For 10 years, I was a political science -- or a politics
2 professor -- they named their department differently -- at
3 Hillsdale College, so from 2014 until this summer.

4 Q Did you teach both undergraduate and graduate courses at
5 Hillsdale?

6 A Yes. I had a joint appointment in both the graduate and
7 undergraduate parts of the college.

8 Q In what discipline do you have your doctorate?

9 A Political science from Baylor University.

10 Q Do you have other graduate degrees?

11 A A master of arts from the same institution, Baylor.

12 Q Has your work focused on any particular subject?

13 A Yes. My primary focus has been on political institutions,
14 particularly how they relate to the constitutional separation
15 of powers.

16 Q And what are political institutions?

17 A The main ones are considered to be the presidency,
18 Congress, the judiciary, as well as political parties.

19 Q And kind of another big picture question, what are
20 political parties in the context you've examined?

21 A Political parties are associations. They unite around
22 common principles and purposes and they seek political power,
23 usually political office at the state, national, and local
24 level to try to implement their principles and their policies.

25 MR. GEIGER: Can we pull up DX-4.

1 BY MR. GEIGER:

2 Q Do you see that on the screen, Dr. Carrington?

3 A Yes, I do.

4 Q Is that your CV you submitted in this case?

5 A Yes, it is.

6 Q It lists many of the articles you have written and courses
7 you have taught; is that right?

8 A Yes, it does.

9 Q Have you written about political parties?

10 A Yes. In particular, the article "Court Curbing the
11 Attempt to Amend the Constitution," I co-wrote that with some
12 colleagues back at Baylor University.

13 And I actually was the one that compiled a database of
14 nearly 1,500 congressional attacks against the Court system.
15 But the focus of it was how those attacks were manifesting in
16 the second half of the twentieth century attempts to maintain
17 or undue party coalition.

18 So in particular, it was looking at how parties are
19 coalitional in nature and how that coalitional nature is fluid
20 over time.

21 MR. GEIGER: Could we go to page 5?

22 BY MR. GEIGER:

23 Q During your teaching career, have you taught any courses
24 on political parties?

25 A Yes. I've taught a dedicated course just on political

1 parties, and that focused on both the theory and the history of
2 their development throughout our nation's time. And then also
3 I've taught at the graduate and undergraduate levels --
4 actually, I have done that at both Ashland and Hillsdale on the
5 American presidency.

6 And the way I've approached the course, there's been a
7 heavy focus on how the nature of the parties determines who is
8 elected, how they're elected to the presidency, as well as how
9 Congress and the presidency interact with each other.

10 And the last thing I'd say is also in -- I've taught
11 regularly American political thought, where to try to put that
12 history together, the changing coalitional nature of the
13 parties from the Federalist, Democratic, Republicans, up to the
14 contemporary Republican and Democrat parties has been a uniting
15 sort of scaffolding to put together the rest of the history.

16 Q You have been retained as an expert by the defendant in
17 this case; is that right?

18 A Yes.

19 Q Is this your first time serving as an expert in
20 litigation?

21 A Yes, it is.

22 Q I'm sure that's fun.

23 What were you asked to do?

24 A I was asked to write a report discussing the shift in the
25 South generally and in Alabama in particular from being

1 reliably democrat in its voting patterns to reliably Republican
2 over the course of the second half of the twentieth century.

3 Q Have you arrived at certain conclusions?

4 A Yes.

5 Q Have you spent much time in Alabama?

6 A No. This is the first time visiting you-all's state.

7 Q Welcome.

8 Has any of your published work focused on Alabama
9 specifically?

10 A Yes. Two scholarly articles I wrote -- one on Thomas
11 Peters, who is a Republican justice in the reconstruction era
12 on the Alabama Supreme Court. I looked at his Civil Rights
13 record.

14 I also looked at the legal acceptance or non-acceptance of
15 the Emancipation Proclamation in the South and the aftermath of
16 the American Civil War.

17 Q What about Alabama of the twentieth century?

18 A Nothing focused particularly on that. My court curbing
19 articles obviously looked at attacks the Alabama politicians
20 made, but that was -- Alabama was not a specific focus, no.

21 Q Have you taught any courses specifically about Alabama
22 politics or history?

23 A No, not that specific.

24 Q Do you consider yourself an expert specifically in the
25 field of Alabama politics or history?

1 A No.

2 Q Well, do you think that for a political scientist to reach
3 the conclusions that you have reached in this case that he or
4 she would need to be an expert in Alabama politics?

5 A No, I do not.

6 Q Why not?

7 A In order to understand political party theory and history,
8 one has to know the way the South participates in that because
9 the South plays an outside role especially in the twentieth
10 century, so to not know the South or Alabama would be to not
11 know that field.

12 In addition, most of the scholarship -- and I agree with
13 this -- do not see Alabama as an outlier at least in regard to
14 the Deep South. And my own research, when I compared
15 Alabama-specific data or Alabama-specific portions of the
16 history to the Greater South, I think, confirmed that it is not
17 an outlier on the particular things that I was looking at.

