

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

4 ALABAMA STATE CONFERENCE *
5 OF THE NAACP, et al., *
6 Plaintiffs, * 2:21-cv-1531-AMM
7 vs. * November 13, 2024
8 WES ALLEN, in his official *
9 capacity as Alabama Secretary *
10 of State, *
11 Defendant. *
12 *****

13 TRANSCRIPT OF BENCH TRIAL
14 VOLUME II
15 BEFORE THE HONORABLE ANNA M. MANASCO
16 UNITED STATES DISTRICT JUDGE

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I N D E X

1		
2		
3	ANTHONY FAIRFAX	225
	DIRECT EXAMINATION	226
4	BY MR. VAN LEER	226
	CROSS-EXAMINATION	277
5	BY MR. GEIGER	277
	REDIRECT EXAMINATION	343
6	BY MR. VAN LEER	
7	KASSRA OSKOOII	348
	DIRECT EXAMINATION	348
8	BY MR. GENBERG	
	CROSS-EXAMINATION	389
9	BY MR. SEISS	389
10	EVAN MILLIGAN	452
	DIRECT EXAMINATION	453
11	BY MR. UNGER	
12		
13	Plaintiffs' Exhibits 6-10	234
	Plaintiffs' Exhibits 33-61	234
14	Plaintiffs' Exhibits 63-74	234
	Plaintiffs' Exhibit 32	245
15	Plaintiffs' Exhibit 15	349
	Plaintiffs' Exhibit 14	354
16	Plaintiffs' Exhibit 208	366
	Plaintiffs' Exhibit 195	387
17	Plaintiffs' Exhibit 196	387
	Plaintiffs' Exhibit 198	387
18		
19		
20		
21		
22		
23		
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25		

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P R O C E E D I N G S

(In open court.)

THE COURT: All right. Please be seated. Good morning, everybody. We're back for day two.

Okay. Who is next up for the plaintiffs?

MR. VAN LEER: Good morning, Your Honor. Plaintiffs call Mr. Anthony Fairfax.

THE COURT: All right.

MR. VAN LEER: As plaintiffs' witness.

ANTHONY FAIRFAX

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

THE COURTROOM DEPUTY CLERK: Speak clearly and loudly into the microphone. State your name and spell it for the Court record.

THE WITNESS: Anthony Edward Fairfax. A-N-T-H-O-N-Y; A-N-T-H-O-N-Y, E-D-W-A-R-D, F-A-I-R-F-A-X.

THE COURTROOM DEPUTY CLERK: Thank you.

THE COURT: You may proceed.

MR. VAN LEER: Thank you. Your Honor, I have a binder with unmarked copies of the witness's expert report for him to have during his testimony. Is it all right if I approach and give that to him?

THE COURT: Any objection?

MR. GEIGER: No.

1 THE COURT: You may.

2 DIRECT EXAMINATION

3 BY MR. VAN LEER:

4 Q Good morning, Mr. Fairfax.

5 A Good morning.

6 Q How are you today?

7 A I'm doing well.

8 Q What's your profession?

9 A I am a demographic and mapping consultant.

10 Q And where do you work, Mr. Fairfax?

11 A I have a company called CensusChannel LLC.

12 Q Do you mind briefly describing your educational

13 background?

14 A I have a bachelor's of science degree in electrical
15 engineering from Virginia Tech and a master's of geospatial
16 information science and technology from NC State.

17 Q And can you describe your professional background in
18 redistricting?

19 A Yes. My redistricting experience began in 1991. I was
20 hired as a GIS consultant for a Ford and Rockefeller Foundation
21 grant project at Norfolk State University.

22 The goals of that project was to develop redistricting
23 plans for small, local organizations mostly in the South.
24 Probably during that period of time, I was a main map drawer.
25 And I probably developed probably 150 to 200 different

1 redistricting plans.

2 The next decade, 2000, I was hired as a consulting
3 demographer for a new non-profit organization called The
4 Congressional Black Caucus Institute. And the institute's goal
5 or the project's goal was to research, analyze, and develop
6 redistricting plans where African-Americans could elect
7 candidates of choice in congressional districts.

8 I probably worked in approximately 22 or 23 states during
9 that time.

10 The next decade in 2010, I was rehired as a consulting
11 demographer and worked in approximately same number of states.
12 I also worked on a special project, if you will, to prepare the
13 next generation of experts, if you will.

14 This was hosted by and sponsored by Duke University and
15 Southern Coalition For Social Justice. And the project that I
16 worked on, the part that I worked on was the mapping portion.
17 There were two project managers, a well-known political
18 scientist and myself.

19 And what I had to do was I had to actually develop the
20 curriculum. I performed some of the training. And also
21 invited trainers throughout the country to come and train the
22 cartographers we called them at that time.

23 During this last decade, I began testifying. So I've
24 developed, if you will, expert reports, provided depositions,
25 and provided testimony in state and federal court.

1 Probably during the 30-some years that I've worked, I've
2 probably developed maybe a thousand different redistricting
3 plans. I believe I probably crossed that amount with this
4 round of redistricting.

5 I've worked for organizations, from small organizations to
6 large nationally recognized organizations. And I've drawn
7 plans from small cities and towns to large congressional
8 district state plans. And that's a summary.

9 Q Thank you, Mr. Fairfax.

10 To what extent has your redistricting work involved state
11 legislative plans?

12 A Approximately, let's say half.

13 Q And has any of your work involved in the state of Alabama?

14 A Yes. I worked on the -- it was the Alabama Legislative
15 Black Caucus case, but I worked with the Alabama democratic
16 conference side. And so I prepared a couple of illustrative
17 for that.

18 I'm currently working on another case in Jefferson County.
19 And then throughout this last round of redistricting, I was one
20 of the trainers for something called CROWD Academy. It was
21 designed to actually train organizations and individuals
22 throughout the country, really, mostly in the South. And so
23 there were organizations or individuals from Alabama. So I
24 actually assisted them in developing their plans sometimes or
25 giving them some guidance.

1 Q And you mentioned your experience testifying as an expert
2 witness in cases. Can you briefly tell the Court a bit more
3 about that?

4 A I have provided illustrative plans. I've also performed
5 what I call comparative analysis looking at traditional
6 redistricting criteria, comparing one plan to the next. I have
7 performed sort of racial gerrymandering analysis, if you will.
8 So that probably covers the spectrum.

9 Q And what's the scope of your experience testifying in
10 cases involving Section 2 of the Voting Rights Act?

11 A Probably about 50 percent, maybe 40, 50 percent, maybe
12 more, maybe 60 percent, something like that.

13 Q Generally, how have courts responded to your expert
14 opinions?

15 A Generally, they've responded very well, I believe.

16 Q And what's the typical nature of your testimony in a
17 Section 2 case?

18 A Usually I develop the illustrative plan. I develop an
19 expert report and provide deposition and testimony about my
20 opinions and conclusions.

21 Q What's the purpose of providing an illustrative plan in a
22 Section 2 case, Mr. Fairfax?

23 A It's to demonstrate. Illustrative means to demonstrate,
24 in essence, that something can occur. And usually in Section
25 2, it's to demonstrate that *Gingles* I can be met.

1 Q Can you describe for the Court your experience working
2 with census demographic data?

3 A I worked with census demographic data from the beginning
4 at 1991 to now. So I've used it extensively.

5 Q I'd like to pull up PX-7. Just scroll down one page.
6 Thank you.

7 Mr. Fairfax, is this a true and accurate copy of your CV?

8 A Yes. There may be one case this year that's left off, I
9 think.

10 Q Okay. And is that a change that's happened since you
11 produced this document?

12 A Yes.

13 Q Any other changes to this CV since you offered it in this
14 case?

15 A No.

16 MR. VAN LEER: Your Honor, plaintiffs offer
17 Mr. Fairfax as an expert in map drawing, demographics, and the
18 use of census data for redistricting.

19 THE COURT: Any objection?

20 MR. GEIGER: No objection.

21 THE COURT: All right. Admitted.

22 BY MR. VAN LEER:

23 Q Mr. Fairfax, I'd like to turn to your role in this case.
24 What were you asked to do by the plaintiffs?

25 A I was asked to determine whether an illustrative plan

1 could be developed that satisfied that first precondition of
2 *Gingles* and adhere to federal and state redistricting criteria
3 for Alabama State Senate districts.

4 Q And what was your opinion on the question you were asked
5 about that first *Gingles* precondition?

6 A That the minority is sufficiently large and geographically
7 compact to constitute ten majority-black districts in the
8 state.

9 Q Can we pull up PX-6?

10 Mr. Fairfax, do you recognize this?

11 A Yes, I do.

12 Q And does this appear to be a true and accurate copy of
13 your initial expert report?

14 A It appears to be.

15 Q How many illustrative plans did you present in this
16 initial report?

17 A Essentially three.

18 Q And is that how many you presented in this initial report
19 or in the whole case?

20 A Overall, there were three. In the illustrative plan,
21 there was just one; the original report, it was just one.

22 Q If I refer to the plan in this initial report as
23 Illustrative Plan 1 moving forward, will you understand me?

24 A Yes.

25 Q Generally, what were the other contents of this initial

1 report?

2 A There was a summary of my conclusions. There was a
3 methodology, a data section. I talked about the data sources.
4 I described the illustrative plan districts. And then I had a
5 *Gingles I* analysis section. And then ended with the
6 conclusion.

7 Q Did you review any defense experts' rebuttal reports?

8 A Yes, I did.

9 Q Do you recall which reports?

10 A Reports from Dr. Trende.

11 Q Did you review any other defense expert reports?

12 A No.

13 Q After reviewing Dr. Trende's reports, did you submit
14 another report in this case?

15 A Yes, I did.

16 Q Which report was that?

17 A I submitted a rebuttal report to Dr. Trende's report.

18 Q And is that the final report that you submitted?

19 A I amended that report and submitted an amended report.

20 Q And did you offer a supplement, as well?

21 A Yes, I did, to make some corrections, typo corrections in
22 that amended report.

23 Q I'll pull up PX-8. Does this appear to be a true and
24 correct copy of your amended rebuttal report?

25 A Yes, it does.

1 Q And I'll pull up PX-10, as well. And, again, Mr. Fairfax,
2 does this appear to be a correct and true copy of your
3 supplemental rebuttal report?

4 A It appears that way.

5 Q Thank you. Did each of your reports have appendices?

6 A I believe so.

7 Q Generally, what kind of materials were included in the
8 appendices of those reports?

9 A Usually I include maps and data reports usually produced
10 from the software that I use, Maptitude For Redistricting,
11 maybe data tables that reflect some data.

12 Q And I believe you mentioned this before, but to be clear,
13 how many illustrative plans are you offering to the Court for
14 consideration today?

15 A Yes. I apologize for that slip-up. Three. Essentially
16 three.

17 Q Quite all right.

18 Is it okay if I refer to Plan 2A and Plan 3 when referring
19 to the whole of the analysis as corrected across those
20 additional reports?

21 A Yes.

22 Q Thank you very much.

23 MR. VAN LEER: Your Honor, to move things along a
24 little more smoothly, if defendants are -- if defendants are
25 all right with it, I would like to introduce sort of as a batch

1 all the exhibits that are drawn from the tables and charts, as
2 well as the reports and appendices themselves.

3 So we move to offer PX-6 through 10, 33 through 61, and 63
4 through 74. Those are the reports, figures and tables from
5 those reports and the appendices.

6 THE COURT: All right. 6 through 10, 33 through 61,
7 and 63 through 74. Any objection?

8 MR. GEIGER: No.

9 THE COURT: Admitted.

10 (Plaintiffs' Exhibits 6-10 admitted in evidence.)

11 (Plaintiffs' Exhibits 33-61 admitted in evidence.)

12 (Plaintiffs' Exhibits 63-74 admitted in evidence.)

13 MR. VAN LEER: Thank you.

14 BY MR. VAN LEER:

15 Q Mr. Fairfax, what data did you download when you started
16 developing your illustrative plan?

17 A I downloaded or accessed, if you will, the main and
18 primary data used for redistricting, which is the PL 94-171
19 data. This includes -- this is an extract from the decennial
20 census, in this case, the 2020 census. It includes total
21 population, includes Voting Age Population. It also includes
22 the racial categories, as well as ethnicity categories, which
23 is really one that it has is Hispanic and Latino.

24 Q Did you download any other data?

25 A Yes. Yes. I also downloaded the American Community

1 Survey, five-year survey. I also accessed the geography of the
2 enacted plan. And I also accessed citizenship data at the
3 county level and city level.

4 Q How typical is it for you to look at these same types of
5 data when you're preparing redistricting plans?

6 A It's typically done. Usually that's the data that I
7 usually download. The citizenship data was a different aspect
8 in this case because we had something unique going on.

9 Q Do you only look at citizenship data when there's
10 something unique going on, or will you look at it in other
11 circumstances?

12 A What I mean by citizenship, I don't mean CVAP. CVAP is
13 normally downloaded, but looking at different counties is what
14 I am referring to or cities in this particular case. But CVAP
15 is constantly done and used all the time.

16 Q Let's go through some of these sources of data
17 individually.

18 Can you tell us what the decennial census data tells you?

19 A Sure. As I said, it's an extract from the decennial
20 census. And it includes racial categories. Prior to 2000, the
21 survey only included the ability to select one racial category.
22 Since 2000, you can select multiple racial categories. So you
23 can select black and white, white, Asian, Native American, or
24 American Indian now.

25 So because of that, there's over 200-something multiple

1 different categories that actually combinations that come from
2 that.

3 They also have the Hispanic Latino category, which it is
4 treated as an ethnicity, not a race, at least the last decade.
5 They make a change in this upcoming one.

6 But because of that, you actually double the number of
7 multiple racial categories to close to 500 and something now.
8 So it includes those racial categories in total population as
9 well as Voting Age Population inside the decennial census.
10 Q And how does the Census Bureau's American Community Survey
11 differ from the decennial census?

12 A The decennial census is a snapshot. It is what's called
13 100-percent count. And it's a snapshot on April 1st of that
14 0-year, in this case 2020. And so it looks at counting, or
15 they look at counting the entire population of the country.

16 The American Community Survey is sometimes referred as a
17 rolling survey. About 250,000 surveys are sent out each month,
18 about 3 million, a little over 3 million a year are sent out.
19 And the census gathers or collects those groups in datasets of
20 one year and five year.

21 The one year is good, or if they will -- they provide one
22 year down to geographies or geographic areas greater than
23 65,000. The five year goes down to the block group level.
24 They also have a three-year supplement.

25 And just to complete my thought, the one -- the decennial

1 census is 100-percent count. The ACS, as they call it, is an
2 estimate.

3 Q Mr. Fairfax, what subjects of data does the ACS include
4 that the decennial census does not?

5 A The decennial census essentially includes the population
6 racial categories. It does have housing units, small amount of
7 that data, as well.

8 The American Community is vast. It includes socioeconomic
9 data, income, education, poverty, whether a person has health
10 insurance, housing, values of housing, what type of housing,
11 the structure of the housing.

12 So it has an enormous amount of data compared to the
13 decennial census.

14 Q And do both of those sources provide CVAP data?

15 A No. The decennial census doesn't. The American Community
16 Survey provides data on citizenship.

17 Q Mr. Fairfax, you mentioned census blocks. Now, the
18 different levels of geography, which you might review the data.
19 Can you explain a little bit more about those levels of
20 geography?

21 A Sure. The lowest level that the census bureau provides
22 data at or for is the census block level. In some areas, it's
23 like a city block. In rural areas, it may be miles, square
24 miles.

25 But you gather census block together. They gather census

1 blocks to form block groups. They gather block groups together
2 to form census tracts. They gather census tracts to form
3 counties or parishes in Louisiana or boroughs in New York, and
4 they gather the county or equivalents together to form states.

5 They have other geographies actually that they provide as
6 well.

7 Q Can you please tell us how race is categorized in census
8 data beyond anything you have already explained?

9 A Like I mentioned, it is a categorizing those multi-race
10 categories. They're five major racial groups, but those
11 combinations are provided in PL-94, those 200-something
12 different combinations are also provided in the PL-94.

13 Q Which racial categories did you rely on in your reports to
14 define the black community?

15 A For the Voting Age Population, I used what's called
16 any-part black. And that means that anybody that's selected
17 black on the survey form would be included. That meant that if
18 they selected black alone as they call it, the single race,
19 that's included.

20 But also in combination. So that's the black and white as
21 I talked about before, black, white, and Asian or Native
22 American. All of that would be included, in addition to the
23 Hispanic black, as well.

24 For the Citizen Voting Age Population, I included a
25 non-Hispanic black alone plus the non-Hispanic black and white.

1 Q Which software programs do you use to visualize that data
2 as part of your map drawing process?

3 A I utilize Maptitude for redistricting. It's arguably the
4 leading redistricting software that's out there. I do on
5 occasion use ArcGIS Pro to just print maps.

6 Q Let's turn to your map drawing process generally.

7 In preparing your reports, did you have the occasion to
8 review the State Senate redistricting plan enacted by the State
9 in 2021?

10 A Yes, I did.

11 Q If I refer to that plan, the State's plan moving forward
12 as the enacted plan, will you understand me?

13 A Yes.

14 Q Thank you. Let's pull up PX-58. This is Appendix B to
15 your first report.

16 Can we go to Page 41 of this pdf?

17 Mr. Fairfax, what is this map?

18 A This is the Madison County region in the enacted plan for
19 the State Senate districts.

20 Q And can you identify -- well, I'm color blind, so I am not
21 sure the exact color of it, but the district towards the center
22 of this map?

23 A Are you referring to District 2? Or are you referring to
24 --

25 Q Why don't you tell us what districts are focused on in

1 this map?

2 A I see Districts 2, 3, 7, 9, 8, and then there's one in 6
3 on the side.

4 Q We can pull that down.

5 Actually, I'm sorry. Let's go to page 42, the next page.

6 Mr. Fairfax, what is this map?

7 A This is the Montgomery County area for SD25 and 26. And
8 then you see the other districts, as well.

9 Q How did you obtain the enacted plan?

10 A I downloaded it from an entity called the Redistricting
11 Data Hub. It's a valued resource, nonpartisan resource. All
12 they do is provide the data. They may actually format it in a
13 more user friendly. So I downloaded it from them. They
14 obtained it from the State.

15 Q When you were beginning to draw your initial *Gingles I*
16 map, do you start from scratch?

17 A No.

18 Q What do you start with?

19 A I started with the enacted plan.

20 Q Why did you do that?

21 A Well, many times you want to leave as many districts as
22 you can intact and not alter and start off with a brand new
23 configuration. So by starting with the enacted plan better
24 ensures that many of the district or most of the districts
25 actually stay the same.

1 Q Were there any majority-minority districts in the enacted
2 plan?

3 A Yes.

4 Q Do you recall how many?

5 A Eight.

6 Q I am going to shift gears a little bit here.

7 What's your understanding of the *Gingles I* requirements?

8 A The *Gingles I* requires that the proof will show that the
9 minority community is sufficiently large and geographically
10 compact to constitute a single-member district.

11 Q How do you attempt to draw reasonably configured
12 districts?

13 A You use what's called traditional redistricting criteria.

14 Q And how do those criteria factor into your map drawing?

15 A I use them.

16 Q Do you consider race when drawing these maps?

17 A Race can be considered. When I draw, I tend to not
18 consider race as much as the other criteria, although I'm
19 allowed to, but I tend to not.

20 Q When do you have racial data toggled on or off in your map
21 drawing process?

22 A Usually what I do is -- and other map drawers, they have
23 to have some sense of where the minority community is in a
24 particular jurisdiction. If they don't, then you end up just
25 drawing in areas that you can't meet that *Gingles I*. So you

1 have to have some idea.

2 So usually in the beginning, I will look at where the
3 minority community exists. And then I turn it off and won't
4 turn it on, but maybe periodically. But I always use the other
5 criteria labels more than race.