18 Q Have you studied whether the development of the Republican
19 and Democratic parties changed the partisan landscape in the
20 South?

21 A Yes.

22 Q And have you written or taught about party politics in the
23 American South?

24 A Yes. Regularly.

25 MR. GEIGER: Your Honor, pursuant to Rule 702,

1 defendant moves to proffer him as an expert in political
2 science, political parties and the partisan shift in the
3 American South.

4 THE COURT: Any objection?

5 MR. ETTINGER: May I have a moment? Yes.

6 Dr. Carrington may be qualified to speak generally about
7 political parties as an institution, but for the reasons
8 articulated in plaintiffs' motion in limine to preclude his
9 testimony, Docket Number 183, he does not have the relevant
10 qualifications to opine on the specific factors that influence
11 the voting patterns of white southerners over a nearly 60-year
12 period. He has never written on the relevant time period,
13 taught on the relevant time period, and the focus of his
14 scholarship has been primarily on the 1860s to early 1900s at
15 the national level.

16 MR. GEIGER: Your Honor, to the last part, to say that
17 he has never written on the relevant time period is not exactly
18 accurate as I think you just heard through his testimony. But
19 he is qualified to examine the question that he set out to
20 examine, which was to identify the reasons why the South,
21 including Alabama, switched political parties over the last
22 50 years or so.

23 He's an expert in political parties. And to be an expert
24 in that political institution, you have to understand and have
25 studied the South very closely, as he has, as he just explained

1 to the Court. He's brought that expertise to bear upon his
2 close examinations of Alabama's political history, the voting
3 patterns of white Alabamians and the voting trends that appear
4 more recently to determine whether those are consistent or not
5 with what he's going to conclude about the partisan shift. So
6 that study has allowed him to reach conclusions about whether
7 the causes for the partisanship in Alabama parallel in
8 important respects the causes for the partisan shift in the
9 South more broadly.

10 MR. ETTINGER: And one note, the focus of his report
11 is not about the political parties of institutions, but rather
12 about voting pattern political participation in the role of
13 race and politics. Each of those subjects are not areas that
14 he has past scholarship or expertise in. And for the reasons
15 again that we raised in our motion, we stand on those
16 objections.

17 THE COURT: All right. I will allow it because I
18 still think it goes more to weight than admissibility, and I
19 think he being offered as an Alabama-specific expert. And I
20 think the line of questioning I have just heard has been candid
21 about his limitations in that regard. And so I will allow the
22 testimony on that understanding.

23 MR. GEIGER: Thank you.

24 BY MR. GEIGER:

25 Q Dr. Carrington, you examined the so-called southern

1 switch; is that right?

2 A Yes.

3 Q Have political scientists and historians attempted to
4 identify reasons for this partisan shift?

5 A Yes, they have.

6 Q Could we pull up Dr. Carrington's report, DX-3. Thank
7 you.

8 Is this the expert that you have submitted in this case?

9 A Yes, it is.

10 Q At the beginning of the report, you identify one
11 explanation offered by some, including by some of plaintiffs'
12 experts, for this partisan shift.

13 What is that explanation?

14 A While taking into account other factors, this line of
15 scholarship says that race is the predominant, overwhelming
16 even, factor for explaining that partisan shift, even in some
17 of the expert reports to the point of saying that other factors
18 are really better explained by race as being the underlying
19 theory.

20 Q When you say "other factors," do you mean those that might
21 not be racial on their face?

22 A Yes.

23 Q Do you agree with that explanation?

24 A No, I do not.

25 Q In your opinion, is there a better explanation?

1 A Yes. In my report is to take into account what I think
2 are nonracial partisan reasons, such as in the economic sphere,
3 the foreign policy sphere, and also the sphere of social issues
4 that I think are more explanatory of the long-term shift.

5 Q When examining the partisan shift, was there a particular
6 racial demographic that you focused on?

7 A Yes. I focused on white voters.

8 Q And why that demographic?

9 A Really a statistical question. I was looking at -- we
10 were -- in trying to determine why the -- we went -- or why
11 Alabama and the South went from majority Democrat to majority
12 Republican, the group that shifted to the degree that made the
13 difference was white voters. So that's why, in answering that
14 question, I had that focus.

15 Q Why do you begin your report with the discussion of
16 faction?

17 A Well, it goes back to political parties. Faction backed
18 the American founding was considered a danger to republics. It
19 was where a group -- and I'm drawing on James Madison and
20 Federalist 10, a group tries to gain political power to oppress
21 other people.

22 And political parties and most of the literature is
23 explicitly or implicitly built on the idea that in our system
24 parties are, at their best, a way of putting together
25 coalitions of voters that in order to gain power have to

1 moderate and broaden their political goals, and that,
2 therefore, it is a way of dealing with a problem of faction.

3 Q Have there been periods in American political history
4 where political parties have been less successful at mitigating
5 the threat posed by faction?

6 A Absolutely. And this is why one has to study the South if
7 you're going to study political parties because the South, in
8 some ways, for a good deal of its history is the exception.