6 Q How do you evaluate compactness when drawing a *Gingles* 1
7 map?

8 A Analysts have created what's called compactness measures
9 to measure the dispersion or the irregular shape of districts.
10 I utilize three different compactness measures, probably the
11 most popular ones -- Reock, Polsby-Popper, and Convex Hull.

12 Q Can you explain generally what those different metrics are
13 measuring?

14 A Sure. Reock is called a dispersion or area compactness
15 measure. It looks at the area of the district and divides into
16 it the area of the smallest circumscribed circle, and that's
17 the smallest circle that fits around the district.

18 And so it looks at extensions like fingers or arms that
19 are sticking out from the district. So you can imagine a
20 finger or an arm sticking out makes the circle larger, makes
21 the area larger. So when you divide that into the district
22 area, the compactness measure of that value goes down.

23 Polsby-Popper is a perimeter measure, and it's calculated
24 by taking the district area and dividing into the area of the
25 circle with the same perimeter as the district.

1 So you can look at that as if you took the district
2 boundaries and stretched it out to a circle, that's the area
3 that you actually want to use. That area is going to be
4 divided into the area of the district.

5 And so you can imagine that if you had a lot of nooks and
6 crannies around the boundary, that circle is going to get
7 larger and larger. So it looks at that perimeter.

8 So the larger and larger the circle, you divide that into
9 the district area, the lower the compactness.

10 Convex Hull is routinely described really as looking at
11 the district and imagining the district really with a sort of
12 thickness, if you will, and taking a rubber band and wrapping
13 it around the district if you can imagine and going from point
14 to point to point, the rubber band will go -- you can envision
15 this in your mind -- that polygon that's created, or they call
16 it a convex hull.

17 They take the area of that convex hull and divide into the
18 district. It's also an area dispersion compactness
19 measurement. But it's much more forgiving, where Reock has a
20 extension that comes out. That circle gets larger.

21 The Convex Hull cuts it off with that rubber band, if you
22 will. So that's why many times the Convex Hull measurements
23 are larger than the other two measures.

24 Q Thank you. I am going to turn to some of the traditional
25 redistricting criteria. What are the primary traditional

1 redistricting criteria that you consider?

2 A There are five different traditional redistricting
3 criteria that permeates really through most of the states;
4 equal population, this is where we get the one person one vote.
5 This is where you equalize or attempt to equalize the
6 districts, and that equalized population of the districts
7 rather. And that's within a deviation.

8 Contiguity has to do with all areas of the district
9 touching each other. Water bodies can be allowed sometimes.
10 They can't without a bridge.

11 Compactness measures, as I mentioned before, are
12 measurement of irregular shapes or the dispersion of the
13 district.

14 Respecting political subdivisions, this includes usually
15 cities and towns. Counties sometimes are also included in
16 political subdivisions and VTDs. What you do is you attempt to
17 minimize a splitting of those.

18 And then finally, the last one, the fifth one, if you
19 will, preserving communities of interest. And these are
20 geographic areas that have some type of shared interest and can
21 be almost anything -- income, education, geography, and the
22 idea is to keep these communities of interest intact as much as
23 possible, so you minimize splitting those, as well.

24 Q Can we pull up PX-32? Mr. Fairfax, are you familiar with
25 this document?

1 A Yes, I am.

2 Q What is this document?

3 A These are the redistricting guidelines for the
4 congressional and State Senate and State House districts.

5 MR. VAN LEER: Plaintiffs would like to offer PX-32
6 into evidence.

7 THE COURT: Any objection?

8 MR. GEIGER: Nope.

9 THE COURT: Admitted.

10 (Plaintiffs' Exhibit 32 admitted in evidence.)

11 BY MR. VAN LEER:

12 Q Mr. Fairfax, what role did the criteria in the State's
13 guidelines play in your map drawing process?

14 A I followed the traditional redistricting criteria, the
15 five that I mentioned that I included in here. But I attempted
16 to follow all of the other ones, as well.

17 Q You gave an explanation of each of those five criteria.
18 There's one I would like to ask just a little bit more about.
19 How do you aim to respect communities of interest as you're
20 developing your illustrative plans?

21 A The communities of interest as I mentioned before, maybe I
22 didn't, they also include cities and towns and something called
23 CDP, census designated places, and these are areas that are
24 created by the census for statistical purposes but are usually
25 locally defined in local areas that everybody knows and

1 understands usually in that particular -- or most people know
2 and understand in that particular area.

3 I minimize a splitting of those areas. I also utilize
4 socioeconomic data, which is allowable to use to look at
5 different shared interest, if you will, of different areas.

6 Q Thank you. What type of socioeconomic factors generally
7 do you look at?

8 A Generally speaking, the two I think that are most widely
9 used, I believe, probably are income and housing. And so I
10 have one of each. But others are looked at, as well --
11 poverty, education, the main socioeconomic status indicators.

12 In this particular case, there was a definite pattern that
13 I saw, and that's how I used it. In the beginning, I look at
14 different patterns to see where there's a connection between
15 different geographic areas. And then I would proceed to
16 attempt maybe to combine those areas in the same district.

17 Q Thank you.

18 How do you employ all of these redistricting criteria
19 together as you're drawing your map?

20 A You balance them out. And so it's a matter of fact of
21 looking at the compactness visually, looking at -- although I
22 print out reports and quantify it -- compactness with equal
23 population, trying to equally populate the district. We're
24 trying to minimize the splits of your political subdivisions.
25 So you're constantly looking back and forth trying to attempt

1 to balance that into the best plan that you can create.

2 Q Mr. Fairfax, can provide an example of how different
3 traditional redistricting principles might positively or
4 negatively affect one another?

5 A Sure. There are always trade offs that map drawers are
6 looking at. So, for example, if you're minimizing, let's say
7 attempting to equalize the district, that may mean that you
8 have to make that district less compact.

9 Same thing with political subdivisions. You may be
10 attempting to equalize the population, but now you have to
11 split a political subdivision in order to do so. So there are
12 trade offs all the time that you are constantly looking at.

13 Q I would like to pull up PX-51. This is Figure 1 from your
14 initial report.

15 What does Figure 1 represent?

16 A This shows the statewide illustrative plan for the State
17 Senate districts.

18 Q Is this your Illustrative Plan 1?

19 A Yes.

20 Q How many black-citizen majority State Senate districts are
21 there in illustrative Plan 1?

22 A Ten.

23 Q And, again, how does that compare to the enacted plan?

24 A Two additional.

25 Q Can you explain your views as to whether this map meets

1 the requirements of the first *Gingles* precondition?

2 A It does. Yes.

3 Q Let's start with Senate District 7. Can you pull up
4 PX-53? This is Figure 2 from the same report.

5 Mr. Fairfax, what are we looking at here?

6 A This a zoomed in version of SD7 for my illustrative plan.

7 Q Generally, can you describe the district's geography to
8 the Court?

9 A Yes.

10 MR. VAN LEER: I believe through our tech setup,
11 Mr. Fairfax has a little pointer that allows him to show
12 something on the map.

13 BY MR. VAN LEER:

14 A The district includes a sizeable area of Huntsville, which
15 is here (indicating). It then expands to the south to include
16 the Red Arsenal, CDP, that's a census designated place that I
17 mentioned.

18 It also includes the Red Arsenal entire geography if you
19 will, which is separate from the CDP, which is a different
20 geographic area. It's larger.

21 It includes and follows the boundary lines of that Red
22 Arsenal geographic area.

23 It extends westward to include the town Triana. It -- I
24 attempted to avoid Madison, although there is an overlapping of
25 a VTD, so a small portion of that VTD is included in the

1 district. It expands westward to portions of Limestone.

2 There is an area in Decatur that is disconnected from the
3 other part of Decatur, and one's in Limestone. The other is in
4 Morgan. And so I connect that area in Decatur with the other
5 portion of the Decatur on this side extends over the Tennessee
6 River and expands the district into Morgan.

7 Q Thank you.

8 Just to clarify, you mentioned -- I believe you said Red
9 Arsenal. Is that the Redstone Arsenal that you mean to refer
10 to?

11 A Yes. I apologize. Redstone Arsenal. Yes.

12 Q Quite all right.

13 Does Alabama A&M University fall within the district?

14 A Yes, it is. I think the approximate area is somewhere
15 around I believe here (indicating) in this area. But it's
16 wholly contained within inside District SD7.

17 Q How did you use socioeconomic data in developing this
18 district?

19 A When I first created the -- a map overlay -- thematic map
20 overlay, I visualize or -- the map actually showed me or
21 visualized to me there were commonalities in median household
22 income and median housing values in the Huntsville area as well
23 as the Decatur area.

24 So that became a possible choice to actually include
25 together.

1 Q Let me pull up PX-61. This is from -- this is Appendix E
2 to your initial report.

3 Scroll to page 2. What does this map show?

4 A This shows the median household income at the census tract
5 level. And what you see is -- are the colors that represent
6 the bottom two quintiles. Quintiles are created by equal --
7 dividing up the geography of census tracts and divide different
8 equal ranges, equal number of features.

9 The bottom two are the ones that we're looking at. You
10 can think of these as the bottom two income levels.

11 Q Scroll to the next page.

12 Mr. Fairfax, what does this map show?

13 A This map shows the same thing except for median housing
14 values. So once again, you have the five, the quintiles
15 dividing up the geography and census tracts into five different
16 equal number ranges looking at the bottom two for median
17 housing values. You can see that in Huntsville as well as
18 Decatur, very similar to median income level to show different
19 commonalities.

20 Q Thanks.

21 A Same commonalities or similar commonalities.

22 Q In these maps, for example, to the area you were just
23 describing as the Redstone Arsenal CDP off to the right of it,
24 there are a few red areas that seem to be just outside the
25 boundaries of the District 7. Can you explain why you didn't

1 include those?

2 A Many times -- or actually most of the times, the VTDs
3 which I use as the smallest building block, the -- they overlap
4 census tracts. So the socioeconomic data may show an entire
5 census tract that overlaps the VTD. So the choice is made to
6 actually select the entire VTD where it exists in the census
7 tract or leave it out. So in many cases, you don't add in an
8 entire VTD if it's just a portion that overlaps.

9 The other is you make decisions based upon this. The
10 socioeconomic data is just one of the decisions that you're
11 using to create a plan. The other decision could be, for
12 example, to follow the boundaries of something. So, for
13 example, on that Redstone Arsenal area, I followed the
14 boundaries of Redstone Arsenal all the way down to the
15 Tennessee River.

16 Q Okay. And I realize I -- I and perhaps you have used the
17 term CDP. Do you mind just clarifying what that term means?

18 A Right. That's the census designated places. And these
19 are created by the Census Bureau for statistical purposes. But
20 as I mentioned, they originate usually local -- locally and
21 named usually locally. They don't have a governmental body as
22 the other census places do.

23 Q And you said your smallest building blocks you're using
24 are VTDs. What's a VTD?

25 A Originally, it was Voting Tabulation District. But now

1 the Census Bureau calls them voting districts.

2 These mimic, if you will, election precincts at the local
3 level. But they follow -- they always follow census geography,
4 whereas local precincts don't necessarily follow census
5 geography. They cut right through census geography. The
6 purpose of theirs is for conduction of elections, not census.

7 Q Thanks.

8 What did you conclude regarding whether Senate District 7
9 in your Illustrative Plan 1 meets the numerosity requirement?

10 A It does. It meets numerosity requirement.

11 Q And that's according to what measure?

12 A CVAP -- Citizen Voting Age Population.

13 Q Why did you use CVAP to measure numerosity for this
14 district?

15 A Because CVAP provided a more accurate estimate for
16 eligible voters, if you will, and that was due to the --
17 specifically the number of noncitizens in that area, northern
18 area -- Madison and Madison County area.

19 Q Let's pull up PX-60. It's appendix D to your initial
20 report. And we can turn to page 9 of the pdf. This is the
21 first page of a table spans eight pages of your appendix.

22 Mr. Fairfax, what is this table showing?

23 A This shows you the by-census place, and it's sorted by the
24 Non-Citizen Voting Age Population. So you can see that up at
25 the top.

1 Huntsville has the largest number of noncitizens in the
2 state insofar as census places or even cities.

3 Decatur has also the sixth largest amount of noncitizens
4 in the state, as well.

5 Q Let's turn to page 3 of this same pdf. What is this table
6 showing us, Mr. Fairfax?

7 A Once again, this shows the Non-Citizen Voting Age
8 Population sorted by noncitizen VAP, and it's county level. It
9 shows you that Madison County has the second largest
10 Non-Citizen Voting Age Population, and Morgan has the ninth.

11 Q We can take that down. And I will pull up Plaintiffs'
12 Demonstrative Exhibit Number 3.

13 I'm sorry. Yeah, thank you.

14 What does this chart show, Mr. Fairfax?

15 A This shows you the percentage of noncitizens for Voting
16 Age Population by racial group. So, for example, you see that
17 1.2 percent of the Voting Age Population is noncitizens in
18 Madison County specifically. The non-black everyone else, it's
19 3.74, three times as high for the noncitizens or everyone else
20 besides black.

21 It's notable that the Latino population and Asian
22 population have extreme high noncitizen percentages at 32 and
23 34 percent respectfully.

24 Q Let's turn to Demonstrative Exhibit 4, please. What does
25 this chart show you?

1 A This shows you the same thing for Morgan County. In this
2 case, it's very, very small percentage of noncitizens for
3 black. The non-black is 5 percent. But once again, you have
4 the Latino population at 51 percent, high. And the Asian
5 population at 29 percent, Voting Age Population at 29 percent.

6 Q One last one here. I will turn to Demonstrative
7 Exhibit 5. What does this chart show us?

8 A Once again, the same thing for Limestone County. It shows
9 up as a percentage virtually, no noncitizens, although I think
10 there are a few. The non-black is 2.34 percent, and then once
11 again, you see the Latino and Asian population are much, much
12 higher at 26.49 and 33.07 respectively.

13 Q We can take that down.

14 Mr. Fairfax, what role, if any, did the data in these
15 counties and census places play in your decision to use CVAP to
16 measure numerosity?

17 A Well, considering the low percentage of black noncitizens
18 compared to the relatively high percentage of non-black
19 noncitizens, specifically the Latino and Asian population, the
20 CVAP data is the more appropriate dataset to use when it comes
21 to the sufficiently large component of *Gingles* 1.

22 Q Did you use ACS CVAP data to draw these districts?

23 A Yes.

24 Q Based on your experience, what are your views about the
25 reliability of ACS data?

1 A It is the best data that's out there, insofar as it is
2 coast to coast. There's no other dataset out there coast to
3 coast at the granular level that exists at -- it's widely used.
4 It's used in -- for researchers. It's also used in -- it's a
5 primary source in litigation. The Department of Justice, the
6 DOJ has found it statistically accurate, actually use it. So
7 it's the standard to use.

8 Q What geographic level is ACS CVAP data provided at?

9 A It's provided down to the block group level.

10 Q So how do you calculate the CVAP values at the district
11 level?

12 A The Maptitude for redistricting program has a function
13 called disaggregation. Disaggregation takes a value at a
14 higher level than the block group and approximates or estimates
15 at a lower level like the census block. And then aggregates it
16 back up to whatever level, in this particular case, the
17 district level.

18 Q What's your opinion on whether performing disaggregation
19 is common when drawing districting maps?

20 A It is probably the standard that's used out there. I
21 think it is the standard that's used out there.

22 Q Let's turn to Senate District 25. Going to pull up
23 Plaintiffs' Exhibit 54. This is Figure 3 from your initial
24 report. What are we looking at here?

25 A This is -- the Senate SD25 in the illustrative plan.

1 Q Can you describe the geography of this district?

2 A Yes. The district is wholly contained inside two
3 counties. The enacted plan has three counties for SD25. What
4 I did was remove one of the counties and -- from SD25, makes it
5 more compact. I then expanded the area in Montgomery County
6 that includes an entire town of Pike Road, whereas the enacted
7 plan cut and split Pike Road and then expands into the city of
8 Montgomery more to complete the district.

9 Q How did you -- sorry. Scratch that.

10 What do you conclude regarding the district's ability to
11 meet the numerosity requirement?

12 A It meets it in both BVAP, Black Voting Age Population and
13 the BCVAP, Black Citizen Voting Age Population.

14 Q Let's turn to compactness now. What's your opinion about
15 the compactness of the ten majority-black State Senate
16 districts in your Illustrative Plan 1?

17 A They are reasonably -- all of them are reasonably compact.

18 Q Do you recall calculating compactness scores for both the
19 districts in your illustrative plan and those in the enacted
20 plan?

21 A Yes.

22 Q What's the reason for doing that?

23 A Well, the second component of *Gingles* is geographically
24 compact. So you want to make sure that these are geographic
25 compact. Reasonably compact sometimes the term is used.

1 Q Is there a reason for comparing the illustrative plan's
2 scores to the enacted plan's?

3 A Yes. Couple of different reasons. One reason is standing
4 alone looking at compactness measures maybe an expert can
5 actually judge whether it's compact or not.

6 The best situation is to compare compactness in one plan
7 is to use another plan. And the enacted plan is a plan that
8 has passed, it's been approved. All of the compactness
9 measures that are included in the enacted plan, they've been
10 approved in essence by passing the plan.

11 So comparing the illustrative plan to the enacted plan,
12 you're comparing whether it meets that -- those compactness
13 measures that are included in the plan -- in the enacted plan.

14 Q And when you say the enacted plan's compactness scores
15 have been approved, you mean approved by the state?

16 A Yes. Yes.

17 Q Let's pull up PX-56.

18 Mr. Fairfax, what's this table?

19 A This is a table that compares the illustrative plan to the
20 enacted plan by each of the measures that I mentioned before --
21 Reock, Polsby-Popper, and Convex Hull.

22 Q Do you recall how the compactness scores of Illustrative
23 Plan 1's SD7 compared to the analogous district in the enacted
24 plan?

25 A Yes. They were more compact, or the illustrative plan was

1 more compact than the enacted plan.

2 Q And across how many measures?

3 A Two different measures.

4 Q How about for Senate District 25?

5 A Senate District 25, all three measures made it more
6 compact for the illustrative plan.

7 Q Thank you. And how do you Senate District 7 and Senate
8 District 25 perform compared to the lowest compactness scores
9 in the enacted plan?

10 A Both of those actually were more compact than the lowest
11 measured scores in the enacted plan.

12 Q I am now going to pull up PX-57.

13 Mr. Fairfax, generally, what does this table show?

14 A This is a summary table of the criteria that I actually
15 looked at between the enacted plan and the illustrative plan.

16 Q About halfway down the table, there's a section on
17 compactness here. I want to ask you about the four compactness
18 comparisons of the plan, why the compactness you make in this
19 table.

20 First, what do you find when comparing the plan's mean
21 compactness scores?

22 A First, the mean is averaging -- it's all the districts for
23 a particular compactness measure. And you end up with the mean
24 or the average for the plan.

25 And so looking at the mean, the enacted plan performs

1 slightly better than the illustrative plan.

2 Q Do you consider the mean scores to be comparable?

3 A Yes. Yes. You see the difference between the
4 measurements. Two of the measures are .01, and then one is
5 actually .02, very, very slight measurement. Just as a
6 notation, I've noticed that a difference of a movement of one
7 VTD could mean a change of .01.

8 Q What did you find when comparing the -- looking at the
9 second metric here, when comparing the plans' compactness
10 scores district by district?

11 A Right. First, district by district actually looks at the
12 numerical value or the numerical number of the districts are
13 the same, numerical number of the other district. So it looks
14 at District 1 of the illustrative plan and compares it with
15 District 1 of the enacted plan.

16 And so in the illustrative plan, nine of the districts
17 performed better. In the enacted plan, five of the districts
18 performed better.

19 Q And can you explain the next metric, comparing the
20 majority-black districts?

21 A Right. This is similar to district by district, but only
22 looking at the majority-black districts. And so it compares
23 those same number of -- the number, district number of the
24 majority-black districts, or the same district number in the
25 enacted plan. And in that case, two of the majority-black

1 district numbers actually performed better, and one performed
2 better in the enacted plan.

3 Q Finally, what do you find when comparing the scores of the
4 illustrative plan's majority-black districts to the minimum
5 compactness scores in the enacted plan?

6 A Right. And once again, the explanation is I'm comparing
7 the illustrative plan majority-black districts to the minimal
8 measure or value in the enacted plan. And so ten of the
9 majority-black districts performed better than the enacted
10 plan's minimal values.

11 Q And based on this analysis, what did you conclude about
12 Illustrative Plan 1's compactness?

13 A That the districts are reasonably compact.

14 Q Do you recall Dr. Trende's color thematic and dot density
15 maps from his initial report?

16 A Yes.

17 Q What's your opinion on whether those methods are
18 responsive to the compactness portion of the *Gingles* 1
19 analysis?

20 A Compactness measures are the standard that experts use to
21 determine a compactness for a plan and for a district.

22 There are holes and flaws in the dot density and thematic
23 -- a mapping use of compactness. Three things come to mind:
24 One is there's no quantification. There's no quantification in
25 the dot density, meaning there's no number of value. You're

1 just looking at it to see.

2 All of the other criteria, there's a value that you can
3 compare to.

4 You have the -- population equality looks at the
5 deviation.

6 The contiguity looks at the number of contiguous areas.

7 Compactness, as we talked about with compact measures, you
8 have multiple measures to compare.

9 Political subdivisions splits, you have a number to
10 compare the number of splits.

11 And then communities of interest, you have that, as well.

12 The dot density doesn't have any quantification. So it's
13 much more subjective aspects.

14 Two, it maybe tends to be a little misleading as far as
15 the dot density and in regards to you may see only a few dots
16 there. But that's because the few dots were let's say the
17 black population. But that's because there's very little
18 population there. And the population of black percentage could
19 be 30 percent. But it shows up as just a little amount of
20 dots. So it's somewhat misleading.

21 And the last thing is, is that I think he pointed to
22 different concentrations of the black population. And plotting
23 against it, that means it's less compact.

24 And that's a little misleading, as well. The districts
25 out there, the majority-black districts are mostly made up of

1 areas that may have different concentrations of black
2 population.

3 You would only -- I guess the only exception would be
4 urban areas. And so you would limit the compactness of only
5 limited areas of urban areas. Most of the majority-black
6 districts have, say, a city that has black population, and it's
7 connected with another city that has black population. That's
8 routinely done throughout the country.

9 Q In your opinion, how standard is it among demographers to
10 use dot density maps to measure compactness for the purposes of
11 *Gingles* 1?

12 A Not standard at all.

13 Q Let's turn to the other traditional redistricting
14 principles. You already explained earlier what some of these
15 are.

16 If I can -- we can pull back up that chart we just had up.
17 It's PX-56. Yes. Thank you.

18 Some of these lines are a bit more self explanatory than
19 others. And I know your report's in evidence and goes into a
20 lot of detail. But I want to ask you about one of these
21 specifically.

22 What information do you consider when trying to preserve
23 communities of interest in political subdivisions? You talked
24 about this again, but just to remind the Court.

25 A Correct. The political subdivisions and communities of

1 interest include cities, towns, villages, and CDPs. The cities
2 and towns would be considered and villages would be considered
3 political subdivisions because they have a governmental body.
4 But CDP would not. There's no governmental body associated, so
5 that would be a community of interest. But the cities, towns
6 and villages would also be communities of interest. They also
7 overlap with each other.

8 The voting districts that created by the government, they
9 would be considered political subdivisions. Where I say
10 landmark areas, I also look at landmark areas. These include
11 -- there's a dataset included in Caliper that includes colleges
12 and universities, military bases, airports. These are somewhat
13 recognizable areas that people sort of recognize as communities
14 of interest and accept as communities of interest.

15 Q How does Plan 1 fare in preserving these communities of
16 interest in subdivisions?

17 A It fares a little better than the enacted plan.

18 Q In considering the entirety of your analysis -- analyses
19 reflected across this table, what's your opinion about whether
20 Plan 1 adheres to traditional redistricting principles?

21 A It does. It adheres to the -- it adheres to traditional
22 redistricting criteria.

23 Q Let's turn to your Plan 2A. I want to pull up page 2 of
24 the pdf of PX-73. This is the appendix to your supplemental
25 rebuttal report.

1 What does this figure represent?

2 A This represents the State Senate districts for
3 Illustrative Plan 2A.

4 Q What was your purpose in developing Plan 2A?

5 A This was developed to address a comment by Dr. Trende in
6 his report.

7 Q What comment in particular?

8 A The comment was that I originally used the 2021 five-year
9 ACS estimate, five-year CVAP ACS estimate. And when he
10 imported the data for the 2022 five-year ACS data estimate, he
11 found that SD7 had dropped below 50 percent in CVAP. And so
12 because of that, I created a new plan. This is 2A that brings,
13 of course, meets that sufficiently large component of *Gingles*.

14 Q And can you explain to the Court why you would use the
15 2021 five-year, developed Plan 1?

16 A That was what's available for the Legislature or would
17 have been available for the Legislature. And so it would have
18 been the ACS that they would actually use. They would not use
19 the 2022 data.

20 Q Do you recall when the 2022 data was released in your map
21 drawing process?

22 A I believe 2023. I'm not sure. Not exactly sure, but,
23 yeah.

24 Q What was your starting point for making this plan?

25 A Although all of the plans really had the enacted plan as a

1 starting point, of course, I used Illustrative Plan 1 as
2 somewhat of a baseline because I was thinking through the same
3 or similar aspects that I -- that I did before. There was no
4 sense in reinventing the wheel, if you will.

5 Q How much changed between Plan 1 and Plan 2A?

6 A A slight change, yeah, extended into Harvest CDP and
7 Morgan -- I mean, excuse me, in Madison and then added a
8 variety of different VTDs in Decatur and Limestone, but some
9 slight changes.

10 Q And how many black citizen majority senate -- State Senate
11 districts are in there in this plan?

12 A Ten.

13 Q And what's your opinion about whether those ten districts
14 meet the first *Gingles* precondition?

15 A Yes, they all do.

16 Q Let's start with SD7. Can we pull up Demonstrative
17 Exhibit 6? What are we looking at here, Mr. Fairfax?

18 A This is a zoomed in version of SD7 Illustrative Plan 2A.

19 Q Great. And you just -- regarding that larger map, you
20 have a bit of explanation as to some of the changes. Can you
21 just briefly describe the geography here?

22 A Yes. As I mentioned, this is the harvest CDP that was
23 added and extended into Huntsville. All of this remained the
24 same. The only changes really with some changes in Limestone
25 here and then some changes in Decatur.

1 (Indicating throughout.)

2 Q What did you conclude regarding this district's ability to
3 meet the numerosity requirement?

4 A It does.

5 Q Did you look at voter registration data for this district?

6 A Yes, I did.

7 Q What did you find?

8 A I found that the black registered voters represented 51, I
9 believe, 3 percent.

10 Q Who compiles and provides that voter registration data?

11 A The state.

12 Q Let's turn to Senate District 25 now. We can pull that
13 down.

14 How did Senate District 25 change between Plans 1 and 2A?

15 A It did not change at all.

16 Q And how, if at all, did shifting to the 2022 five-year ACS
17 data change your opinion about whether Senate District 25 meets
18 the requirements of *Gingles* 1 -- I'm sorry -- the numerosity
19 requirement?

20 A It did not change at all.

21 Q Did it change your opinion about the compactness
22 requirement?

23 A No.

24 Q Let me ask you about compactness then. What's your
25 opinion here about the compactness of the ten majority-black

1 districts in Illustrative Plan 2A?

2 A They all reasonably are compact.

3 Q Do you recall generally how the compactness scores of Plan
4 2A's SD7 compared to the analogous district in the enacted
5 plan?

6 A It performed better than the enacted plan.

7 Q And you stated that Senate District 25 didn't change?

8 A Yes, that's correct.

9 Q How does Senate District 7 and Senate District 25 in Plan
10 2A perform compared to the lowest compactness scores in the
11 enacted plan?

12 A It performed better.

13 Q I'm going to pull up Demonstrative Exhibit 1. What does
14 this table show, Mr. Fairfax?

15 A This is similar to the Illustrative Plan 1. It shows a
16 summary of the criteria comparison for Illustrative Plan 2A and
17 the enacted plan.

18 Q Let me ask you about the compactness section of this table
19 again.

20 Again, recognizing that you have already gone through some
21 extensive detail about what these are and there's more details
22 in your report, as well.

23 Generally, how did Plan 2A perform in your plan-wide
24 compactness comparison?

25 A Overall it performed slightly better than the enacted

1 plan.

2 Q Great. Are there any, you know, particular -- can you
3 briefly just go through each of these measures for Plan 2A?

4 A Sure. For the mean, we have the enacted plan performing
5 slightly better. We have district by district. You see it's 8
6 for the Illustrative Plan 2A, and 6 for the enacted plan.

7 Once again, you have two majority-black districts that
8 perform better when you're looking at the same number of
9 majority-black district. One for the enacted plan. And then
10 all ten of those majority-black districts performed better than
11 the minimum or the least compact measure in the enacted plan.

12 Q Thank you.

13 Based on this analysis, what do you conclude about Plan
14 2's overall compactness?

15 A Plan 2 is reasonably -- Plan 2A is reasonably compact --
16 has reasonably compact districts.

17 Q You previously offered some responses to Dr. Trende's dot
18 density maps and color thematic maps for Plan 1. Do these same
19 opinions apply to his critiques here on Plan 2?

20 A Yes.

21 Q What's your opinion of his analysis of regional Reock and
22 Polsby-Popper scores?

23 A That is usually not done unless the criteria tells you to
24 do so. For example, North Carolina, there are these cluster
25 and cluster groups. But in this particular case, there's no

1 criteria that tells you to regionally look at different areas.

2 Usually, you'll look at the entire plan as a whole.

3 Q And what's your opinion, if any, on his discussion of cut
4 edges?

5 A Cut edges is a more recent compactness measure. It is not
6 a standard that's being used right now. Like I mentioned
7 before, the most widely used are Reock and Polsby-Popper.
8 Convex Hull is probably a third. But cut edges isn't widely
9 used. It's a burgeoning -- well, it's a new comer, if you
10 will, insofar as compactness measure.

11 Q How, if at all, does Dr. Trende's critique impact your
12 conclusions about Plan 2A's compactness?

13 A None at all.

14 Q Now, I want to briefly turn to the other redistricting
15 criteria in the table here, if we could keep the table up.
16 Sorry.

17 Again, many of these lines speak for themselves to some
18 degree. And I know you address them all in your report. But I
19 do want to ask again about the communities of interest and
20 political subdivisions. How does Plan 2A perform in terms of
21 respect for those criteria?

22 A It performs slightly better overall than the enacted plan.
23 You can see that it performs slightly higher on the census
24 places, lower on the landmark areas, and lower on the split
25 VTDs.

1 Q And when you say it performs lower, you mean that it
2 splits fewer?

3 A Yes. Yes. I'm sorry.

4 Q Based on the entirety of your analyses in this table,
5 what's your opinion about whether Plan 2A adheres to
6 traditional redistricting criteria?

7 A It does.

8 Q And finally, I would like to turn to your Illustrative
9 Plan 3. Can we pull up PX-65. This is Figure 3 from your
10 amended rebuttal report. What does this figure represent?

11 A This represents the State Senate districts for
12 Illustrative Plan 3, Senate -- State Senate districts for
13 Illustrative Plan 3. I apologize.

14 Q A lot of alliteration in this case?

15 A Yes.

16 Q What was your purpose in producing Plan 3?

17 A This was also a response to a comment from Dr. Trende
18 insofar as the use of CVAP. And so SD7 in this particular case
19 meets that *Gingles* 1 numerosity requirement for BVAP as well as
20 BCVAP.

21 Q What was your starting point for making Plan 3?

22 A This was created when I was looking at a variety of
23 different options. And so the enacted plan was the starting
24 point. And from the enacted plan, that created a variety of
25 options.

1 This is one of the options that -- well, some derivation
2 of this, as well as Illustrative Plan 1 had one of the options
3 as well.

4 Q And how many BVAP majority State Senate districts are
5 there in Illustrative Plan 3?

6 A Ten.

7 Q What's your opinion about whether those ten districts meet
8 the requirements of the first *Gingles* precondition?

9 A They all do.

10 Q We will start with Senate District 7 again. Pull up PX-8
11 and go to page 27.

12 One page up. There we go. Thank you.

13 What are we looking at here, Mr. Fairfax?

14 A This is a zoomed in version of Illustrative Plan 3's SD7.

15 Q Okay. And you've generally described the region already,
16 but do you mind briefly telling us about this district?

17 A Yes. This has the inclusion of that Harvest CDP. It's
18 wholly contained. Once again, a sizeable amount of Huntsville
19 is included. That Redstone Arsenal CDP and geographic areas
20 also included like the other plans. It extends westward to --
21 picks up that portion of Decatur that was separated in
22 Limestone and crosses over the Tennessee River to Decatur,
23 picking up parts of Decatur. And then extends to an area two
24 towns, Courtland and North Courtland and picks up portions
25 close to them.

1 Q You previously talked about using socioeconomic data when
2 drawing your illustrative plans. How did socioeconomic data
3 factor into developing this plan?

4 A Those same bottom two quintiles showed up in Huntsville as
5 well as Decatur, but they also showed up close in vicinity to
6 the towns of Courtland and North Courtland.

7 Q What did you conclude regarding Senate District 7's
8 ability to meet the numerosity requirement in Plan 3?

9 A It meets it in both BVAP and CVAP.

10 Q Did you look at voter registration data for this district?

11 A Yes.

12 Q What did you find?

13 A I found that there were 52.7 percent black registered
14 voters in the district.

15 Q And turning to -- we can pull that map down. Turning to
16 Senate District 25, how, if at all, did that district plan in
17 Plan 3 from the other plans?

18 A Can you repeat that?

19 Q Sorry. How, if at all, did Senate District 25 change in
20 Plan 3?

21 A Not at all.

22 Q And just to be clear, then, what's your opinion on whether
23 Senate District 25 in Plan 3 meets the numerosity requirement?

24 A It meets it in both BVAP and CVAP.

25 Q Turning to compactness. What's your opinion about whether

1 the ten majority-black districts in Illustrative Plan 3 are
2 compact?

3 A They all are reasonably compact.

4 Q And for Plan 3, do you recall how the compactness scores
5 of Senate District 7 compare to the analogous district of the
6 enacted plan?

7 A Yes. The enacted plan was slightly better.

8 Q Would you consider them to be comparable?

9 A I would say so. Similar.

10 Q And how about Senate District 25?

11 A It performed better, the Illustrative Plan 3.

12 Q And once again, how do Senate District 7 and Senate
13 District 25 in Plan 3 compare to the lowest compactness scores
14 in the enacted plan?

15 A Those, as well as the other majority-black districts,
16 performed better than the enacted plan's minimal or least
17 compact measures.

18 Q Can we pull up Demonstrative 2?

19 Mr. Fairfax, what does this table show?

20 A Once again, this is a summary of the criteria for the
21 Illustrative Plan 3 and enacted plan.

22 Q And can you generally just walk us through your
23 compactness comparison for Plan 3?

24 A Yes. You can see that the plan mean, the enacted plan
25 performs slightly better. The district by district is equal --

1 7 for the illustrative plan and 7 for the district -- for the
2 enacted plan.

3 One of the majority-black districts performed better than
4 the same in number of district -- same numbered district in the
5 enacted plan, two for the enacted plan. And all ten
6 majority-black districts performed better than the least
7 compact measure in the enacted plan.

8 Q Based on that analysis, what do you conclude about Plan
9 3's overall compactness?

10 A Plan 3 is reasonably compact.

11 Q We already discussed your opinions of Dr. Trende's
12 theories, critiques of your prior maps. How, if at all, do
13 your opinions on those critiques differ for Plan 3?

14 A They don't differ.

15 Q And again, briefly let's turn to the other redistricting
16 criteria. Can you tell us generally about the conclusions you
17 draw in this table for Plan 3's performance?

18 A The illustrative plan performs slightly better for
19 communities of interest and political subdivisions, splits.
20 The enacted plan, I would say performs slightly better for
21 county splits.

22 Q Mr. Fairfax, are you able to confirm whether a certain
23 address falls within a particular district in your illustrative
24 map?

25 A Yes.

1 Q Do you recall being given the addresses of the following
2 individuals in the Huntsville-Decatur region: Mary Peoples,
3 Randall Kelly, Mary Moore, and Kesha Hendrix?

4 A Yes.

5 Q Can you tell the Court what you determined about these
6 folks' addresses?

7 MR. GEIGER: Objection, Your Honor. This is beyond
8 the scope of any of his reports.

9 MR. VAN LEER: The witness will be able to testify
10 simply to the fact that these individuals have been identified
11 fall within the illustrative districts. It's fully within the
12 scope of his testimony in the case generally that he is the one
13 who designed these districts, so he knows where addresses fall.

14 MR. GEIGER: It's still beyond the scope completely.

15 THE COURT: How is it beyond the scope of his
16 illustrative plan to tell us where certain addresses fall? And
17 a second question -- well, let's answer that one first. I
18 mean, he's testifying as to where the lines are for his plan,
19 whether they include or don't include a certain address.

20 MR. GEIGER: Yeah. We've stipulated to the addresses.
21 I guess they don't mind that much.

22 THE COURT: All right. You may answer.

23 THE WITNESS: I geocoded the addresses and found that
24 in the versions 1, 2A, and 3, at least one of the plaintiffs
25 fell in SD7.

1 BY MR. VAN LEER:

2 Q You say the plaintiffs. You mean those individuals?

3 A Yes, those individuals. I'm sorry.

4 Q And do you recall being given the addresses of James E.
5 Lovejoy and Joann Williams in the Montgomery region?

6 A Yes.

7 Q Can you tell the Court what you determined about those
8 folks' addresses?

9 A Both of their addresses fell within SD25 on all the plans.

10 Q Thank you.

11 Mr. Fairfax, one final question for you in conclusion.
12 Based on the illustrative plans and the analysis that you've
13 done in this case, what is your overall opinion on the first
14 *Gingles* precondition?

15 A My conclusion is that the minority community in this
16 particular case, the black community is sufficiently large and
17 geographically compact to constitute ten majority-black
18 districts in the state of Alabama.

19 Q Thank you, Mr. Fairfax.

20 MR. VAN LEER: I have no questions for this witness at
21 this time.

22 THE COURT: All right.

23 Would you rather take our morning break now or part way
24 through your cross?

25 MR. GEIGER: My coffee is telling me that I think I

1 would like it now.

2 THE COURT: All right. That sounds great. It's 9:51.
3 Let's come back at 10:05.

4 (Recess.)

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

6 CROSS-EXAMINATION

7 BY MR. GEIGER:

8 Q Mr. Fairfax, good morning. My name is Soren Geiger.
9 We've never met.

10 Can we get PX-353 up on the screen?

11 I will continue while we get that pulled up.

12 You started your map drawing process with the enacted
13 plan, is that correct?

14 A That's correct.

15 Q And you used Maptitude when drawing your illustrative
16 plans?

17 A Yes.

18 Q You testified just a couple of hours ago or not quite that
19 long that when you have the enacted plan pulled up in
20 Maptitude, you first begin by looking to see where racial
21 populations are concentrated; is that accurate?

22 A Initially, yes.

23 Q Initially.

24 A Then I turned it on.

25 Q Right. And before you began drawing district lines or

1 moving the lines around, do you also look at American Community
2 Survey data to see where non-citizen populations are
3 concentrated?