9 It has, I think, it's safe to say, a race-based faction
10 that gains at least majority power partly through who's
11 excluded from participation in the 19th and into a good deal of
12 the twentieth century.

13 Q Is Southern politics still dominated by a race-based
14 faction from your view?

15 A My argument in my report is that, thankfully, no, that it
16 has moved into being and behaving more like the general theory
17 of political parties and with -- more in line with the country
18 as a whole.

19 Q At what point in history did the South move to become more
20 in line with the country as a whole, as you just testified?

21 A I point to the Civil Rights movement of the '60s and '70s
22 pushing the South in that direction and achieving a more
23 normalized politics, I would say, by the 1980s.

24 Q You spent a significant portion of your report juxtaposing
25 the development of the Democratic and Republican parties in the

1 twentieth century; is that right?

2 A Yes.

3 Q So if we could start with the Democratic party.

4 You refer, first, to the New Deal Democratic coalition.
5 What was that?

6 A The New Deal coalition is inaugurated by Franklin
7 Roosevelt's victory of the presidency in 1932 and it gives the
8 Democrats a lasting majority for the first time since before
9 the Civil War. It -- in line with the way I've studied
10 coalitions and parties, it is centered on an economic program,
11 greater government intervention into the economy for the sake
12 of fighting the Great Depression. Its basis of operation,
13 significant strength in the South, significant strength among
14 blue collar workers, both white and black. This is when
15 African-Americans who are allowed to vote first begin really
16 voting majority Democrat. And it becomes a lasting dominant
17 coalition in the American -- in the American system.

18 Q You then describe the rise of the New Left. What was the
19 New Left?

20 A So if there's a New Left, that means there is an old left,
21 right? And the old left was the New Deal coalition. And by
22 the early 1960s, although there were elements of it even
23 before, this movement arises predominantly on college campuses
24 questioning that New Deal coalition, questioning it
25 economically, wanting to move more, I would say, progressive on

1 economics, questioning -- much more critical of the
2 United States, much more fundamentally critical of the
3 United States. Anti-Vietnam war, that was a big part of it.
4 And also seeing the issues of oppression as being more than
5 just economic, but also racial, also related to issues of sex
6 and sexuality.

7 So a lot of movements that sort of flower in the second
8 half of the twentieth century, environmentalism, some of the
9 antinuclear movements, feminism, the LGBTQ movement, all of
10 these either directly descend or have significant roots in this
11 intellectual and political movement.

12 Q Does the Democratic party, today, look more like the New
13 Deal coalition or the New Left?

14 A I think, increasingly, it looks more like the New Left
15 coalition, both in the composition of its voters, but also in
16 its particular ideas that unite it, especially on matters of
17 sex and sexuality, for example.

18 Q That transition into what the Democratic party has become,
19 did that occur quickly or --

20 A No. It did not.

21 Now, the -- that movement gained prominence within the
22 Democratic party very quickly, so you get George McGovern who
23 was painted as -- and I'm not saying whether this is fair or
24 not -- but as being for amnesty, acid and abortion in the 1972
25 campaign. So he, in many ways, was seen as a triumph of the

1 New Left ascending to power, but then he loses very badly.

2 You get Walter Mondale, Michael Dukakis that are seen as
3 at least more congenial to those groups, but you don't get a
4 national winning campaign. You do get specific states where
5 people -- women like Abzug gets into Congress in New York, Tom
6 Hayden who writes the Port Huron Statement that I mention is a
7 seminal statement of the New Left. He participates in
8 California politics.

9 So these -- there tends to be a battle. I quote one
10 scholar saying, After '72, the Democratic coalition was never
11 the same. It was never like the New Deal coalition, that it
12 retains elements of both, fighting it out for supremacy within
13 the Democratic party.

14 Q When, if ever, did the New Deal -- excuse me -- the New
15 Left begin to experience national political success?

16 A Well, beyond state level or congressional level success,
17 the real measure of that, I guess, would be the presidency and
18 I would say while they certainly win nominations in the
19 Democratic party, a winning candidate that at least has
20 significant credentials related to the New Left wouldn't be
21 until the twenty-first century with the election of President
22 Obama.

23 Q Now, the Republican Party, did it also change over the
24 course of the twentieth century?

25 A Yes. So you have the Roaring Twenties and you have the

1 party of Calvin Coolidge, which is a very limited government,
2 probusiness understanding. It gets severely discredited by the
3 New Deal -- or not by the New Deal, by the Great Depression and
4 FDR's critique of the New Deal; I go into that in my report.

5 Then, you have in the 1950s what's called the new
6 Republicanism under Dwight Eisenhower and its argument was to
7 make peace with the New Deal, try to manage the New Deal, be a
8 more restrained management of it than the Democratic party.

9 But an element of the Republican Party chaffs at that and
10 starts to articulate what I would call modern conservatism. And
11 this restates a belief in limited government and even, I'd say,
12 greater emphasis maybe on free markets, federalism,
13 anticommunism comes into the mix and also an articulation of
14 what's often been called traditional moral values.