4 A No. Not usually. No.

5 Q Did you in this case?

6 A No.

7 Q And also at that early stage before you began moving
8 lines, did you use Maptitude's disaggregation process that you
9 mentioned to look at Black CVAP data at certain levels?

10 A I'm trying to recall whether I looked at CVAP or the
11 Voting Age Population. I can't recall whether I used one or
12 the other at this particular moment.

13 Q Okay. Just one second, sir. Do you still have your
14 report in front of you?

15 A Yes.

16 Q Could you turn to -- this is your initial report -- to
17 page 8, paragraph 14?

18 THE COURT: What Exhibit Number is that?

19 MR. GEIGER: This is Exhibit 6, Plaintiffs' 6.

20 THE COURT: 6?

21 BY MR. GEIGER:

22 Q And just to refresh your recollection, I think maybe the
23 last sentence there might do so.

24 A This is in regards to looking at the total population, not
25 in regards to any thematic map. Were you referring to just

1 looking at the data itself, the numerical value, or were
2 talking about a thematic look at?

3 Q Did you say thematic?

4 A Yeah, like a map that shows where you the black population
5 is. This is basically used to determine what the district's
6 population is.

7 Q Right. At the district level before you began moving
8 district lines, did you look at both BVAP and BCVAP?

9 A I see what you are saying. Yes. I thought you meant
10 thematically.

11 Q Okay. Thank you. And you determined that additional
12 majority-minority districts in the Huntsville and Montgomery
13 regions could be drawn based on the population data available
14 to you?

15 A Based upon the overall analysis.

16 Q Did you look to see whether additional majority-minority
17 districts could be drawn in other parts of the state?

18 A Early on, I analyzed the entire state and found that
19 potentially there could be additional majority-black districts
20 in the state.

21 Q Okay. Once you determined where to begin and to focus
22 your efforts when developing your illustrative plans, you
23 testified that you toggled race off; is that accurate?

24 A Yes.

25 Q Okay. I think -- and then you also said that you

1 periodically would check to see kind of how decisions that you
2 have made have affected racial populations?

3 A Yes. Periodically, you want to refresh your memory to see
4 if you want to go a different route, if you will.

5 Q All right. I believe in Maptitude you can have certain
6 information displayed in the data view that gets updated as you
7 make changes; is that accurate?

8 A That's correct.

9 Q And did you use that data view feature when you say you
10 periodically checked to see how certain decisions you made have
11 changed population characteristics?

12 A You would periodically look, or I would periodically look
13 to see if that sufficient large component was met.

14 Q Okay. And so the data view would display both BVAP and
15 BCVAP?

16 A It does in different columns.

17 Q Right. Did the data view that you put together and the
18 columns that you toggled on I suppose have both of those
19 populations?

20 A Both of them were there. That's how you could tell, yes.

21 Q And was data view always on screen, or would you pull it
22 up periodically?

23 A The data view is there all the time; however, the black
24 percentages, specifically the CVAP is not there because it's to
25 the far right. So normally you're looking at the total

1 population, the population deviations.

2 Q Okay. So if someone were standing over your shoulder
3 watching the process of developing this map, would they see the
4 Black VAP and Black CVAP population columns to the far right,
5 or would they be off screen?

6 A They would be off screen. You would have to scroll to
7 check them.

8 Q Thank you. When you say periodically, how often are you
9 pulling up data view? Is this -- you have been doing this a
10 long time, so I am sure you're quite efficient. Is this every
11 few minutes as you're making a number of changes or less
12 periodically than that?

13 A It depends. Sometimes it's less periodically. Sometimes
14 it may be every few minutes.

15 Q Okay. So let's say in this case that you pull up the data
16 view and you see that the district you're working on is
17 65 percent BVAP. What would that tell you about where you are
18 in the map drawing process?

19 A It depends. It depends on the population that you're at.
20 If it's 65 percent, and you are half the district size, it
21 doesn't tell you that you have a district, complete district
22 yet. So you would continue to use traditional redistricting
23 criteria. You're adding and subtracting. And then
24 periodically, again, you would look to see if you meet that
25 sufficiently large component.

1 Q What if you're at 65 percent and you're within the
2 population parameters of plus or minus 5 percent?

3 A Possibly. You may stop. This is hypothetically.
4 Possibly, you may stop if you're satisfied with all the other
5 criteria. What you do many times -- or a map drawer may have a
6 stopping point but then begin to try to improve -- continue to
7 improve all of the different criterias.

8 Q Because 65 percent would be pretty nice BVAP cushion above
9 50 percent plus one, and so there is some wiggle room there to
10 make some changes that might lower that BVAP percentage while
11 also improving on traditional criteria; is that right? Would
12 you perhaps do that?

13 A I mean, that's a possibility hypothetically speaking.

14 Q Right. Now, let's say that you get the district shape
15 looking pretty good in terms of all the criteria, and you check
16 the data view to see that the BVAP is just under 50 percent, so
17 doesn't meet the threshold. At that point, would you continue
18 to massage the lines a little to see if the BVAP might increase
19 to just over 50 percent?

20 A You would probably -- or I would probably rather try a
21 different route, a different configuration. So that means
22 potentially erasing, if you will, where the vast majority of
23 the district is and then start concreting it back where you
24 began.

25 Q You included some redistricting criteria reports that I

1 think you looked at a little bit with Mr. Van Leer. Did you
2 have Maptitude run those reports after you got the illustrative
3 plans to a point that you were satisfied with?

4 A When you speak of reports --

5 Q The redistricting criteria. I think they are covered
6 reports in your appendices?

7 A Yes. You periodically run them, or at least that's what I
8 do. I periodically run compactness reports, split reports for
9 political subdivisions, split reports for communities of
10 interest. So you periodically run them throughout.

11 Q Thank you. Let's pull up PX-58. Can you see it on your
12 screen, Mr. Fairfax?

13 A Yes.

14 Q I actually can't see it on mine, but that's fine.

15 I have on the second page a higher res version, it's the
16 exact same plan.

17 Could you tell us what we're looking at?

18 A This is the Illustrative Plan 1, State Senate districts.

19 Q And you used Black CVAP as the racial population to
20 determine majority-black status for District 7 in this plan; is
21 that right?

22 A That is correct. All of the districts met that Black CVAP
23 percentage.

24 Q But not all met the Black VAP percentage?

25 A That is correct.

1 Q Could we --

2 A SD7 did not.

3 Q Right. Can we zoom in a little bit on SD7 in the north?

4 And you chose to use only Black CVAP in SD7 because you
5 found that the area contained a meaningful number of
6 non-citizens; is that right?

7 A That is correct.

8 Q And I think you testified a little earlier today that
9 something, quote, something unique was going on, end quote in
10 this area. And could you describe what that -- what was going
11 on that was unique to you?

12 A That there was a high concentration of non-citizens in the
13 area.

14 Q And when did you learn, based on your analysis of the map,
15 that there was a high concentration of non-citizens?

16 A When I developed both the Plan 3, which it was a
17 derivation of Plan 3, which had BVAP and BCVAP above 50. And I
18 developed this plan or close proximity to this plan. I made
19 the determination that potentially CVAP may be the more
20 appropriate use for that majority numerosity requirement.

21 Q So a few minutes ago you testified that before you began
22 moving district lines, you did not use ACS data to determine
23 where these non-citizen populations were?

24 A That's correct.

25 Q And so after you've developed maybe a number of plans, you

1 then determined -- you then decided to look at CVAP to see
2 whether that would be an appropriate population to use in lieu
3 of BVAP?

4 A That is correct.

5 Q Okay.

6 A And I didn't just start out using. I did research. I
7 looked at that area, determined that that area had a
8 significantly high number of non-citizens for the state. So it
9 wasn't that I decided on SD7. What I did was decide whether
10 the component, the majority-minority status component should be
11 CVAP. So it's a little different than maybe what you're, you
12 know, talking about.

13 Q I think I understand. Thank you.

14 In this plan, the first plan, and in the two versions of
15 your second plan, I think we've primarily referred to that
16 second plan as Plan 2A today, District 7's Black Voting Age
17 Population is below 50 percent, but its Black Citizen Voting
18 Age Population is estimated to be above 50 percent; is that
19 correct?

20 A Yeah. I think it's 48.something percent, and the CVAP is
21 above 50 percent, yeah.

22 Q Did using only CVAP in these plans allow you to keep
23 District 7 a little more compact than if you had used only
24 BVAP?

25 A That was one of the deciding factors that started me on

1 this research was that Illustrative Plan 3 wasn't the best
2 plan, wasn't my best choice. It was reasonably compact, no
3 question, but it wasn't the best choice out of the plans that I
4 created. The SD7 I believe was the best overall choice.

5 Q And so is that -- I think you've answered my question, but
6 just to make sure, is that a yes that using BCVAP allowed the
7 plan to be more compact than had you used BVAP as the
8 population?

9 A It -- out of the plans that I created, the BCVAP using
10 CVAP created a more compact plan.

11 Q Okay. Did using CVAP also allow you to give a little more
12 weight to other traditional redistricting principles than had
13 you only used BVAP or used BVAP in addition?

14 A No. The weight didn't change.

15 Q I know you've testified, and we will talk about this a
16 little bit more, that the map drawing process is a balancing
17 act where you're giving more weight to some criteria and less
18 weight to others, and that's just the nature of the trade off?

19 A Right.

20 Q And so if giving a little more weight to BVAP in Plan 3
21 meant perhaps giving a little less weight to compactness, did
22 that also translate to some other districting principles?

23 MR. VAN LEER: Objection, Your Honor. Asked and
24 answered.

25 MR. GEIGER: That's a new question.

1 THE COURT: He can answer it.

2 THE WITNESS: That's not necessarily the way you view
3 this. The configuration is what the configuration is. You're
4 balancing the criteria -- I balanced the criteria for the
5 Illustrative Plan 3. I balanced the criteria for the SD7 -- I
6 mean the Illustrative Plan 1 and 2A, so I am still balancing
7 the criteria for all of them.

8 BY MR. GEIGER:

9 Q No. I understand that there's balancing going on with
10 every one. But in some of those -- in the process of balancing
11 for each plan, some weight will be given -- some criteria will
12 be given a little more weight than other criteria; is that
13 correct?

14 A I guess I don't view it as weight being given. I view it
15 as you're establishing -- you're configuring the district in a
16 certain way, balancing the criteria for both plans.

17 Q Right. With Mr. Van Leer, you described the balancing act
18 as a trade off?

19 A Yes.

20 Q So to use that description of balancing as opposed to
21 giving weight, would you be trading off a little more one
22 criteria in favor of another?

23 A That's a little -- that's a little better, a little more
24 agreeable that there are trade offs that occur. But let me
25 make sure that, you know, Illustrative Plan 3 still is a

1 reasonably configured district.

2 Q But within the realm of reasonableness, there will be a
3 degree of trade offs?

4 A Yes.

5 Q Okay. Are the non-citizen populations of Huntsville and
6 Montgomery both significant in your view?

7 A When you say both significant, are you looking for one
8 being larger than the other? I mean, what is significant?

9 Q That's actually my question for you is: How do you define
10 when a non-citizen population is meaningful or significant as
11 you have described Huntsville?

12 A Huntsville had the leading, the number one population of
13 non-citizens in the state insofar as the city or census place.
14 And Decatur had the sixth.

15 Q Can we go to page 9 of PX-60? We will pull up the chart
16 that you looked at earlier today. Just help me understand a
17 little better.

18 Can we maybe zoom in on the top 15 or 20 rows just so we
19 can read it a little bit easier?

20 Thanks.

21 So this is ranked in terms of total number of
22 non-citizens, correct?

23 A Correct.

24 Q And is that the population that matters? Is that the
25 metric that matters for determining whether the population is

1 significant?

2 A That's the value or attribute that I used to determine
3 whether Huntsville is a place that has significant amount of
4 non-citizens insofar as the relationship to the state.

5 Q So I see Montgomery second on the list. It's maybe 900
6 lower in terms of total number, and a little over 1 per -- or
7 .1 percent lower in terms of non-CVAP percentage. Would you
8 consider that non-citizen population significant or meaningful?

9 A Yes. And let me say that Montgomery, I created a BCVAP
10 that's above 50 percent and a BVAP that's above 50 percent.
11 There wasn't any need to actually do and define or research for
12 that particular area.

13 However, in the Madison County area, it became apparent to
14 me that I should research and find what would be the most
15 accurate measure or depiction for the majority-black
16 population. And in that context, that's why Madison became
17 relevant to researching. It's to get a more accurate
18 depiction.

19 I could have used the same research and analysis for
20 Montgomery, but I didn't have to. I didn't have to do that.
21 The question is, in the context of SD7 in Madison County, what
22 is the best metric to use for a majority-black status in that
23 particular area? What's more accurate? And CVAP is the more
24 accurate to use.

25 Q But would it have been the more accurate to use for

1 Montgomery?

2 A It's a moot point. Why would I do it when the
3 majority-black status is already there?

4 Q In terms of BVAP?

5 A Yes. In terms of BVAP and CVAP. What I am trying to do
6 is determine what majority-black status in SD7. That's the
7 question. And in that particular area, what's the best metric
8 to use? BCVAP could be used in Montgomery. No question. I
9 could do the analysis and find out the same thing occurs in
10 Montgomery, which probably does. But there's no need to do
11 that research.

12 Q But you did have a plan for the Huntsville area SD7 of
13 Plan 3?

14 A Correct.

15 Q Which like Montgomery was above 50 percent BVAP and above
16 50 percent CVAP. So why would you not determine like with
17 Montgomery that there was no need to look further?

18 A Because I'm trying -- this is no different than what
19 occurs in most *Gingles* analysis or any plan analysis. You look
20 at trying to put forth the best plan. And Illustrative Plan 1
21 in this particular case, and then 2A, were the best plans to
22 put forth. They were better than Illustrative Plan 3.

23 Illustrative Plan 3 was reasonably compact. I was
24 satisfied with it. But it wasn't the best plan that I would
25 put forth. So I put forth the best plan.

1 Q Is there a bright line rule for when CVAP is more
2 appropriate in lieu of BVAP or just VAP?

3 A I think in the context of the *Gingles* 1, it would be
4 looking at whether that sufficiently large numerosity
5 requirement can be met using the more accurate dataset. And
6 so, again, you try to determine what's the more accurate
7 dataset. Once you determine the more accurate dataset, then
8 you utilize that to actually create your districts in order to
9 meet that sufficiently large component.

10 Q In determining which dataset is more accurate, you looked
11 to see the size of the non-citizen population, correct?

12 A That is correct. That is -- correct.

13 Q Relative?

14 A That is part. Yes.

15 Q I'm sorry. The relative size?

16 A Yes.

17 Q Do you see other significant non-citizen populations in --
18 on this list? Do any stand out to you?

19 A I see the non-citizen CVAP that are similar to Huntsville.
20 But that's not the question. The question was that the Madison
21 County area, if there was another area that I was looking at
22 for majority-black status, then I would analyze that area for
23 the same thing.

24 Q Okay. Can we go to page 3, just a little bit earlier in
25 this exhibit to look at the county, county list? Can we also

1 zoom in again? So Madison is second. Montgomery is third.
2 Jefferson is first, but the percentage, the non-CVAP percentage
3 is a little lower than Madison and Montgomery. Do any other
4 counties stand out to you, or does even Jefferson County stand
5 out as having a significant non-citizen population that would
6 make it the more appropriate population to use for *Gingles* 1?

7 A Yes. There are other counties that have a significant
8 amount of non-citizens. And if there were districts that were
9 similar to SD7, then I would have done the same analysis for
10 those districts, but there weren't. This was the only one.

11 Q If the non-CVAP percentage is higher than 3.13 percent as
12 it is in Madison County, would you consider that county to have
13 a significant non-citizen population?

14 A No. No.

15 Q No?

16 A Not necessarily.

17 Q Okay. How should a Legislature know when they're drawing
18 district lines whether to use CVAP or VAP?

19 A Well, I think that they could create a proposed plan. If
20 they ran across the same situation as I had, which is you have
21 two illustrative plan districts, one that meets BVAP and BCVAP,
22 another that only meets CVAP, then they should perform the
23 appropriate analysis to see if BCVAP is the appropriate metric
24 to use.

25 Q Do you know whether under Alabama law the Legislature is

1 permitted to draw district lines based on ACS data?

2 A I would imagine there's nothing to prohibit it. We're not
3 talking about population equality now. You can't use it to
4 equalize the population. But it's used in other areas in other
5 states to determine majority-minority status. So I can't see
6 any reason why -- again, I am not an attorney, but I can't see
7 any reason from a map drawer's perspective.

8 Q Hypothetically, if Alabama law stated that the decennial
9 census is the population that the Legislature must look to, is
10 the dataset that the Legislature look to, would, you as a
11 *Gingles* 1 map drawer, look to ACS data as well, or would you
12 limit yourself to the census?

13 A I think that it depends on the context of that's stating,
14 meaning that are they directing it for population equality, or
15 are they directing it for racial demographics. And there is a
16 difference. I think they would have to actually hone in on
17 what you're using it for. So in population equality, yes, that
18 makes sense. But that doesn't necessarily make sense in the
19 *Gingles* 1 circumstance.

20 Q Okay. Let's look at the Montgomery region. And we'll go
21 back to that previous map, the PX-353, and just zoom in on the
22 Montgomery area instead of the northern Alabama area. Great.

23 Could we also put the illustrative plan on one side of the
24 screen that would be from I think PX-58 just so we can see them
25 side by side? If you wouldn't mind zooming in again on the

1 Montgomery area again if that's possible?

2 Mr. Fairfax, do you still have your pointer with you?

3 A Yes. I'm not sure it works on this.

4 Q It's not going to work for us. Great. That's fine.

5 Would you mind just explaining to us what you changed from
6 the enacted plan to the illustrative plan for Districts 25 and
7 26?

8 A Yes. So SD25 in the enacted plan includes three different
9 counties -- Elmore, Montgomery, and Crenshaw. And so I removed
10 Elmore County from SD25 which makes SD25 more compact. And in
11 order to make up that population, I expanded into more of
12 Montgomery County, including as I said, that whole town of Pike
13 Road and then portions of the city of Montgomery in a compact
14 fashion.

15 Then 26 had to be expanded because it lost population, so
16 I expanded it to Elmore.

17 Q Hypothetically, if you had used only Black CVAP to
18 determine majority-black status for Districts 25 and 26, could
19 you have made those districts even more compact?

20 A I'm not sure. I can -- I could probably -- in retrospect,
21 regardless whether BVAP or CVAP, I probably could make them
22 more compact, regardless, period, and still meet their
23 majority-black status.

24 The focal point that I was trying to do was with SD25.
25 And so in retrospect, I probably could have made SD26 a little

1 more compact and still had it -- 25 meet its numerosity
2 requirement.

3 Q So I believe that SD25's Black CVAP was over 55 percent.
4 Does that sound accurate to you?

5 A That sounds right.

6 Q Okay.

7 A Yes.

8 Q And if -- so again, it has a little bit of wiggle room
9 there to maintain the numerosity requirement but still perhaps
10 work with some lines on the fringes to make it more compact
11 potentially?

12 A Right. But your question implies that I'm toggling race
13 and compactness, and that's not what I am doing. I am not
14 toggling race and compactness and trading off those. I'm
15 looking at all of the criteria and trading off those.

16 Q For neighboring District 26, you added some Elmore County
17 precincts as you just mentioned, and but then you also removed
18 some Montgomery city precincts from District 26; is that
19 correct?

20 A That is correct.

21 Q And do you believe that the people who live in the Elmore
22 County precincts that you added have more in common with
23 District 26 Montgomerians than those Montgomerians who you
24 removed from District 26?

25 A Not necessarily. But crossing over -- clearly crossing

1 over district boundaries is done throughout the enacted plan,
2 and it's done throughout the redistricting process. So it's
3 not something that is not standard.

4 Q Did you look to see whether residents of west Montgomery
5 have something in common or in the same community of interest
6 as people who live at Lake Jordan near the very top of District
7 26?

8 A No, I did not. But as I mentioned, crossing over is done
9 all the time.

10 Q Was one of your reasons, just -- I know, again, there's a
11 number of criteria -- but was one of your reasons for shedding
12 the Montgomery precincts from District 26 to increase District
13 25's Black Voting Age Population?

14 A That had the net effect. But once again, when I'm drawing
15 plans, I am looking at all the criteria and drawing and trying
16 to determine whether that sufficiently large component can be
17 met.

18 So it's not as if it's a pure trade off as I mentioned
19 before.

20 Q And when you drew out those Montgomery precincts from
21 District 26 as you just said, I think that left District 26
22 underpopulated. And so you went north to capture Millbrook and
23 other precincts. Once again, one of the reasons for that to
24 increase District 26's BVAP above 50 percent so that it
25 remained a majority-minority district?

1 A No. No. If you look, the 26 is somewhat landlocked in
2 the county. So I'd have to cross over Lowndes and Autauga, and
3 I didn't want to do that. So the only place I really had to go
4 is really to Elmore, because I was restricted in going to
5 Elmore.

6 Q I believe you said that one of your goals in drawing your
7 illustrative plans was not to eliminate any existing
8 majority-minority districts; is that right?

9 A I don't know if I said that, but I think I said that I
10 attempted to leave as many districts intact as possible, and
11 that was whether they were majority black or not majority
12 black.

13 Q If it was one of your goals to -- not to eliminate any
14 majority-black districts from the enacted plan when drawing
15 your illustrative plans, do you think that you would have moved
16 into Elmore and through Millbrook to keep District 26
17 majority-minority?

18 A I -- at this time, I don't know. I was going into Elmore
19 to add the population that was lost. And as I mentioned
20 before, it's bound -- 26 is bound by the counties to the west.
21 So I only had one choice, and that was Elmore.

22 Q Would you mind looking at PX-6, your initial report one
23 more time at paragraph 55? I'll tell you the page in just a
24 second. It's page 33.

25 Would you mind reading that, that paragraph before the

1 parenthesis at the end?

2 A Which paragraph?

3 Q Paragraph 55?

4 A 55?

5 The illustrative plan avoids violating the constitution or
6 potentially running afoul of Section 2 of the VRA, as it
7 includes two additional majority-black districts that adhere to
8 traditional redistricting criteria without eliminating any of
9 the eight existing majority-black senate districts, and the
10 illustrative plan did not prioritize race over other factors.

11 Q Thank you.

12 It was the without eliminating portion that I was -- that
13 I had in mind that I was referring to.

14 A Uh-huh.

15 Q Is it your opinion that had you eliminated one of the
16 majority-black districts from the enacted plan by, for example,
17 moving District 26 into one of the counties to the west instead
18 of up into Elmore County, that that would have violated the
19 Voting Rights Act?

20 A That wasn't my mindset when I was developing the plan.
21 What I was thinking is I do not want to cross over an
22 additional county boundary, splitting that. Again, my only
23 choice, or actually the logical choice, I think most map
24 drawers would take would be to move into Elmore. It wouldn't
25 be to cross over to another county at that time.

1 Q Do you know whether your plan splits Prattville by moving
2 into Elmore County where you did?

3 A I know that there were one wholly-contained census place,
4 and there were I think two other that were almost wholly
5 contained, and I was trying to not split them, but just a small
6 portion. So I believe Prattville was one of those that were
7 contained in there. But my intent of drawing it was to wholly
8 contain those census places up in that area.

9 Q But there was a small portion that wasn't wholly
10 contained?

11 A Yes. I believe, yes.

12 Q Can we go to PX-6, Table 23, at page 48?

13 And we've seen this before today. Let's have this up here
14 as we talk for a minute.

15 So this is going to be -- looking at the balancing act
16 that you're conducting when map drawing, you're balancing a
17 number of criteria, like the state's traditional districting
18 principles, but compliance with the Voting Rights Act, which
19 requires some consideration of race; is that correct?

20 A Yes.

21 Q But also the Constitution, which forbids considering race
22 too much; is that right?

23 A That is correct.

24 Q The top line of that chart, U.S. Constitution, Alabama
25 constitution, and the federal Voting Rights Act, Section 2,

1 *Gingles* prong 1.

2 Does Plan 1, the illustrative plan fare better than the
3 enacted plan and comply with Section 2 of the Voting Rights Act
4 because it has more majority-black districts than the enacted
5 plan?

6 A It performs better in the *Gingles* 1 prong, which shows or
7 makes the determination whether you can actually develop one or
8 more majority-minority districts that's sufficiently large and
9 geographically compact, so it performs better from that sense.

10 Q So because it performs better and because you -- by adding
11 additional majority-black districts in your view, it better
12 complies with the Voting Rights Act?

13 A That is correct.

14 Q Okay. If complying with the Voting Rights Act meant
15 giving a little less weight or making a slight trade off to,
16 for example, minimizing county splits, could that be
17 appropriate?

18 A You're talking about outweighing the Voting Rights Act?
19 Could you repeat that?

20 Q Certainly.

21 A That's what I heard.

22 Q No. In complying with the Voting Rights Act, could it be
23 appropriate to give a little less weight or to make a slight
24 trade off with minimizing county splits?

25 A I think that as long as it adheres to traditional

1 redistricting criteria, because the assumption is that when you
2 perform that *Gingles* 1, you also are following the criteria to
3 do so. So if the criteria is reasonable, then, yes.

4 Q So as long as you're within the realm of reasonableness,
5 giving a slight trade off to one traditional principle in order
6 to comply the Voting Rights Act is perfectly fine?

7 A I think that as long as it's within the realm of
8 acceptable, that's right.

9 Q And ultimately, in the right situation, could it be
10 appropriate to give a little less weight still within the realm
11 of reasonableness to any of the state's traditional principles
12 in order to comply with the Voting Rights Act?

13 A Again, as long as that plan adheres to the traditional
14 redistricting criteria, the answer is yes.

15 Q And in your illustrative plans, race did not predominate
16 over traditional criteria, correct?

17 A That's correct.

18 Q So you considered race for compliance with the Voting
19 Rights Act, but not too much?

20 A Not too much. I would say I considered it.

21 Q Okay. You've provided consulting services to State
22 Legislatures many times as a map drawing expert; is that right?

23 A Yes, few times.

24 Q And do State Legislatures when they're redistricting
25 conduct this same kind of balancing act that you do in mapping

1 drawing?

2 A You're saying when they draw districts?

3 Q Yes. Yes.

4 A It all depends on whether they're looking through the lens
5 of the *Gingles* 1. You know, *Gingles* 1 is actually looking at a
6 specific aspect, which is --

7 Q But aren't -- I'm sorry.

8 A You know, which is determining whether you can draw one or
9 more majority-minority districts sufficiently large and
10 geographically compact. So if they're looking at it from that
11 lens, yes.

12 Q But aren't State Legislatures also trying to draw maps
13 that comply with federal law including the Voting Rights Act?

14 A Yes. They should. They don't necessarily do that.

15 Q But they should?

16 A I think they should, yes.

17 Q And doesn't that require the same kind of balancing act
18 that you're performing when weighing the compliance with the
19 Voting Rights Act with all the other criteria?

20 A Yes. They should, I believe, perform some type of
21 analysis to see if the situation is right, of course, that
22 *Gingles* 1 can be met. That would get them out of trouble later
23 on down the road.

24 Q So to that point, sometimes it's possible for Legislature
25 to consider race too much; is that correct?

1 A I mean, hypothetically, yes, of course.

2 Q Well, you have been consulted and retained by different
3 organizations or different entities to examine whether race
4 predominates in a Legislature's enacted plan; is that right?

5 A Yes.

6 Q And what specifically do you look for to determine whether
7 the Legislature considered race too much?

8 A In my opinion, in racially gerrymandered analysis, you are
9 looking for a pattern. You know, one or two VTDs that appear
10 to be added or subtracted by race really doesn't make it. It's
11 a pattern that you would see, almost a story. As I tell
12 people, you're trying to come up with a story of what occurred.

13 Q So a pattern of racial decision making in the map drawing
14 process; is that fair?

15 A Yes. And sometimes it's unintentional.

16 Q And do you -- you mentioned VTDs. Do you focus -- are
17 they the best evidence of racial decision making when a voting
18 district is split or not included or included?

19 A VTDs are one aspect. The overall population shift is
20 another, what's going on, you know, looking at what occurs with
21 each of the districts. This district added population, this
22 district lost population, a pattern of doing that, using race
23 is also what you look at, as well.

24 Q And in your view, that can be done unintentionally?

25 A It's a possibility it could be done unintentionally, yes.

1 Q When you or any other *Gingles* 1 map drawer is conducting
2 this balancing act, is it possible for the *Gingles* 1 map drawer
3 to consider race too much?

4 A It's possible.

5 Q Is it possible to do so unintentionally?

6 A Yes, it is possible.

7 Q And to know if a *Gingles* 1 map drawer went too far with
8 race, would you look for the same kinds of racial
9 decision-making patterns as you would with an enacted plan?

10 A If you are trying to determine whether the districts are
11 racially gerrymandered, yes. But if you're looking at a purely
12 Section 2, then you don't do that. You know, purely you're
13 trying to look through the *Gingles* lens. You are not looking
14 through the racial gerrymandered lens, if you can follow what I
15 am saying.

16 Q I think so.

17 A It's two separate analysis, if you will.

18 Q But when looking through the *Gingles* lens, do you -- is it
19 not appropriate also to look through the racial gerrymandered
20 lens at some point to determine whether race was considered too
21 much?

22 A You're speaking of the map drawer or whether the map
23 drawer's analyzing say an enacted plan?

24 Q Both.

25 A You would not necessarily look at the analysis of the

1 enacted plan in a Section 2, *Gingles* 1. You would not look at
2 it through a racially gerrymandered analysis, at least not
3 complete. You may notice some packing, notice some cracking,
4 but you are not going to do a full analysis, if you will.

5 Q And you were describing just now the enacted plan?

6 A Yeah.

7 Q Is that right?

8 A Yeah.

9 Q Okay. And how would that analysis differ from analyzing
10 an illustrative plan?

11 A Well, the illustrative plan, the assumption is that you're
12 developing the plan and not considering race too much or not
13 considering race as a predominate factor. So that's how you
14 satisfy that. You develop the plan such that you're not using
15 race. So no analysis should be necessary. Two different
16 things.

17 Q As a *Gingles* 1 map drawer, are you permitted to use race
18 in a different way than a Legislature is?

19 A Interesting question.

20 MR. VAN LEER: Your Honor, I'm going to object to the
21 extent it's calling for a legal conclusion.

22 THE COURT: Are you asking about his understanding?

23 MR. GEIGER: I am, just as Mr. Van Leer asked about
24 his understanding of *Gingles* earlier.

25 THE COURT: I think the doors are wide open now by the

1 way, to the expert's understanding of *Gingles* given that the
2 questions have come from both sides.

3 THE WITNESS: Can you repeat the question?

4 BY MR. GEIGER:

5 Q As a *Gingles* 1 map drawer, are you permitted to use race
6 in a different way than a Legislature is?

7 A I think that the Legislature has the responsibility to
8 look at *Gingles* or look at their plan through a *Gingles* 1
9 approach and each time to keep them out of trouble. So we look
10 at it most likely in the same way or should. That necessarily
11 doesn't happen, but they should be looking at it through the
12 *Gingles* 1 lens to see if any districts meet the *Gingles* 1
13 requirement.

14 Q But then you said that the *Gingles* 1 scenario or lens is
15 different than the racial gerrymandering scenario or lens. And
16 so is there a different standard of how to determine whether
17 race was considered too much depending on which scenario you're
18 looking at?

19 A Right. The question that you said before was in the
20 development of a plan. And which is what I would say akin to
21 the *Gingles* 1 analysis, which is different than the racial
22 gerrymandering analysis. So you have to separate it.

23 And if the question is, should the Legislature look
24 through the lens of racial gerrymander, yes, I agree, they
25 should do that, as well, if that's the question. But that's

1 separate from the development of *Gingles* 1.

2 Q So if you are on the outside looking in at a *Gingles* 1
3 plan, on outside looking in as you have been retained to do in
4 some cases at an enacted plan, are you looking to see whether
5 race was considered too much in different ways?

6 A In what context am I analyzing?

7 Q To determine whether race was considered too much. So in
8 the context of --

9 A A gerrymander.

10 Q -- determining whether race was predominant, whether you
11 are looking at an illustrative plan or an enacted plan?

12 A It's -- again, as I mentioned before, it's two different
13 contexts. In the context of an illustrative plan, as you're
14 creating the plan, you're making sure that race doesn't
15 predominate. That's the analysis.

16 In a racial gerrymander plan, it's after the fact. You're
17 looking at and trying to analyze what occurs. You don't have
18 to analyze it in the illustrative plan, because you're actually
19 drawing the plan.

20 Q Okay. But we're after the fact here for your illustrative
21 plans, and so hypothetically, if we were looking to see whether
22 race predominated in your illustrative plans after the fact,
23 would we conduct a different analysis than if we were looking
24 at the enacted plan?

25 A If you're looking at my plan, then you have to consider

1 the fact that these are new *Gingles* 1 districts. And that is
2 different than a district, for example, that had existing
3 majority-black districts and you are adding to those districts
4 a black population or removing white population.

5 In the context of the *Gingles* 1, it's acceptable that you
6 are going to have districts that go -- that are non-black that
7 become black. That's the only way you can meet the *Gingles* 1.
8 So it's a slightly different arrangement than if you're
9 analyzing a racially gerrymandered plan that has existing
10 majority-black districts.

11 Q Okay. So if you are analyzing -- I only have a couple
12 more questions on this. We have been going on it for a long
13 time on it. Sorry.

14 If you are analyzing a, as you say, a racially
15 gerrymandered enacted plan that has majority-black districts
16 and you see signals of racial predominance and you also see
17 what might look like those same signals in an illustrative
18 plan, the *Gingles* 1 plan, you wouldn't then pursue that
19 investigation or that analysis because it's a different
20 scenario; is that question clear?

21 MR. VAN LEER: Objection for lack of clarity and
22 compound question.

23 THE COURT: Do you understand the question?

24 THE WITNESS: I think.

25 THE COURT: You may answer it as far as you

1 understand.

2 THE WITNESS: Let me approach it from this point of
3 view: If you're -- if it's a newly enacted plan, and you
4 clearly see signs of let's say packing, then, of course, you
5 would look at that as that newly district, that *Gingles*
6 1 district as 70 percent black, that would be clearly an
7 evidence of packing the district.

8 So, of course, you probably would make that analysis
9 without having to dive too deep into the other racial
10 gerrymandering analysis. But even that, you want to actually
11 do a full-blown analysis if you will, and that's separate from
12 the *Gingles* 1 creation of districts.

13 BY MR. GEIGER:

14 Q Okay. I think I can ask the question a little bit
15 clearer, and this will probably be the last one. Not of the
16 cross-examination. Sorry.

17 So the same features of an enacted plan that might suggest
18 racial predominance would not necessarily suggest that race
19 predominated in a *Gingles* 1 plan; is that fair?

20 A There is -- there is a difference, whereas I said you
21 cannot look at race only being added to the district in an
22 illustrative plan, because you have districts in a *Gingles* 1
23 that move from not being a majority-black district to being a
24 majority-black district.

25 So if you add black population, that can't be a central

1 feature; however, in an enacted plan, where there are
2 majority-black districts and it is an attempt to keep them as
3 majority-black districts or increase their size adding black
4 population may have or may be perceived as racially
5 gerrymandering or race predominating.

6 So, again, it's two different situations. One is it's
7 acceptable because that the only way you're going to have the
8 *Gingles* 1 met is to take districts that aren't
9 majority-minority and make them majority-minority. And that's
10 the only way versus one where you have majority-minority
11 districts, and you're removing or you're adding population to
12 it in a racial manner.

13 Q Thank you, Mr. Fairfax.

14 Let's look at District 7 in your first plan, and this will
15 be again PX -- excuse me -- DX-7, page 5, perhaps on one side
16 of the screen and PX-6, the initial report of Mr. Fairfax, page
17 34 on the right, if we can align them so it's a little easier
18 to look at the two. Perfect. Thanks.

19 In this plan, you reported District 7's Black CVAP to be
20 50.16 percent; is that accurate?

21 A I believe so.

22 Q Okay. Do citizenship estimates from the American
23 Community Survey reflect an actual count?

24 A They reflect an estimate, a point value usually.

25 Q And what is the estimate based on?

1 A The estimate based on surveys that have taken --

2 Q Surveys?

3 A Yes.

4 Q So it's sample data?

5 A Yes.

6 Q And how large was the sample size for District 7 for the
7 CVAP estimate?

8 A I don't know.

9 Q Did you look -- did you at one point know or look to see
10 how large the sample size was?

11 A No, no, no. That's not done. That's not done. Usually a
12 map drawer will look at the point value and accept the point
13 value unless there's some reason to not.

14 Q Is it typically important when relying on sample data to
15 look at the sample size or to know how large the sample size
16 was?

17 A It's not done in the context of CVAP in the redistricting
18 industry, let's say, and even in redistricting litigation.

19 Q Could the sample size have been even under 5 percent of
20 the population?

21 A I don't know. There's a possibility.

22 Q Do these CVAP estimates come with an error rate?

23 A Yes. It's a mar -- it's not a -- an error, definite
24 error. It's a margin of error.

25 Q Did you discuss the margin of error anywhere in your

1 initial report?

2 A No.

3 Q And why is that?

4 A Because that's not commonly used. Usually the map drawer
5 will use the point value and relate that. Also, the
6 disaggregation process that's used, there's no way to come up
7 with that type of error, margin of error.

8 Q Because there's no way to come up with it, is it
9 unimportant in this context?

10 A It depends upon what you mean by important.

11 Q That you need to know it in order to proceed with relying
12 upon it?

13 A Then it's not important if you need to know.

14 Q Okay. Should you know it before relying upon it?

15 A It would be one of the things that would be nice to know,
16 but it's not done. As I said, that's not what occurs in map
17 drawing or litigation.

18 Q Did you calculate margin of error for District 7's CVAP in
19 any of your plans that you submitted?

20 A I did for 2A. I calculated the margins of error using the
21 two methods that Dr. Trende included or mentioned, I believe,
22 in his report.

23 Q And do you recall what you calculated the margin of error
24 to be roughly or exactly?

25 A Roughly 2 to 3 percent.

1 Q Okay. Plus or minus 2 or 3 percent?

2 A Yes. Plus or minus.

3 Q Do you remember what confidence interval you used for that
4 error margin?

5 A The same as the census, 90.

6 Q 90? And do you recall what margin of error Dr. Trende
7 calculated himself?

8 A I believe he did multiple. I'm not sure. I don't recall.
9 But I believe he did multiple.

10 Q Do you recall whether those margins of error were similar
11 to what you calculated?

12 A Yes. I believe he said around 3 percent, something like
13 that. That's what comes to mind.

14 Q Would you consider your and his margins of error
15 reasonable?

16 A Yes.

17 Q Okay.

18 A Yes. Definitely.

19 Q Does Voting Age Population data from the decennial census
20 come with a margin of error?

21 A Repeat that.

22 Q Does Voting Age Population data from the decennial census
23 come with a margin of error?

24 A Not voting age. You are speaking of the decennial census?

25 Q Yes.

1 A No. Because it's 100-percent count.

2 Q So if hypothetically the census had a citizenship
3 question, would you find the census's citizenship count more
4 reliable than ACS estimate data?