15 Q Where, if they do, do Presidents Nixon and Reagan fit in
16 to the story of the Republican Party?

17 A So Nixon is someone who comes to prominence before really
18 the rise of modern conservatism. So in some ways he
19 overlaps -- he rises from -- by being an anticommunist,
20 participating in the Chambers-Alger Hiss hearings.

21 But he also is not on board. He's more on board with the
22 Eisenhower economic approach than the modern conservatism --
23 modern conservative approach, so he has wage and price
24 controls. He creates the Environmental Protection Agency.

25 Reagan is considered more of a, you could say,

1 prototype -- I mean, no person's perfect resemblance of a
2 movement, but more of a prototype of the emphasis on
3 federalism, the emphasis on free markets, anticommunism,
4 traditional moral stance. And also unlike some of the previous
5 standard bearers, actually achieves electoral success by
6 winning in 1980 and 1984 the presidential election.

7 Q Could you pull up PX-2. Go to page 8. Sorry.

8 Do you recognize this document we have put up on the
9 screen, Dr. Carrington?

10 A Yes. That looks to be Dr. Bagley's rebuttal report, which
11 included, in part, a rebuttal of my own.

12 Q Could you focus on the last paragraph.

13 Dr. Bagley contends that, quote, The culmination of the
14 rise of modern conservatism, then, is Ronald Reagan.

15 It's right there in the middle of that paragraph.

16 A Yeah. I see it.

17 Q Okay. Who used coded appeals like the Welfare Queen and
18 who rolled back Civil Rights enforcement and expenditures at
19 the federal level, end quote.

20 Do you see evidence that Reagan, or Nixon, for that
21 matter, used racial appeals to pursue Southern white voters?

22 A I think that -- I would say no. And the reason I would
23 say that I don't see that as the dominant thrust of what
24 they're doing is, one, with -- neither of them are willing to
25 align themselves with the segregationists' movement. They

1 really demand that if Southerners are going to be identified
2 with the Republican Party, it's more on Republican Party terms
3 on modern conservative or even Eisenhower conservative terms.

4 And I see that from both statements and from actions.
5 Statements, if you look at Nixon's inaugural address, he
6 emphasizes that there has been a terrible history of not
7 recognizing equality under the law and that we are finally
8 having our laws start to catch up with our principles.

9 He follows that up with actions. He is, I think,
10 underappreciated for what he did for desegregation. He is
11 underappreciated for himself being an early creator of
12 affirmative action programs.

13 I think with Reagan, if you look at his second inaugural
14 address where he decries racial hatred on the basis -- both in
15 law and custom. And it's interesting, in his first inaugural
16 he famously says government is the problem. In the second
17 inaugural he says government -- in this case, the federal
18 government is a necessary part of dealing with the problem of
19 legal and customary racial discrimination.

20 And for that matter, I think Dr. Bagley leaves out the
21 fact that it is Reagan that not only signs a renewal of the
22 Civil Rights Act of 1965, but strengthens it, strengthens it
23 with the 1982 amendment.

24 So I think if one knows some of the background of the
25 Welfare Queen comment, I think, to speak specifically to that,

1 a lot of that is, I think, appealing to limited government
2 principles that decry what many saw as the unfairness of abuses
3 of the welfare system that could occur across a number of --
4 you know, regardless of the race of the person doing so.

5 Q Well, then, how do you know that appeals to limited
6 government principles themselves and other modern conservative
7 policy positions aren't subtle appeals to race?

8 A Well, I'd say I don't know that perfectly. One can't
9 prove a negative, but that's one difference I sometimes have
10 with parts of the political science literature on these points
11 and that is -- obviously, we know to avert appeals to race.
12 But this idea of sort of covert or implied often involves
13 someone saying something and an observer, a political scientist
14 saying, well, he didn't really mean what he said, he meant
15 something else.

16 And then once you determine that, having to then determine
17 that a significant portion of the audience didn't understand
18 what was said as what was directly said, but understood what
19 was implied.

20 And then you have to take a third step and say not only do
21 you establish that, well, they didn't mean what they said, they
22 meant something else, people understood something else than
23 what was said, you then have to go to the final step of saying
24 and then that was the determining factor of a vote or of a
25 political identity.

1 And I think that one has to be very careful with that
2 because one can slip into more amateur psychology than
3 political science if one is too free with making that
4 determination or making that assumption.

5 Q Thank you.

6 Was the South also changing over the course of the
7 twentieth century?

8 A Yes.

9 Q In what major ways?

10 A I think two ways that I pinpoint that need to be
11 understood is, first, economically the South starting off the
12 twentieth century as one of the poorest regions of the country.

13 In 1940, which is well into the century, you still have
14 only around 30 percent of the South being in the middle class.

15 By the 1980s, that's 60 percent. So significant economic
16 growth. Significant raise in the standard of living.

17 The second is at the beginning of the twentieth century,
18 the South begins as one of the most rural areas in the United
19 States and develops a very significant Metropolitan -- I mean,
20 urban and suburban population to where by the twenty-first
21 century it's comparable to the country as a whole.