5 A That's not as easy a question to answer because of the
6 fact that -- this was discussed I believe years ago, and the
7 problem is, is that some organizations fear that individuals
8 would not fill out the survey, and you would not get an
9 accurate account of total population because they wouldn't fill
10 out the survey.

11 I am speaking of the decennial survey. So you would have
12 a huge error in the total population of individuals because of
13 the lack of surveys being filled out.

14 Q But that same fear does not apply to the ACS?

15 A The ACS is a sample. And so you are not trying to survey
16 everyone. So as long as they collect an adequate amount of
17 surveys or sample, then you can estimate what the point value
18 is. They're not trying to collect 100 percent. You may be
19 able to collect 80 or 90 percent, so if you elected 80 or
20 90 percent, that's 10 or 20 percent off.

21 But if you collect a sample that only collects, let's say
22 only 1 or 2 percent, maybe 5 percent as you said, you can do
23 that. You can have enough individuals fill out those sample
24 forms.

25 Q Would you not fear thought that some of those in the 1 or

1 2 or 5 percent would false report?

2 A There -- you know, there's always that that's included
3 even in the 100-percent count. So if we move to the
4 100-percent count, that could be true, as well. So there's
5 always that fear in taking surveys.

6 Q And again, if hypothetically the census had the
7 citizenship question, would you consider that less reliable
8 given the fears you have described than ACS citizenship
9 estimates?

10 A See, that's the problem. I don't know. Again, because of
11 the situation I talked about, the amount of individuals that
12 would not fill out the form. It's somewhat of an unknown. I
13 think some organizations tried to actually sample this and try
14 to give opinions of that, and they found a considerable amount
15 of people in certain communities would not fill out the form.

16 Q What ACS dataset did you use for calculating District 7's
17 Black CVAP in Plan 1, this one?

18 A I used the 2021 CVAP five-year ACS.

19 Q And it's your position that that dataset was available to
20 the Legislature when they drew this map?

21 A If I -- I mentioned that before in recollection. At this
22 moment, now, I'm wondering whether it was available at that
23 particular time. But my assumption is that it was available at
24 that particular time when I used it. But it may not have been
25 available, because there was a delay now that I'm thinking

1 about it.

2 Q And after you drew Plan 1, has the census bureau published
3 any newer five-year datasets?

4 A After?

5 Q You submitted Plan 1?

6 A The 2022, yes.

7 Q And this was not available to the Legislature, correct,
8 the 2022?

9 A Correct. This -- that was purely in response to
10 Dr. Trende's comments.

11 Q Using 2022 five-year ACS data, do you agree with
12 Dr. Trende that District 7's BCVAP falls below 50 percent?

13 A For Illustrative Plan 1, yes, I agree with that.

14 Q When will a 2023 five-year ACS data be released?

15 A It should be coming out soon. I think this year, maybe at
16 the end of the year or the beginning of next year. I'm not 100
17 percent sure.

18 Q Are you confident that the BCVAP percentage of SD7 will
19 remain estimated to be above 50 percent in your illustrative
20 plans using 2023 five-year data?

21 A I'm confident that when the data comes out 2022, that you
22 can create a *Gingles* 1 district in that area. I'm confident of
23 that. Don't know how the district may fare if you import it,
24 but I'm confident that in that area you can create a *Gingles* 1
25 district.

1 Q But you can't be sure that BCVAP will remain estimated to
2 be above 50 percent in the districts that you have drawn
3 already?

4 A I don't know.

5 Q Okay. Let's go to Plan 2. You submitted this second plan
6 in your first rebuttal report, correct? And we'll pull it up
7 here in a second.

8 A Okay. I'm sorry. Repeat the question.

9 Q You submitted your second plan in your first rebuttal
10 report, correct?

11 A Yes.

12 Q And using 2022 five-year ACS data, you calculated the
13 BCVAP to be 50.05 percent. Does that sound accurate?

14 A I believe so.

15 Q Okay. And the margin of error that you calculated that we
16 discussed a minute ago was between 2 and 3 percent for that
17 plan?

18 A Yes.

19 Q Okay. Using your BCVAP estimate of 50.05 percent, would a
20 plus or minus 2 percent margin of error include values below
21 50 percent?

22 A It would include values below and above.

23 Q Right. And you also looked at voter registration data for
24 Plan 2, right?

25 A Correct.

1 Q And why did you do that?

2 A As supplemental backup, gives comfortability that it is a
3 majority-black district.

4 Q Is it your view that if a majority of registered voters in
5 a district are black that that district satisfies *Gingles* 1
6 numerosity requirement?

7 A No. No.

8 Q Do you typically report voter registration data for your
9 illustrative districts that you draw?

10 A Sometimes I do. But for the most part, I would analyze it
11 from as a supplemental aspect, just gives you a little more
12 confidence in the district.

13 Q And you would acknowledge, right, that not all eligible
14 voters are registered to vote?

15 A Correct.

16 Q And according to your report -- this is one of your
17 appendices. We can pull that up. PX-70 -- District 7's total
18 CVAP in Plan 2 is estimated to be 102,776. I will wait until
19 that comes up.

20 Could you go to page 10 of the pdf? Zoom in a little bit
21 so we can see row 7 better.

22 Okay. There near the bottom, do you see that figure,
23 102,776?

24 A Yes.

25 Q Okay. And 43,533 of those are white, and 51,442 are

1 black; is that accurate?

2 A That's correct.

3 Q Okay. And you report that there are 93,932 registered
4 voters in this district. And if you have your supplemental
5 report PX-9 in front of you, do you have that one? We can pull
6 it up on the screen if not.

7 A I think I do not, but I will take what you say. You're
8 talking PX-9?

9 Q I think that is the red line version. So if you have the
10 non-red line version, it should be this paragraph that we'll
11 refer to should be the same. It's paragraph 50.

12 A Yes. This is PX-8.

13 Q Okay. So do you see that figure that you report, 93,932
14 registered voters, and of those, 38,939 are white, and 48,181
15 are black. So based on those numbers, there are about 4,600
16 more white citizens of voting age than registered white voters
17 and about 3,200 more black citizens of voting age than
18 registered black voters. Is that roughly accurate?

19 A Roughly accurate, yes. Right.

20 Q So would you agree that black people are registering at a
21 higher rate than white people in this district?

22 A That's an interesting question, and I'm hesitant, because
23 the ACS is looking at a five-year period of time, and the
24 registered voters is a snapshot in time. So the ACS is not
25 stating a specific time where the registered voters is stating

1 a specific time. So I can't come to that conclusion.

2 Q Did you look at registration rates?

3 A No. No, I did not.

4 Q Is it possible that if a certain number of the non-black
5 citizens in District 7 registered, the percentage of black
6 registered voters would dip below 50 percent?

7 A If the non-black citizens registered?

8 Q Thereby increasing their share of the percentage?

9 A Numerically, yes, but you are saying that non-citizens
10 registered to vote.

11 Q No. I'm sorry. I think I said non-black citizens. I
12 didn't mean non-citizens.

13 A Oh, okay. I'm sorry. Numerically, that would be the
14 case.

15 Q And did you submit this report in April of this year?

16 A I believe so.

17 Q Is that correct? Okay. Is it possible that this voter
18 registration snapshot may have changed a great deal since then
19 given that we've had a general election?

20 A It's a possibility.

21 Q And do you also acknowledge that there are some citizens
22 of voting age who are not eligible to vote under Alabama law?

23 A Yes.

24 Q Such as persons who have been convicted of a disqualifying
25 felony or perhaps declared mentally incompetent by a court?

1 A Yes.

2 Q Did you take these populations into account when
3 calculating District 7's BCVAP in your illustrative plans?

4 A No, and it's not normally done.

5 Q But you don't know whether the district would be
6 majority-black eligible voter after taking into account those
7 disqualified populations?

8 A No, I don't. And as I said, it's not normally done.
9 Usually, you use the point value for the CVAP.

10 Q I understand. A couple of questions about Plan 2A, which
11 I know it's been focused on more this morning than the first
12 iteration of Plan 2.

13 But it's essentially identical to Plan 2 with a couple of
14 minor changes; is that right?

15 A Very similar.

16 Q And did the margin of error that you calculated in your
17 rebuttal report, is it staying roughly the same for Plan 2A as
18 it did for Plan 2?

19 A Yes.

20 Q Okay. And I believe the BCVAP estimate for Plan 2A was
21 50.19 percent. So a little higher than the first version of
22 Plan 2? Does that sound accurate?

23 A That sounds right. 50.19, yes.

24 Q And would a plus or minus 2 or 3 percent margin of error
25 using that point estimate also include values below 50 percent?

1 A Yes. It would be -- it would include values below, but
2 they're -- theoretically there are more values above than
3 below.

4 Q To that point specifically, can we go to paragraph 19 of
5 this Exhibit PX-9? Sorry. Paragraph 19 on page 11.

6 And I believe the portion I'd like for you to read,
7 Mr. Fairfax, is on the next page. Maybe could we zoom in on
8 the part of paragraph 19? That's right.

9 The very last sentence. Would you mind reading that for
10 us?

11 A Thus, every person above the 50 percent point makes it
12 even more likely that the actual value falls above 50 percent
13 despite any smallest estimated margin of error.

14 Q Thank you. Is that still your position today?

15 A That there are more, let's say options above 50 percent
16 than below 50 percent because the margin of error is less below
17 50 percent than above 50 percent, yes.

18 Q So using the BCVAP -- excuse me -- using the margin of
19 error that you calculated, would a BCVAP estimate of 50 percent
20 plus one person give you a reasonable degree of certainty that
21 the district was likely majority BCVAP?

22 A Theoretically, yes, from a theoretical point of view.
23 It's one person better.

24 Q And because the estimate is that it's one person better --

25 A Yes.

1 Q -- and the margin of error would have one person less
2 below 50 percent than above than theoretically it's more likely
3 that the district is in fact majority BCVAP?

4 A Correct.

5 Q Okay. Let's move on to your third plan.

6 I believe you testified earlier this morning that your
7 purpose with this plan was to meet the numerosity requirement
8 with both BVAP and both BCVAP; is that right?

9 A This is one of the plans that I drew initially, or it was
10 a derivation of one of the plans as I was looking at different
11 configurations. This is a plan that I came up with in addition
12 to the Illustrative Plan 1 plan of similar option or similar
13 configuration.

14 Q This is the only district in the third plan -- let me
15 rephrase that.

16 District 7 in the third plan is the only version of
17 District 7 that has a majority-Black Voting Age Population; is
18 that correct?

19 A Yes. But as I mentioned that as I was drawing or
20 developing it, there were slightly different configurations of
21 this Illustrative Plan 3. It wasn't the only one. But then as
22 I mentioned before, what you do is you actually pick the best
23 ones out of the bunch. So this was the best one I think that I
24 had a majority-black BVAP and a majority-Black CVAP.

25 Q And just to clarify a little bit, when did you draw the

1 third plan, this version of the third plan relative to the
2 first plan?

3 A During the same process. So as you're drawing, you're
4 looking at a variety of different configurations. And as I
5 think I mentioned before, you put those configurations on the
6 table, and you come up to -- you come up with a conclusion of
7 which one is the best plan to put forth.

8 And so that's why Illustrative Plan 1 I looked at all the
9 criteria, and I put that forth as the best plan to put forth.

10 Q Could we jump real quick to paragraph 66 of exhibit --
11 Plaintiffs' Exhibit 9? It should be the same of the paper
12 Exhibit 8 that you have, if you want to look at that.

13 A What paragraph?

14 Q 66. The second sentence is lengthy, but I will just read
15 it real quick if you don't mind.

16 Huntsville, Decatur, as well as the towns of Courtland and
17 North Courtland are part of the third largest combined
18 statistical area within the state of Alabama, the Huntsville
19 Decatur CSA. There's a sentence break.

20 In Illustrative Plan 3, additional parts of Huntsville
21 with one VTD removed and the expansion into Lawrence were added
22 and three VTDs in Decatur were removed in order to reconfigure
23 the district from Illustrative Plan 1 and meet the equal
24 population guidelines.

25 So my question is: When you were drafting the various

1 versions of District 7, did you reconfigure Plan 3 from Plan 1
2 as you write here in this paragraph?

3 A The process was the same that I did in all the plans,
4 meaning that you essentially start with the enacted plan, but
5 then you have history of those other plans.

6 And so you begin to create similar areas as the other
7 plan.

8 So in the context of the Illustrative Plan 1, you're
9 configuring it, you end up really configuring it where
10 similarly to Illustrative Plan 1 or 2A, but then you make
11 changes like you do balancing -- like I said before, balancing
12 out the criteria.

13 So this is referring to that.

14 Q I think I understand. So you have the enacted plan, but
15 then you have -- because you're doing this process multiple
16 times, I suppose you have a history -- seems very efficient,
17 and we are human. We have memory, of course, that drawing the
18 district in a certain way will result in a -- perhaps
19 46 percent BVAP district with just over 50 percent CVAP, and
20 that would be Illustrative 1, but then maybe moving into
21 Lawrence County or moving, adding the Harvest area VTD would
22 perhaps maybe have a different effect?

23 A I would agree except for the racial aspect. You're
24 configuring it with criteria. And you may or may not end up in
25 the exact configuration.

1 In this case, I did, meaning that you are looking at a
2 variety of different shapes and configurations. I ended up
3 pretty much where 1 and 2A was in the configuration. But just
4 expanded it into Lawrence.

5 Q Right. I believe you said earlier that you prefer Plan 1
6 to Plan 3 because Plan 1 is more compact; is that accurate?

7 A It's the totality of the criteria, not just compactness.
8 It's, you know, looking at all the criteria.

9 Q So beyond compactness, it also respects traditional
10 principles a little better, not -- a little better than Plan 3?

11 A It performs better in the criteria, the county splits, you
12 know, compactness.

13 Q You note in your reports that every majority-black
14 district in your plan is more compact than the least compact
15 district in the enacted plan, correct?

16 A That's correct.

17 Q But in the third plan, District 7 isn't far from the
18 bottom. I think it's right at second or third least compact;
19 is that right?

20 A That seems probably right. I can't recall exactly.

21 Q Is it your opinion that an illustrative majority-minority
22 district is geographically compact so long as it is more
23 compact than the enacted plan's least compact district?

24 A I think that's one of the measures or methods that you can
25 use. I think that when the Legislature passes or approves a

1 plan, they're also approving the metrics that they use.

2 So looking at that as the minimum or performing better
3 than those metrics gives a good emphasis that it's reasonably
4 compact. Of course, you can look at the other metrics, as
5 well.

6 Q But if in order to comply with the Voting Rights Act
7 District 7 had to drop a few places and become the least
8 compact district in your plan and less compact than any
9 district in the enacted plan, that wouldn't automatically mean
10 that it's not geographically compact; is that right?

11 A That is correct. You are saying if during the process the
12 configuration came out to be the least or tied with the least
13 compact, that's correct. That is correct. It may not be
14 something that you would conclude as not compact.

15 Now, of course, there are always exceptions to the rule.
16 If for some reason there was attention provided to compactness
17 for the enacted plan and it was, you know, an allegation that
18 the enacted plan was not compact, you know, that people were
19 saying that it violated the compactness rule, then, of course,
20 that may not be the measure that you would look at because the
21 allegation is that the enacted plan isn't compact. But there's
22 no such allegation as the enacted plan being -- alleged to
23 being a non-compact plan.

24 Q For *Gingles* 1 map drawing in Alabama, is there any
25 compactness score or measure that in your view is just too low

1 for a district to be considered geographically compact?

2 A I think they are -- experts, I guess experienced map
3 drawers would recognize if something was extremely low around
4 .01, .02, and people would say that's not a compact district.
5 But believe it or not, districts in Hawaii have that type of
6 compactness measures. So you just can't go with just the
7 number itself. That's why you want to compare it to some
8 approved plan to get a sense of what's acceptable and what's
9 not.

10 Q In Alabama, leaving aside Hawaii, is there a compactness
11 measure that you wanted to stay away from because that was not
12 reasonably or geographically compact?

13 A No. I didn't calculate or research any specific numerical
14 value. That's why I used the least compact measures.

15 Q And between your preferred plan, Plan 1, and your third
16 plan, which one contains more county splits?

17 A The third plan.

18 Q And you first reported that the third plan contains 19
19 counties, but then you corrected that and noted that it
20 contains 21 when you amended the report. But your conclusions
21 does not change that the third plan is reasonably configured;
22 is that right?

23 A That's correct.

24 Q Is there a number of county splits that would cause your
25 conclusions to change that the third plan was reasonably

1 configured?

2 A That's difficult to say, but it wouldn't be two. It
3 wouldn't be two more splits. But it's difficult to say what it
4 would be.

5 Q But there could be a plan that has far more than two,
6 perhaps even ten more that could still be, given the other
7 criteria being balanced, reasonably configured?

8 A That would give pause to me in drawing my conclusion. But
9 fortunately, I didn't have to make that decision. I only had
10 to make it on two.

11 Q Just to clarify, although it would give pause, it's not
12 out of the realm of possibility that that kind of plan could be
13 reasonably configured?

14 A I would say yes, because you may be trying to meet some
15 other criteria. So, for example, if you are trying to actually
16 keep census places whole and they cross county boundaries all
17 the time, then that would split many more counties. So it all
18 depends on the criteria emphasis, if you will.

19 Q Okay. Slightly different, but still regarding counties.
20 Parts of how many counties are within District 7 in the
21 preferred plan, the first plan?

22 A Could you repeat that? I'm sorry.

23 Q Yes. Portions or parts of how many counties are within
24 District 7 in the first plan?

25 A Three counties.

1 Q And what about the third plan?

2 A Four counties.

3 Q Are there any other districts in your plans that contain
4 parts of four counties? Do you recall?

5 A No. I don't recall.

6 Q If I represented that there are not, would you believe me?

7 A You seem like an honest person. Yes.

8 Q Thank you.

9 What if District 7 -- actually, can we pull the map back
10 up so we can kind of see what we're talking about? PX-58, I
11 believe.

12 What if District 7 needed to stretch a little bit
13 southeastward to capture a portion of Marshall County thereby
14 making the number of counties in District 7 five instead of
15 four, could that district still be reasonably configured?

16 A Five, I would -- I would say so. I would say so. I've
17 seen more county splits than this. I would say so.

18 Q Okay. And actually, my eye is drawn to southwest Alabama.
19 Maybe we can zoom down there on 22 and just north of Mobile.

20 That's part of the state where and even a little bit north
21 a number of counties kind of converged together. So what if
22 you could draw this beautifully compact circular district right
23 there that contains portions of six or seven counties, but
24 achieves the other traditional districting principles including
25 complying with the Voting Rights Act, could that seven-county

1 district be reasonably configured in theory?

2 A Again, it's a hypothetical.

3 Q Yeah.

4 A In theory, potentially. But once again, you have to look
5 all of the other factors, reasons why you are doing that.

6 Q If they permitted it or if they counseled in favor of it,
7 would a district with portions of seven counties be reasonable?

8 A Yes. But there could be ramifications -- other
9 ramifications besides just the county splits. So, you know,
10 that alone is difficult. You're starting to get into sort of a
11 gray area, if you will. So I don't know if I can necessarily
12 blanket agree to that.

13 Q Of course.

14 Does your preferred plan, Plan 1, pair incumbents?

15 A There are two incumbents paired or two incumbent pairs.

16 Q Does your third plan also pair incumbents?

17 A Yes.

18 Q How many?

19 A I believe the same amount.

20 Q And how did you --

21 A I'm not sure. I'm sorry. I'm not sure about that, but I
22 believe the same amount.

23 Q How did you go about determining whether or not your plans
24 pair incumbents?

25 A I obtained the location of incumbents from counsel and

1 geocoded them, if you will, to their locations and created a
2 layer. And then as I'm drawing, I can actually look while I'm
3 drawing to see if the incumbents are there. And, two, there's
4 a report that you print out that actually shows the pairs.