22 Q Were people moving from rural portions of the South to
23 urban and suburban areas?

24 A There certainly was some of that, but also the literature
25 shows that significant portions of that growth come from

1 migration from other parts of the country -- Midwest and other
2 places -- that make up a significant amount of that. And
3 actually, I should add, most of the migration from outside of
4 the South -- I think it's 63 percent between the 1950s and
5 2000 -- is coming to urban and suburban areas, so very little
6 of it is actually coming to the rural areas.

7 Q Did you find some connection between the South's
8 development and the partisan shift that occurred?

9 A Yes. And in line with some other scholars, as well, the
10 kind of voter, going back to the 1920s, that was at least more
11 attracted to the Republican Party even in the South was
12 upwardly mobile, white-collar, living in Metropolitan areas.

13 And as the two trends I talked about progress, the type
14 of -- the amount of the type of voter that would be more
15 attracted, especially to the Republican economic policy, but
16 also other things -- just gets a lot bigger. And I think that
17 by itself helps the Republican Party get more competitive by
18 just growing the pool of voters that were already -- tended
19 nationally to be attracted to the Republican Party.

20 Q What about the blue-collar worker? What happened to him
21 during this time?

22 A Well, there certainly was increasing migration toward the
23 Republican Party during these times, but it was slower, and the
24 scholarship shows this. It wasn't until the 2010s that
25 Republican -- that rural voters identified more as Republican

1 than Democrat. Voting patterns, it tended to be that they were
2 more -- more remained with the Democratic Party longer or at
3 least in bigger numbers even as there was a move toward the
4 Republican Party during that time, even among those voters.

5 Q Why do you think they took longer to move away from the
6 Democratic Party?

7 A Well, some of it's migration since not many people from
8 outside are moving to those areas that tended to be Republican
9 voters anyway.

10 I think also the economic message of Republicans, if they
11 could pinpoint -- and again I am not talking about what's right
12 or wrong, but as far as messaging, if they could pinpoint the
13 Democratic Party as too far to the left economically, tax and
14 spend, stagflation under President Carter, they could lure the
15 voters to a degree over, but they're more doctrinaire
16 free-market conservatism, at times seemed to be critical of the
17 New Deal and I think blue-collar workers have always been more
18 in line with those economic policies.

19 So I think that that -- retained, I think that people have
20 undervalued how much blue-collar workers were willing to be
21 resistant to that economic message when it crossed a certain
22 line.

23 MR. GEIGER: You can take that down.

24 BY MR. GEIGER:

25 Q Let's talk a little bit about foreign policy. Could you

1 briefly describe the development of the Democratic Party in
2 their Cold War -- its Cold War foreign policy?

3 A Yes. It really gets established by at first by Truman,
4 President Truman with his containment policy, the idea that
5 we're not going to try to roll back communism where it already
6 is, we will try to keep it from expanding further.

7 And that continues to be largely the policy going forward,
8 even if there is some tension that grows later on in those who
9 are wanting a more -- I don't want to say softer, but a more
10 reproachful relationship with communism versus less so.

11 Q Could you also describe the development, if any, of the
12 Republican parties' Cold War foreign policy?

13 A Yes. I think that it always had a more decided or maybe
14 let's say aggressive anti-communist strain. Going all the way
15 back to '48, Richard Nixon campaigns across the country
16 attacking Truman as being too soft on communism. You have the
17 infamous Joe McCarthy, Republican senator from Wisconsin.

18 You have up to Reagan in the 1980s calling the Soviet
19 Union an evil empire. And so I think what you have, especially
20 when you get into the '70s and '80s, the question of
21 communism -- or let's say a strident anti-communism as a more
22 unifying principle within the Republican Party. It's more a
23 point of a tension or I would say lack of determinacy within
24 the Democratic Party as time goes on.

25 Q Do you have an opinion about which foreign policy would

1 have resonated more with white southerners?

2 A I think the more strident anti-communism of the Republican
3 Party was more of a fit.

4 Q Why would that be the case?

5 A I could give three broad reasons: One, you know, there's
6 high levels -- considered high levels of patriotism in the
7 South, and the Soviet Union was seen as a global foe of the
8 United States at this time.

9 I would say on economics, while the -- even blue-collar
10 voters were still on board with the New Deal, communism was
11 painted as against the liberty of the individual in a way that
12 I think was effective, as far as marketing.

13 And then I think of great importance was religion. From
14 Whittaker Chambers up through Ronald Reagan, the right side of
15 the political spectrum is hammering that the communists are
16 godless materialists, right? And I think that given the
17 religiosity of the South generally, including Alabama -- I get
18 into some of those statistics in my report -- the painting
19 themselves -- the Republicans painting themselves as the
20 anti-communist party and painting the communists as those
21 things, I think, was certainly an effective strategy.

22 Q Thankfully the Cold War is over and it has been for a long
23 time, so what explanatory power does this have for why we see
24 white voting patterns shift into what they have become today?

25 A I'd say two things to that. Yes, the Soviet Union is

1 gone, but one thing I was trying to trace is how we got to this
2 point, which includes the story of the Cold War, and I've even
3 acknowledged in some of my own writings that there was -- ou
4 know, there was accusations of Civil Rights leaders being
5 communists, but I think -- I think communism as its own
6 independent evil was a position that was firmly held by many
7 southerners. And the second thing I would say is, yes, the
8 Soviet Union's gone, but the language is not.

9 I think just a regular political observer would see that
10 the political right likes to cast the political left now as
11 being socialists and communists. And again, I'm not saying
12 whether that's true or not, fair or not.

13 But that language still has a -- it's still wielded a lot
14 by the political right to try to draw people away from the
15 Democratic Party and the political left.

16 Q The final section of your report examines the development
17 of the two parties on a number of social issues. You begin
18 with religious identity. So how have the parties developed
19 with respect to that issue?

20 A Well, political -- both political parties have always had
21 religious believers in it. And there's always been some
22 distinction based on denomination, especially of Christianity.
23 So there's the old joke that mid century the Episcopal church
24 was the Republican Party at prayer, right?

25 The way it develops in the latter half of the twentieth

1 century is twofold: You see a certain denomination's
2 liberalizing their theology, and that is seen as linking up
3 with the leftward move of parts of the Democratic Party. So
4 certain denominations start to be considered more aligned
5 especially of their clergy with the political left.

6 Whereas you see a rightward shift of other denominations
7 theologically, and they tend to be welcomed or at least told
8 they have a home in the Republican Party.

9 And then the second thing I would say that is really
10 important is the rise of the nones -- N-O-N-E-S -- not the
11 other kind of nuns, where the growing -- whereas the Democrats
12 tend to take a more firmer view of the separation of church and
13 state, they are seen as a more natural home to the more secular
14 voters, and the political right tended to paint that as meaning
15 they were not very receptive to a recognition of a public place
16 for religion or religious liberty.

17 Q Did that development on the issue of religious identity
18 affect, in your opinion, voting patterns in the South?

19 A I think it did, as well. I think it affected by -- you
20 know, many Alabamians, I think, identify as religious. Alabama
21 has one of the highest levels of regular church attendance in
22 the country. And if -- whether true or not, again, if you
23 are -- if you paint one party as less receptive to those kind
24 of voters' values religiously and another as more, that's going
25 to make the one party seem more attractive than the other.

1 Q Is there scholarly support for that position you just
2 articulated?

3 A Yes. And I cite a number of those in -- in my report.
4 And I could have recited a lot more. I think it's a -- the
5 fact that this was a conscious attempt by conservative groups
6 and the Republican Party to woo voters, particularly including
7 in the South, I think, is fairly well accepted that that was at
8 least the attempt that was being made.

9 And I saw that in my own research when I was doing the
10 Court curbing articles. There were so many attempts to -- and
11 I don't think they were serious -- but legislative attempts to,
12 like, overturn Supreme Court cases that were based on the
13 establishment clause and removing prayer from school, removing
14 funding for religious schools or things like that.

15 And I think those were, as my article argued, wedge issues
16 trying to lure voters that the voted Democrat into the
17 Republican Party.

18 Q Moving on now to the issue of abortion, which you discuss
19 in your report.

20 Today, where do the parties fall on that issue?

21 A The Democratic Party is considered the natural home for
22 pro-choice voters, generally advocating for pretty limited
23 restrictions on a woman's right to terminate a pregnancy.

24 The Republican Party has been seen as the more natural
25 home for self-identified pro-life voters who want extensive

1 regulations restricting or even outright banning abortion.

2 And I even point out that some of the literature in the
3 '90s and even some earlier pegged when it tried to ask what
4 does -- what did voters or citizens think about this. And the
5 Republican Party at that point was already considered the more
6 natural home for pro-life-identified voters and the Democratic
7 Party for pro-choice voters.

8 Q Do you think the parties being those respective natural
9 homes has contributed to the partisan shift that has taken
10 place in the South?

11 A I think it contributes, as well. I mean, remember, going
12 all the way back to 1972 with McGovern, amnesty, acid and
13 abortion.

14 But I think it contributed to that move because -- Alabama
15 in particular I looked at is consistently in peer research and
16 others been cited as the most pro-life state in the country.
17 You have the sanctity of life amendment that passed by, I
18 believe, a 59/41 margin when it came up.

19 And so I think that that's made a significant impact
20 because abortion, we've also seen, is -- in that polling is an
21 issue that is of -- not just held by certain voters, but highly
22 prioritized by certain voters.

23 Q When you say "highly prioritized," is it your opinion that
24 the issue of abortion is to certain voters, perhaps many
25 voters, more important than a racial issue?

1 A That's -- that would be my conclusion, yes.

2 Q Could abortion itself be a racial issue?

3 A That's certainly been argued, but I -- I find it
4 unconvincing based on the rhetoric and the advocacy that the
5 pro-life movement tends to have in arguing that they have a
6 sort of universal life ethic, that they don't want to just
7 protect unborn children of a certain race. They advocate
8 across racial lines. They advocate for crisis pregnancy
9 centers across racial lines.