5 Q What if I told you that Senator Wes Kitchens won a special
6 election for District 9 in January of this year, and that in
7 your third plan he's paired with Senator Orr in District 3 in
8 your District 3? So if your third plan actually pairs
9 two pairs of incumbents, would that change your conclusion that
10 it's reasonably configured?

11 A No. It wouldn't change my conclusion. Yeah. Incumbent
12 pairing is not part of the traditional redistricting criteria.
13 It is included in some of the state's criteria. But when you
14 are looking at the *Gingles* 1 analysis, it's usually something
15 that's not done.

16 Q Why is that?

17 A Because that would give a preference to the incumbents.
18 It doesn't have anything to do with the creation of the
19 districts themselves.

20 Q Are there not non-racial reasons why residents of a
21 district would not want to be drawn out of the district in
22 which they're represented by a certain representative?

23 A Absolutely. Yeah. Sure. There are reasons. But there
24 are other reasons and other factors, as well.

25 Q Uh-huh.

1 A There's reasons why individuals may want a specific
2 military base in their district. But that's not critical to
3 the *Gingles* 1 process.

4 Q Does District 7 in your preferred Plan 1 split voting
5 districts VTDs?

6 A Yes. You're talking about the illustrative plan?

7 Q Yes.

8 A Yes. One. Yes.

9 Q Does District 7 in the third plan split VTDs?

10 A I don't recall. I believe so. But I don't recall.

11 Q Can we pull up real quick Plaintiffs' Exhibit 70 at pdf
12 page 169? I think this will refresh your recollection.

13 A I do recall that in what's called The Dwelling Place.
14 That's split.

15 Q Right. Near Redstone Arsenal?

16 A Yes.

17 Q Okay. Can we zoom in on the data there? It's the top
18 right corner Illustrative Plan 3. And this is one of the
19 Maptitude reports that reveals VTD splits; is that right?

20 A That's correct.

21 Q So any time we see a 7 over there, that means that a VTD
22 is split between 7 and one other district?

23 A That is correct.

24 Q Are there four split VTDs in Plan 3 for District 7?

25 A It appears that there's one, two, three, four -- yes, I

1 believe that is correct. Yes.

2 Q Do you recall Dr. Trende's analysis that making any of
3 these four split precincts whole would drop District 7's BVAP
4 below 50 percent?

5 A I believe I recall him mentioning that, yes.

6 Q Do you have any reason to dispute that analysis?

7 A I didn't perform the analysis, so I -- on this -- I didn't
8 perform the analysis, let me say, so I don't know if I can
9 agree with it since I didn't perform the analysis.

10 Q If that were the case, would that factor into your
11 calculation that the district is reasonably configured?

12 A No. No. No.

13 Q And we can go back to the map.

14 District 7 in all of your plans is contiguous, correct?

15 A Yes. There is one point contiguity that was in the
16 enacted plan, continued to be in the illustrative plan.

17 Q But that wasn't District 7, right?

18 A Right. No.

19 Q So hypothetically, again, what if balancing all the
20 factors required District 7 to just slightly sacrifice
21 contiguity, could that in theory still be reasonably
22 configured?

23 A I think it depends upon the reason and rationale why you
24 were actually -- why you have a non-contiguous area. Sometimes
25 you have annexed areas of cities that are non-contiguous. The

1 focal point or desire may be to keep that city whole within a
2 district, and that requires a non-contiguous area to be there.
3 So it all depends.

4 Q But it is possible?

5 A It is possible. Hypothetically, yes.

6 Q Nearly done, Mr. Fairfax. Thank you for your patience.

7 I understand why the first plan is your preferred plan
8 given our discussion.

9 My question is: What factor was given a little more
10 weight in the third plan that caused those criteria we
11 discussed to suffer a little bit -- not saying to an
12 unreasonable degree, but to suffer a little bit compared to the
13 preferred plan?

14 A Well, it's a configuration that is traditional -- that
15 adheres to traditional redistricting criteria and satisfies
16 that first precondition of *Gingles*, and it meets that BVAP
17 versus BCVAP.

18 Q Right. Because in your view, both plans, District 7 in
19 both plans satisfies the first precondition of *Gingles*, but the
20 difference is that District 7 and Plan 3 satisfies it with
21 BVAP, as well?

22 A Correct.

23 Q And is that the reason why we see compactness suffer a
24 little bit and VTD splits and county splits suffer a little bit
25 in Plan 3?

1 A In order to meet that BVAP, that's the configuration that
2 I came up with. Maybe other configurations, you know. There's
3 a time factor on this, unfortunately. When you are in
4 litigation, you don't have unlimited time to come up with
5 configurations -- unlimited configurations. There could be
6 that. There could be other configurations that meet that. But
7 this is what I came up with that meets BVAP and BCVAP.

8 Q I understand.

9 Can we pull up page 25 of Defendant's Exhibit 8? I'm
10 sorry. Defendant's Exhibit 8.

11 And then two pages down to page -- internal page 25.
12 Okay. Could you zoom in on that map, please?

13 MR. GEIGER: For Mr. Van Leer's benefit, there are
14 some light brown and some darker brown regions of this map.

15 MR. VAN LEER: Appreciate it.

16 BY MR. GEIGER:

17 Q This is from Dr. Trende's report. Have you seen this map
18 before?

19 A Yes. It is in his report.

20 Q His analysis shows that District 7 in your third plan
21 includes 32 of the top 35 highest BVAP precincts in the four
22 counties that the district touches. Do you dispute that?

23 A No. I don't dispute that.

24 Q Okay. Kind of going back to the beginning of our
25 conversation, if you were conducting a racial gerrymandering

1 analysis on a Legislature's plan that included this district,
2 would your suspicions be aroused by what you see here?

3 A Not necessarily. I would have to try to make some deeper
4 dive into the reasons and rationale why these areas are
5 included.

6 Q Based on some of the VTDs that are included in the
7 district and those that are not included in the district and
8 perhaps some of those that were split, do you think you could
9 see a pattern of racial gerrymandering if you were looking at a
10 Legislature's enacted plan that contained this district?

11 MR. VAN LEER: Your Honor, I am going to object. This
12 isn't a racial gerrymandering case. He is not here testifying
13 about racial gerrymandering for the claims here. It doesn't
14 seem particularly relevant what he would do if he were
15 analyzing -- he were in a Legislature analyzing racial
16 gerrymandering.

17 MR. GEIGER: Your Honor, it's relevant to his
18 understanding of racial predominance.

19 THE COURT: You may answer.

20 THE WITNESS: First, I would say that the thematic map
21 is probably a little misleading, because he uses the 30 percent
22 breakpoint. 30 percent is a significant amount of black
23 population percentage. And that's number one.

24 Number two, when you look at -- and he has another image
25 of this at the block level, you can clearly see that there are

1 other areas that are black in those areas at the block level.
2 So it's not as if it grabs only the black areas inside this --
3 these three different counties.

4 And number three, it's not uncommon for, one, a
5 majority-black district to have majority-black precincts.
6 That's just the way it's done many times. You can't create
7 necessarily majority-black districts without including
8 majority-black precincts or VTDs in this particular case.

9 BY MR. GEIGER:

10 Q Thank you, Mr. Fairfax.

11 Let's go back to your initial report, PX-6 at page 40.

12 Looking at paragraph 73, Mr. Fairfax, could you read the
13 last sentence beginning with the term "majority"?

14 A The term "majority" under the context of this illustrative
15 plan means greater than 50 percent CVAP for the black
16 population within the district.

17 Q I'm going to show you two expert reports that you wrote
18 for some recent cases, one in Texas and one in Louisiana, the
19 Galveston case in Texas, and the Robinson case in Louisiana.

20 I have a few copies.

21 MR. GEIGER: May I approach, Your Honor?

22 THE COURT: You may. Thank you.

23 MR. VAN LEER: Your Honor, I am going to object to the
24 use of these. These are not exhibits that have been provided,
25 and I don't see what he could be testifying -- testifying to

1 with being impeached. Not clear if they're being properly
2 introduced.

3 MR. GEIGER: I am not asking that they be introduced
4 as exhibits. This is impeachment evidence pertaining to his
5 definition of the term "majority."

6 THE COURT: All right.

7 MR. VAN LEER: Your Honor, this clearly says the term
8 "majority" in the context of this illustrative plan. I don't
9 think that a Galveston report or Louisiana report is going to
10 have any testimony included or statements about what is created
11 in this particular illustrative.

12 MR. GEIGER: I am sure he can explain that, and that
13 he can give it the appropriate weight.

14 THE COURT: All right.

15 MR. VAN LEER: I'm sorry, Your Honor, if I may. He
16 can explain that, but that's not proper impeachment. He hasn't
17 said anything about a general definition of what majority
18 means.

19 THE COURT: I will allow it.

20 MR. GEIGER: I should have also given you at the same
21 time the Robinson Louisiana report.

22 MR. VAN LEER: To be clear, Your Honor, I only have
23 the one report there. I will raise the same objection for the
24 other report, but I understand your ruling.

25 THE COURT: Understood. Thank you.

1 BY MR. GEIGER:

2 Q If we could pull up the Galveston report first.

3 Mr. Fairfax, do you recognize this document that I handed you?

4 A Yes, I do.

5 Q Is that your report, one of your reports, your initial one
6 that you wrote for the Galveston case?

7 A I believe so.

8 Q Let's go to page 20, paragraph 45. Could you also read
9 the same sentence or the similar sentence I should say that
10 begins with the term "majority"?

11 A The term "majority" has been reaffirmed to mean greater
12 than 50 percent VAP for the minority population within the
13 district. In some circumstances, evidence of the minority
14 group being greater than 50 percent CVAP may also be required.

15 Q When you wrote "may also be required," were you defining
16 majority as including both VAP and CVAP majority VAP and
17 majority CVAP?

18 MR. VAN LEER: Your Honor, I am going to renew the
19 objection under improper impeachment here.

20 THE COURT: The objection is overruled. I mean, he's
21 opined as to why he's used the definition he's used. And I
22 think limiting it specifically to this case in a statement
23 doesn't make this improper impeachment.

24 MR. VAN LEER: I will make a standing objection, then.

25 THE COURT: Very well.

1 BY MR. GEIGER:

2 Q Do you need me to repeat my question?

3 A I believe I can answer that the reason why I said in the
4 context of this illustrative plan, which is not in the context
5 of this illustrative plan.

6 Q In the Galveston report, did you say that in the context
7 of the Texas or east Texas the term "majority" has been
8 reaffirmed to mean greater than 50 percent VAP?

9 A No. No. But it was written in the context of the plan
10 that I'm working on in Galveston.

11 Q Let's go to the Robinson report. Do you recognize this
12 document, Mr. Fairfax?

13 A Yes.

14 Q Is this the Robinson report that you wrote for that case?

15 A I believe so.

16 Q Okay. On page 28, it's the last sentence of what was
17 paragraph 58, so it's at the very top of the page. It's again
18 your definition of the term "majority." Could you read that,
19 please?

20 A Yes. The term "majority" has been reaffirmed to mean
21 greater than 50 percent Voting Age Population for the minority
22 population within the district.

23 Q And then also could you zoom in on footnote 53, which is
24 relevant, and could you read footnote 53, please, at the bottom
25 of the page?

1 A Although many times the focus is on Voting Age Population,
2 the illustrative plan has been developed to contain a majority
3 of Black Citizen Voting Age Population for each majority-black
4 district as well.

5 Q Mr. Fairfax, did you not testify in the Galveston and
6 Robinson cases that you understand the term "majority" to mean
7 majority-minority Voting Age Population and that sometimes it
8 is appropriate to make sure that the district is also
9 majority-minority CVAP?

10 A Could you repeat that unfortunately? I --

11 Q No problem. Long question.

12 A Compound. Yeah.

13 Q Did you testify in these reports that we just looked at
14 that you understand the term "majority" to mean
15 majority-minority Voting Age Population and that sometimes it
16 is appropriate to make sure the district is also
17 majority-minority CVAP?

18 A Yes. The difference, though, is in both of the Texas case
19 and the Louisiana case, I didn't perform any analysis that
20 would lead me to which one is the best metric to use.

21 In this case, I did. So in those two cases, it was
22 adequate statement to make.

23 In this particular case, I did analysis and determined
24 that CVAP was appropriate. If I had done it in Texas, if I had
25 done it in Louisiana, I may have come to the same conclusion

1 that BCVAP was the appropriate metric to use in those cases, as
2 well. But I didn't do that.

3 Q Before this case, have you ever determined that only Black
4 CVAP is the appropriate metric to use in a *Gingles* 1
5 illustrative plan?

6 A I can't recall whether I have done that in any plan. I
7 believe probably not. I've used BCVAP, and I have used BVAP.

8 Q Okay. Thank you again for your patience in answering my
9 questions.

10 MR. GEIGER: That's all I have, Your Honor.

11 THE COURT: All right. Do plaintiffs have redirect?

12 MR. VAN LEER: Yes. If I could just have a moment to
13 confer.

14 THE COURT: You may.

15 REDIRECT EXAMINATION

16 BY MR. VAN LEER:

17 Q Thank you, Mr. Fairfax.

18 Just a few questions for you here.

19 Could we please pull up Plaintiffs' Exhibit 32? I'm not
20 seeing it here. Thank you.

21 If we could turn to the next page.

22 Mr. Fairfax, you previously testified that these are a
23 copy of Alabama's Reapportionment Committee redistricting
24 guidelines, right?

25 A Yes.

1 Q Do you mind reading for the Court -- if we can scroll down
2 to Section 2, numeral F, it's line 22 there. Do you mind
3 reading that guideline?

4 A Yes.

5 Districts shall be drawn in compliance with the Voting
6 Rights Act of 1965, as amended. A redistricting plan shall
7 neither the purpose nor the effect of diluting minority voting
8 strength, and shall comply with Section 2 of the Voting Rights
9 Act and the United States Constitution.

10 Q Thank you.

11 If we can scroll to the next page. Actually, sorry. I
12 think it's going to be two pages later.

13 Do you see the portion that begins on line 7 of this page?
14 I'll represent that this is Section II(j)(6), I believe.

15 Do you mind reading that, as well?

16 A Starting at 7?

17 Q Yes.

18 A In establishing legislative districts, the Reapportionment
19 Committee shall give due consideration to all the criteria
20 herein. However, priority is to be given to the compelling
21 state interests requiring equality of population among
22 districts and compliance with the Voting Rights Act of 1965, as
23 amended, should the requirements of those criteria conflict
24 with any other criteria.

25 Q What's your opinion of whether your plans comply with

1 these aspects of the state's guidelines?

2 A They comply with the state's guidelines. They comply with
3 the Voting Rights Act.

4 Q We can pull that down.

5 Mr. Fairfax, would you yourself know if race predominated
6 in a plan that you drew?

7 A Yes, because I drew the plan.

8 Q When you used disaggregation to calculate the BCVAP point
9 estimates for SD7 in your plans, did you determine it was over
10 50 percent?

11 A Yes.

12 Q Did you look at other methods of calculating the CVAP
13 point estimates?

14 A Yes, I did.

15 Q Describe those.

16 A I used two methods that I believe Dr. Trende included in
17 his report. I looked at using whole block groups that were
18 wholly contained within the districts. And then I looked at
19 whole block groups plus those block groups that had greater
20 than 50 percent population contained within the district.

21 Q And what was the result of those analyses?

22 A They both ended up approximately 51.3, a little more for
23 each one, a little less.

24 Q And what did you find when you looked at voter
25 registration data?

1 A That they also were approximately 51.3, and the plans 52 I
2 believe for the -- 52.7 for the Illustrative Plan 3.

3 Q So in total, how many methods indicated a black majority
4 of eligible voters?

5 A There were actually four different methods -- the
6 disaggregation method that I originally used, the block group,
7 whole block group method, the whole block group plus 50 percent
8 block groups, 50 percent plus one block groups, and then the
9 black registered voters. All four indicated that it was a
10 majority-black district.

11 Q How confident does that make you at the point estimates?

12 A It makes it very confident.

13 Q Mr. Fairfax, how common is it to rely on the lower end of
14 a confidence interval to determine a district's CVAP?

15 A It's not done. It's not done in redistricting. It's not
16 done in litigation for redistricting, as well. The standard is
17 to use the point value. And I am not saying it's not 100
18 percent done, but in most of the cases, the vast majority, the
19 point value is what's used.

20 Q Mr. Fairfax, do you recall you were asked a few questions
21 about incumbents?

22 A Yes.

23 Q Once a districting plan is enacted, if a new official is
24 elected to a district, is a plan redrawn to account for their
25 address?

1 A No, it's not.

2 Q And is a plan redrawn if an incumbent moves?

3 A No. It's not.

4 Q I have one last question here, as well, at this point. Do
5 you recall being asked a question about a handful of VTD
6 splits?

7 A Yes.

8 Q How common is it for a statewide legislative plan to split
9 a VTD?

10 A It's very common. And as a matter of fact, I believe the
11 enacted plan split 100 VTDs.

12 MR. VAN LEER: If I may have a moment to confer.

13 Thank you, Mr. Fairfax.

14 Your Honor, I have no further questions.

15 THE COURT: All right. Is there any reason why I may
16 not excuse Mr. Fairfax from the witness stand?

17 MR. GEIGER: No reason.

18 MR. VAN LEER: Sorry, Your Honor. Nothing for us.

19 THE COURT: All right. Thank you very much for being
20 with us this morning. You may be excused.

21 (Witness excused.)

22 THE COURT: All right. It seems that we have reached
23 an appropriate time for our lunch break. It is 12:05. How
24 about we come back at 1:15?

25 (Recess.)

1 THE COURT: All right. Be seated. Plaintiffs, call
2 your next witness.

3 MR. GENBERG: Plaintiffs call Dr. Oskooii.

4 KASSRA OSKOOII

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

7 THE COURTROOM DEPUTY CLERK: Please speak loudly,
8 clearly. State your name and spell it for the record.

9 THE WITNESS: Yes. So my name is Kassra Oskooii, last
10 name is spelled O-S-K-O-O-I-I.

11 DIRECT EXAMINATION

12 BY MR. GENBERG:

13 Q Good afternoon, Dr. Oskooii.

14 A Good afternoon.

15 Q What were you asked to do in this case?

16 A So I was asked to evaluate Dr. Trende's report to the
17 extent that he makes claims about demographic data collection
18 estimation and analysis.

19 Q What are your current professional positions?

20 A So I am an associate professor with tenure at the
21 University of Delaware in the department of political science
22 and international relations.

23 Q When did you start this position?

24 A I started this position in about August of 2016.

25 Q Are you affiliated with any centers or research

1 institutes?

2 A Yeah. I'm affiliated with four centers of research
3 institute at the University of Delaware, such as the Data
4 Science Institute, the Master in Data Science Program, Center
5 for Political Communication, and the Center for the Study of
6 Diversity.

7 Q If we could please pull up PX-15.

8 Dr. Oskooii, is this your CV?

9 A Thank you. Yes. This appears to be a copy of my CV.

10 MR. GENBERG: Plaintiffs offer Exhibit 15 into
11 evidence.

12 THE COURT: Any objection?

13 MR. SEISS: No, Your Honor.

14 THE COURT: Admitted.

15 (Plaintiffs' Exhibit 15 admitted in evidence.)

16 BY MR. GENBERG:

17 Q Dr. Oskooii, do you have tenure?

18 A Yes. I received tenure in 2021. Basically, I was an
19 assistant professor for four years, and I went up for tenure
20 evaluation and was granted tenure in 2021.

21 Q What is your doctorate in?

22 A My doctorate is in political science, and I received my
23 doctorate from the University of Washington in Seattle,
24 Washington.

25 Q Do you have a concentration?

1 A Yes. My expertise is in American Politics, Race and
2 Ethnic Politics and Political Methodology.

3 Q What is your research expertise in?

4 A Yes. So obviously American Politics and Methodology. But
5 within that more subfield area expertise would be political
6 behavior, public opinion, political psychology, and race and
7 ethnic politics. And my work is highly quantitative in nature.