10 So it seems inconsistent, if race is really what's driving
11 them, that they would have the advocacy and the language they
12 do about abortion.

13 It seems like, whether you agree with them or not, that's
14 honestly what they believe, and that's honestly what's
15 influencing their political decisions to a significant degree.

16 Q You conclude with the section on LGBTQ rights. Have the
17 parties developed and even changed on that issue, as well?

18 A Yes. So I note that it's not until the twenty-first
19 century that one party advocates for recognition of same-sex
20 relationships as marriages. But -- and I trace a lot of the
21 platform language on this between the two parties.

22 The Democratic Party, though, is regularly seen as more
23 welcoming to LGBTQ persons, more willing to advocate for LGBTQ
24 rights, and, you know, one of the Republican wedge issues in
25 the early 2000s especially, but also in the '90s, is to appeal

1 to more traditionally minded voters by painting the Democrats
2 as the party of those advocacies and painting themselves as not
3 that -- as the opposite.

4 Q Would those parties' positions or how they were painted by
5 the other party, in your opinion, also contribute to the
6 partisan shift that occurred in the South?

7 A I think so. And I think this goes back to one reason I
8 started with religiosity and then led into abortion and LGBTQ
9 issues is because I think there's a link there. And so more
10 conservative or traditionally minded denominations tended to
11 oppose same-sex relationships.

12 And I think that if you look at the Sanctity of Marriage
13 Amendment, which passed overwhelmingly in Alabama in 2006, and
14 if you look at, you know, there's even research saying that
15 those initiatives across the country helped George W. Bush win
16 the 2004 election, I think that it was seen as something that
17 effectively brought a certain number of voters to identify more
18 with the Republican Party.

19 Q Can we go back PX-21, page 14.

20 Let's turn back to Dr. Bagley's rebuttal report, which
21 should be coming up on the screen here in a second. And
22 looking at, I believe, the last paragraph.

23 Dr. Bagley criticized your discussion of the abortion and
24 LGBTQ issues by citing a *Washington Post* article by Michelle
25 Boorstein who wrote that -- and this is kind of three lines

1 down, Black evangelicals in Alabama, quote, are less motivated
2 by the issues that heavily drive white evangelicals,
3 specifically abortion and the rise of LGBT rights, end quote.

4 And then he also quotes her as concluding that, quote,
5 Race generally trumps religion in Alabama overall as a dividing
6 line among voters and that is a certainly true among
7 African-American voters.

8 Do you agree with that assessment that in Alabama race
9 trumps religion as a dividing line among voters?

10 A I would say to the overall, no. And to be a little more
11 specific, I did not focus on African-American voters. So I
12 would not want to guess, necessarily, about that.

13 But I will say that among white voters that I was looking
14 at, their votes are consistent with nonracial factors, like
15 their religious beliefs, with their positions on abortion,
16 their positions on LGBTQ issues. So it seems to me that, at
17 least as far as white voters, that's not the case.

18 And I would add, you know, I don't -- I don't know that I
19 needed to necessarily focus on what drove African-American
20 voters to understand what motivated white voters in their
21 particular -- in their particular voting patterns.

22 Q If we could pull up PX-13 at page 16.

23 Do you recognize this document?

24 A Yes. That is the rebuttal report from Dr. Burch, who
25 also, in a smaller section, rebutted -- had rebuttals to my

1 report.

2 Q Okay. Page 16.

3 Let's look at kind of the top half of the page.

4 A little earlier, when I asked you about when, if ever,
5 the New Left began to experience on a national scale political
6 success, you mentioned the presidency of Barack Obama.
7 Dr. Burch writes in her report on this page, about half way
8 down -- a little bit above half way down, that paragraph, Obama
9 was, quote, consequential to the relationship between race and
10 partisanship and vote choice, end quote.

11 Do you agree with that evaluation of Obama's presidency?

12 A I think that Dr. Burch overly reduces President Obama to a
13 particular identity, his race, without taking into account his
14 actual views and actions and I think President Obama really
15 brings together a lot of my narrative.

16 So I argue that a number of things were driving voters,
17 Southern voters into the GOP. Well, let's think about those in
18 relation to President Obama.

19 He was consistently criticized in the 2008 race for having
20 supported -- having opposed a ban on partial birth apportionments
21 in Illinois; so there we have abortion related to what I was
22 saying, a position that would be inconsistent with Southern
23 white views on abortion.

24 Let's think about socialism and communism. How was the
25 Affordable Care Act attacked as a move towards socialism or

1 communism? Right or wrong, that plays into what I was saying
2 was pitches made to drive voters into the GOP.

3 Let's think of religion. I don't doubt President Obama's
4 religious beliefs, but when he said on the campaign trail that
5 there are people bitterly clinging to God and guns, that was
6 pitched or interpreted as being antagonistic towards a
7 particular type of religious voter of which there would be a
8 disproportionate level in the South.

9 And he, himself, changes his view on recognition of same
10 sex relationships between the '08 and 2012 election --
11 electoral campaigns, which itself would be consistent with a
12 move away from the priorities -- the nonracial priorities of
13 white voters in the South, including Alabama.

14 So on all of these, he sort of exemplifies the move of the
15 Democratic party away from these issues that a majority of
16 white voters in the South, including Alabama, claim to hold.

17 Q Let's go to page 18, top paragraph.

18 Dr. Burch here also writes that top line, quote, Research
19 has shown that alternative explanations for polarization also
20 became tied more strongly to racial attitudes. Several of the
21 items Dr. Carrington discusses as not being race-based issues
22 are increasingly tied to race.

23 How do you respond to that criticism?

24 A Here, again, I do have some methodological questions with
25 this because some of the research she cites say, Well, what is

1 a racially antagonistic or -- you know, I forget the exact
2 phrase she uses, but racially connected statements. And it's
3 statements to the effect of I don't -- I feel like a stranger
4 in my own country, or I -- or certain views about immigration
5 in relation to government policy.

6 And I think that one has to, again, be very careful with
7 saying I don't believe what you actually said, I believe there
8 was an implied meaning that is then connected to other people
9 believing the implied meaning, not the real meaning.

10 And this isn't me assuming good faith on the part of
11 people. I know people can try to be deceptive. But in some
12 ways, it's me not believing people are smart enough to
13 consistently do that kind of thing. But it's also humiliating
14 on my part.

15 As a political scientist, I can't read people's minds, all
16 I have to go on is what they say and what they do and I think
17 that puts the burden of proof on what they actually say and do,
18 unless I think there's a very high standard to the contrary.
19 Otherwise, there's the danger of me reading my preconceptions
20 in, reading my own assumptions in, and, obviously, I don't
21 think that is a good -- that's more advocacy than political
22 science.

23 Q Just a couple last questions, Dr. Carrington.

24 Were you trying to mute race when analyzing this partisan
25 shift?

1 A No, I was not. If by "mute" one means to eliminate -- act
2 as if it's eliminated entirely, no. It plays a dominant role
3 for too much of American history -- well, any part was too
4 much. But I also don't deny, and I say this in several points
5 in my report, that race continues, that I can't deny that it
6 doesn't continue to be a factor of some degree.

7 All I merely say is I think that that is an oversimplified
8 story to say that it is the dominant or overwhelming, or that
9 it somehow is really what's lurking behind all the other views.

10 So I'm more trying to bring out that fuller story, without
11 denying that -- I can't say that there's no voters that has any
12 relevance to or take that into account at all. I think that
13 would be bad political science, to act as if I'm omniscient on
14 that.

15 Q Well, to that point, you said and testified that, Race may
16 continue to be a factor in the South's partisan shift and even
17 in voting patterns today.

18 What do you mean by that?

19 A Well, by -- a factor, again, I can't prove a negative.
20 There is a history and, therefore, I would not rule out that
21 there are voters of whom that is some level of -- some level of
22 motivation or some level of what they're thinking of.

23 But at the same time, I -- my report was to say that I
24 don't see that as being the best explanatory factor. I think
25 the other is on economics defense -- or I should say foreign

1 policy and social issues really become more -- the more
2 driving -- the much more driving factors and that is consistent
3 with bringing the South back within the range of normality of
4 the theory and history of political parties that I have been
5 studying in my career.

6 Q Thank you.

7 MR. GEIGER: Your Honor, may have just a minute?

8 THE COURT: You may.

9 MR. GEIGER: Thank you.

10 With a few minutes to spare, I pass the witness.

11 THE COURT: Thank you.

12 All right. Why don't we stop there for today, rather than
13 start cross for just a few minutes.

14 What can counsel for the Secretary tell me about the line
15 up for tomorrow? I believe we previously discussed some fact
16 witnesses.

17 MR. DAVIS: Yes, Judge. And I have spoken with
18 Mr. Ross and Mr. Rosborough.

19 So we'll finish Dr. Carrington tomorrow and then Dr. Hood
20 will testify.

21 After that, we have Cedric Coley, Karen Landers, and Bill
22 McCollum, in that order, although a couple of those could
23 switch orders.

24 THE COURT: Sure.

25 MR. DAVIS: And depending on what time we finish with

1 those, we will be prepared to start Dr. Bonneau tomorrow
2 afternoon or he could start Wednesday morning.

3 THE COURT: Sure.

4 MR. DAVIS: But we're trying to fill up so we don't
5 have spare time.

6 THE COURT: Understood.

7 All right. Then, why don't we plan to begin at 9:00 a.m.
8 Does that suit everybody?

9 MR. DAVIS: Yes.

10 THE COURT: Okay. Great.

11 MR. ROSBOROUGH: Yes, Your Honor.

12 THE COURT: All right. I will see you at 9:00 a.m.
13 We will recess until then.

14

15 (Whereupon, the above proceedings were concluded at
16 4:51 p.m.)

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CERTIFICATE

I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter.

Christina K Decker

11-18-2024

Christina K. Decker, RMR, CRR

Date

Federal Official Court Reporter

ACCR#: 255