8 Q Any research expertise related to voting rights or
9 districting?

10 A Yes. I have published peer-reviewed journal articles as
11 it pertains to *Gingles* preconditions in particular,
12 racially-polarized voting analysis or methods of
13 racially-polarized voting analysis.

14 Q Where has your research been published?

15 A So my research has been published in -- so I have about 22
16 peer-reviewed journal publication in various well-known and
17 highly-ranked journals, such *Sociological Methods in Research*,
18 *Political Behavior*, *Public Opinion Quarterly*, and *Political*
19 *Psychology* to name a few.

20 Q Do you employ statistical analysis in your research?

21 A Yes. As I mentioned, my work is highly quantitative.

22 Q How do you employ such analysis?

23 A I'm sorry. What was the --

24 Q How do you employ statistical analysis in your research?

25 A Yeah, I mean, I use various, you know, survey datasets,

1 you know, I implemented and analyze surveys. I have used --
2 implemented and analyzed experiments, ecological data, such as
3 election data at precinct levels and also demographic data such
4 as United States census data whether it's decennial census or
5 American Community Survey.

6 Q What is the focus of your teaching?

7 A So I teach courses in American politics at both
8 undergraduate and graduate Ph.D. level. At the undergraduate
9 level, I teach intro to American politics and an advanced
10 course in voting rights representation and redistricting. And
11 then I teach obviously, Ph.D. level courses in the area of
12 political behavior and race and ethnic politics.

13 Q Do you teach courses in redistricting?

14 A Yes. So one of the courses which is an advanced
15 undergraduate course focuses specifically on *Gingles*
16 preconditions, but also redistricting principles. So I cover
17 various redistricting or districting traditional principles,
18 and, you know, teach my students how to collect data, how to
19 evaluate plans, you know, how to analyze jurisdictions by using
20 things such as the decennial census and American Community
21 Survey.

22 Q Does your teaching including statistical analysis?

23 A Yes. The prime example being the upper level
24 undergraduate course, but also at the graduate level course, it
25 is my responsibility to teach about various statistical methods

1 for our incoming Ph.D. cohorts, you know, covering various
2 topics from regression analysis, to, you know, ecological
3 inference, simple descriptive statistics, and so on and so
4 forth.

5 Q Have you been retained as an expert witness in voting
6 rights cases?

7 A Yes. I have been.

8 Q How many times?

9 A I think about a dozen of times.

10 Q Have you been retained by jurisdictions related to voting
11 rights?

12 A Yes, I have. Twice. Once as a confidential expert by the
13 Maryland Attorney General's Office, and also I drew the
14 redistricting plans for Roswell Independent School District,
15 the school board boundaries after -- you know, every ten years,
16 you redraw plans. I took part in that.

17 Q Other than the Roswell instance, how many times have you
18 submitted redistricting maps?

19 A Other than Roswell, so I submitted illustrative or
20 demonstrative maps, about 12 of them in a case in the state of
21 Kansas in Dodge City in specific. And I submitted remedial
22 plans for Washington State Legislature as part of a case, which
23 the Court then adopted one of the remedial plans that I
24 submitted, and it's currently in effect in this election cycle.

25 Q Did you use decennial census data while drawing these

1 maps?

2 A Yes.

3 Q Did you use the United States census -- American Community
4 Survey data in these analysis?

5 A Yes.

6 Q Has the Court ever determined you lacked the
7 qualifications to offer expert testimony on any point?

8 A No.

9 Q Has your expert testimony ever been excluded for any
10 reason?

11 A No.

12 Q Have Courts ever referenced and credited your opinions in
13 their decisions?

14 A Yes. In the three times that I have appeared in court and
15 testified, the Courts have credited my opinion. For instance,
16 in case in Galveston County, Texas, the federal judge in that
17 case substantially weighted my opinions in reaching a
18 conclusion about *Gingles* 2 and 3.

19 In the state of Kansas, in that Dodge City case, the Court
20 relied on my opinion in concluding that *Gingles* 1 is satisfied.

21 And, finally, in the Washington state case, the Court
22 relied on my opinions and ultimately selected one of the
23 remedial plans for the State Legislature that I submitted.

24 MR. GENBERG: Your Honor, we offer Dr. Oskooii as an
25 expert in map drawing, statistical analysis, and U.S. census

1 data including the American Community Survey and the decennial
2 census.

3 THE COURT: Any objection?

4 MR. SEISS: No, Your Honor.

5 THE COURT: Admitted.

6 BY MR. GENBERG:

7 Q Can we please pull up Exhibit PX-14?

8 Dr. Oskooii, do you recognize this document?

9 A Yes. This appears to be an expert report I submitted in
10 this case on April 19th, 2024.

11 MR. GENBERG: Plaintiffs offer PX-14.

12 THE COURT: Any objection?

13 MR. SEISS: No, Your Honor.

14 THE COURT: Admitted.

15 (Plaintiffs' Exhibit 14 admitted in evidence.)

16 BY MR. GENBERG:

17 Q Dr. Oskooii, you said you were asked to analyze
18 Dr. Trende's report. Could we pull up Exhibit DX-7, expert
19 report of Sean Trende?

20 Dr. Oskooii, is this the report you reviewed?

21 A If you could show me the date perhaps. Oh.

22 Q Maybe we could flip to the next page?

23 A Oh. I think I actually saw it in the corner. Yes. This
24 appears to be -- yeah. This appears to be the case.

25 Q Is this the only report of Dr. Trende that you reviewed?

1 A Yes.

2 Q Did you analyze an illustrative plan drawn by Mr. Fairfax?

3 A I did.

4 Q If we could pull up Exhibit PX-6, the expert report of
5 Anthony Fairfax. Thank you.

6 Is this the report written by Mr. Fairfax that you
7 reviewed?

8 A Yes. It appears to be the case, yes.

9 Q If you could turn to page 31 of this document. This the
10 illustrative plan that you reviewed?

11 A Yes.

12 Q Is this Mr. Fairfax's Illustrative Plan 1?

13 A I believe he labels it as Illustrative Plan 1, yes.

14 Q Did you review any plans drawn by Mr. Fairfax in
15 subsequent reports?

16 A No.

17 Q At a high level, can you summarize your opinions with
18 respect to Dr. Trende's report?

19 A At a high level, I believe the American Community Survey
20 five-year estimates are reliable, and CVAP is an appropriate
21 and useful metric in describing the eligible voting population
22 of Illustrative SD7. I take at -- various criticisms of the
23 various methods Dr. Trende used to estimate BCVAP as well as
24 the margin of error calculations and the way he tries to
25 interpret them.

1 And finally, you know, I have criticisms about the dot
2 density plots and the ways in which they show or do not show
3 population concentrations by race and ethnicity across the
4 different regions of the illustrative districts.

5 Q Okay. Let's start with your opinion that CVAP is an
6 appropriate metric to use here.

7 When is it appropriate to use Citizen Voting Age
8 Population data in redistricting?

9 A Yeah. So if we're trying to estimate eligible voting
10 population, Citizen Voting Age Population is the only reliable
11 source of data that we have because the decennial census does
12 not include a citizenship question.

13 Q What data does the decennial census have?

14 A Well, the decennial census, you know, it's a survey --
15 it's not a survey. It's an enumeration or count of American
16 population, and it asks, you know, very various demographic
17 questions, such as, you know, trying to measure total
18 population, Voting Age Population, and et cetera.

19 Q Does the decennial census have Voting Age Population data?

20 A Yes.

21 Q What is the effect of using Voting Age Population data to
22 estimate the proportion of the eligible voting population for
23 groups that have lower citizenship rates?

24 A Well for groups that have lower citizenship rates, if you
25 are using that as an indicator of, you know, eligible voters,

1 you want to overestimate their size since they have lower
2 citizenship rates, and obviously, citizenship is a requirement
3 to vote in our country.

4 Q What is the effect of using Voting Age Population data on
5 the proportion of the eligible voting population for groups
6 that have significantly higher citizenship rates than others in
7 the jurisdiction?

8 A Again, if you use VAP as an indicator, you are going to
9 underestimate in that case the share of eligible voters if you
10 rely on VAP. Particularly if you have another group that has
11 substantially lower citizenship rate.

12 Q Does Dr. Trende acknowledge in his report this issue of
13 Voting Age Population data understating the proportion of the
14 eligible voting population for groups that have higher
15 citizenship rates?

16 A In this report, it does not, no.

17 Q What is your understanding of Dr. Trende's previous use of
18 Citizen Voting Age Population versus Voting Age Population data
19 and analyzing the proportion of eligible voting population for
20 groups that have higher citizenship rates?

21 A Oh. Based on my experience, and Dr. Trende has previously
22 claimed that CVAP is a useful metric to use to measure the
23 eligible Black Voting Age Population. In a case in Virginia
24 where he talks about that when you have immigrant-based
25 population, such as Asian Americans and Hispanic Americans with

1 lower citizenship rates than black Americans and white
2 Americans, then in those scenarios, it would be useful to rely
3 on CVAP so that you are not understating or overstating either
4 side of the equation, the groups's electoral power.

5 Q And just to be clear on the terminology. Is Citizen
6 Voting Age Population data also referred to by its acronym
7 CVAP?

8 A Yes.

9 Q Is Voting Age Population often referred to by its acronym
10 VAP?

11 A Yes.

12 Q Now, between black and Hispanic Alabamians, which group in
13 the Illustrative District SD7 has a higher citizenship rate?

14 A Black Americans do.

15 Q And how does the White Voting Age Population in
16 Illustrative District SD7 compare in terms of citizenship rate
17 to the Hispanic Voting Age Population?

18 A So the White and Black Voting Age Population, they are
19 very high citizenship rates, you know, around 95 percent
20 citizenship rate. If we look at the Hispanic population, there
21 are 10.1 percent of the Voting Age Population in SD7. However,
22 they comprises only 4.4 percent of the Hispanic Citizen Voting
23 Age Population in SD7. So that's half of that, which, if you
24 translate that, the citizenship rate for Hispanics is below
25 50 percent in SD7, which is vastly different than the

1 citizenship rates of both white and black residents.

2 Q If you wanted to know the eligible voting population of
3 the Illustrative District SD7, would it be better to use VAP or
4 CVAP?

5 A Well, in this particular instance, one, first of all, I
6 should say, again, it's worth emphasizing decennial census does
7 not include a citizenship question. Okay? So the only survey
8 that does include it is the American Community Survey. So you
9 would want to use CVAP.

10 But at the same time, what's important is that you have
11 disparities in citizenship rates by race and ethnicity in this
12 given jurisdiction. So if you use VAP as an indicator of
13 electoral power, you're not going to provide accurate results
14 that match, you know, the underlying reality.

15 Q When drawing illustrative maps, have you ever used
16 minority CVAP to demonstrate the proportion of eligible voters
17 in an illustrative district?

18 A Yes, I have.

19 Q Have you ever exclusively used minority VAP to demonstrate
20 the proportion of eligible voters in an illustrative district?

21 A No, I have not.

22 Q Is there a circumstance where you would consider using
23 only minority VAP to demonstrate the proportion of eligible
24 voters in an illustrative district?

25 A Yeah. I suppose if you have racial and ethnic groups in

1 the jurisdiction that have almost identical or very similar
2 citizenship rates, then your use of VAP is not going to
3 overinflate or understate their electoral power. But when you
4 have a situation which, you know, you have multiple groups of
5 different citizenship rates, then VAP as an indicator would not
6 be as good in that scenario.

7 Q And is that condition present here?

8 A Yes. In fact, again, as I mentioned, 10.1 percent of the
9 Voting Age Population is Hispanic. And you have vastly
10 different citizenship rates between Hispanic Americans and
11 white and black Americans.

12 Q Let's discuss Dr. Trende's opinion about the reliability
13 of CVAP data obtained through the American Community Survey.

14 What is the American Community Survey?

15 A So American Community Survey is a survey of the American
16 population that asks various questions about socioeconomic
17 status and various demographic questions, including citizenship
18 status that's conducted on a monthly basis and released on a
19 yearly basis which is called the one-year ACS estimate. And it
20 also is aggregated to and released as a five-year estimate.

21 Q Is the American Community Survey often referred to by the
22 acronym ACS?

23 A Yes.

24 Q Do you know of any other sources of CVAP data by race and
25 ethnicity other than the ACS data published at various

1 geographic units across the United States?

2 A No.

3 Q Is the decennial census a sample like the ACS?

4 A No. The decennial census, which is conducted about every
5 ten years, is a count of the American population or we say
6 enumeration, so it's not a sample.

7 Q Are there situations where you believe it is preferable to
8 use decennial census data rather than ACS data?

9 A Well, yes. It depends on the use case. So in
10 redistricting, one of the principles or criteria that we're
11 concerned with is population parity between the districts.

12 Since we are looking at population parity, which is total
13 population, if you have the enumeration or count of the
14 American population, it's preferable to just use that. And
15 there's no reason then for us to use a sample.

16 Q Tell me about the ACS's sampling procedure.

17 A Yeah. So ACS samples on a yearly basis every year about
18 3.5 million households and housing quarters, which translates
19 into about 1 in 38 households or housing quarters a year get
20 contacted or sampled.

21 And so they do it by, you know, they -- they first of all
22 ask everyone in that household to participate, and people can
23 participate via the Internet or by mail, mail questionnaire.
24 And then to make sure the response rate is high and, you know,
25 they get a high response rate, they also have phone or

1 in-person follow-ups.

2 And, in fact, the ACS has incredibly high response rate
3 for a survey. It hovers around 90 percent.

4 And we have been hearing a lot about public opinion polls
5 this election cycle. And a lot of these public opinion polls,
6 you know, they have a response rate -- if they're a good public
7 opinion polls by the way, they have a response rate of like 5
8 to 10 percent, relative to ACS, which is about 90 percent.

9 Q You previously mentioned the ACS on your estimates. What
10 level of geography does ACS on your estimates provide CVAP data
11 by race and ethnicity?

12 A Yeah. So the ACS provides CVAP data and all the other
13 measures that's included in ACS one-year for jurisdictions with
14 population size of 65,000 or greater.

15 Q At what level of geography does the ACS provide the
16 five-year estimates for data, CVAP by race and ethnicity?

17 A Yeah. The five-year estimates because you're aggregating
18 five one-year estimates, you have a much larger sample size.
19 And as a result of that, the ACS is able to provide CVAP
20 estimates by race and ethnicity all the way down to the census
21 block group level.

22 Q What is a block group?

23 A So a block group is a -- is a collection of census blocks.

24 Q And what is the smallest geographic unit designated by the
25 United States census?

1 A Census bloc.

2 Q And what dataset does the U.S. census publish block level
3 data?

4 A So the decennial census provides block level data, but the
5 American Community Survey, the five-year estimate, the lowest
6 is block group level data.

7 Q Okay. What's the next census measure level up from a
8 bloc?

9 A So from bloc, you go to block group.

10 Q Which years does the ACS's 2022 five-year estimates
11 aggregate?

12 A So it's five one-years starting at 2022 and working our
13 way backwards, 2021, 2020, and et cetera on until we have
14 five years.

15 Q And what is the reason to aggregate five years of
16 estimates?

17 A Well, it increases the sample size to enable the American
18 Community Survey the U.S. census to provide estimates at a
19 lower geographic unit for smaller areas like many
20 municipalities that are below 65,000, but also providing
21 estimates at the block group level.

22 Q Let's pull up Dr. Trende's report DX-7 and turn to page 15
23 of the report near the bottom under the -- under the heading,
24 the ACS CVAP data produces bizarre outcomes.

25 What is your understanding of his argument here?

1 A Well, it appears that Dr. Trende appears to cast doubt on
2 the reliability of American Community Survey by comparing total
3 CVAP block group estimates to total VAP block group estimates
4 provided by the decennial census.

5 But, you know, what's happening in this case is that
6 Mr. Fairfax did not draw districts that are the size of a
7 single block group, right? Mr. Fairfax drew districts that are
8 much larger. In fact, you know, Senate, legislative districts
9 in the state of Alabama boasts I believe an ideal size
10 population of over 140,000 or so, which is a much larger
11 geographic unit.

12 And obviously, as the sample size increases, you don't see
13 some of the discrepancies between total block groups, CVAP, and
14 block group VAP that he points out. In fact, as I have shown
15 in my report, if you look at all the counties in which -- that
16 are partially or fully encompassed in SD7, and these are
17 counties of different population sizes, by the way, you don't
18 have a scenario in which total CVAP exceeds total VAP. And you
19 certainly don't have that scenario in SD7, which total CVAP
20 exceeds total VAP.

21 Q Now that we've heard about why it's proper to use CVAP
22 data in this case, let's discuss Dr. Trende's Black CVAP
23 estimation methods. Did you review Dr. Trende's black CVAP
24 estimation methods?

25 A Yes. Based on what he wrote in the report and the code --

1 R code that he supplied as part of the report.

2 Q Before we discuss his methods, please explain the most
3 precise way of estimating Black CVAP.

4 A Yeah. I think the most precise way and common sense way
5 of doing things is you have to figure out how to proportion
6 block group BCVAP to blocks. And the reason you have to do
7 that is when you are drawing districts in which block groups
8 are divided between two district lines, you have certain blocks
9 of a block group within one district, and the other blocks
10 within that block group in another district.

11 So what you have to do is you have to disaggregate block
12 group data to the block level. And the way do you that is by
13 considering the BCVAP of the block group. And then you take --
14 you have to come up with the block-to-block group BVAP ratio,
15 which is you take the BVAP of a block, divided by the BVAP of
16 the block group, which gives you like a percentage, and you
17 times that by the BCVAP to basically in a complicated way, to
18 allocate BCVAP accurately to the block level.

19 Q Is that how you estimated a Black CVAP in this case?

20 A This is how the Redistricting Hub has estimated it, which
21 I rely on the Redistricting Hub data, the disaggregated data,
22 and this is, to my knowledge, the best way of doing it because
23 it relies on the least amount of assumptions.

24 Q What is the Redistricting Data Hub?

25 A So Redistricting Data Hub is essentially a website that

1 hosts various election level theatre sets as well as
2 demographic and datasets such as American Community Survey and
3 RDH as we call it. It's used by practitioners, academics, and
4 those involved in redistricting for -- as a data source.

5 In fact, one of the most famous redistricting applications
6 that exists, such as Dave's Redistricting application relies on
7 RDH's BCVAP disaggregation data and uses that as its underlying
8 CVAP data for map drawing.

9 Q Is RDH an acronym for Redistricting Data Hub?

10 A Yes.

11 Q Can we pull up 208, please? What is this document?

12 A So this is a README file, which is accompanied with the
13 dataset that I downloaded from RDH which is the 2021, five-year
14 ACS CVAP estimates by race and ethnicity disaggregated from
15 block groups to blocks.

16 And here, RDH describes its disaggregation method and how
17 they did things essentially.

18 MR. GENBERG: Plaintiffs offer PX-208.

19 THE COURT: Any objection?

20 MR. SEISS: No objection, Your Honor.

21 THE COURT: Admitted.

22 (Plaintiffs' Exhibit 208 admitted in evidence.)

23 BY MR. GENBERG:

24 Q Dr. Oskooii, does Dr. Trende employ the most precise Black
25 CVAP method in any of his four methods?

1 A No. I didn't -- based on reviewing his report and the
2 code, I didn't see any clear evidence in which he uses BCVAP
3 and then he creates a block-to-block group BVAP ratio where you
4 divide BVAP at the block level by the BVAP at the block group
5 level, rather than dividing let's say BVAP by total VAP, which
6 is not the same. And also, it's also different if you just
7 rely on total VAP and not rely on BVAP.

8 Q Does Dr. Trende rely on disaggregated data like
9 Redistricting Data Hub's, or does he do the disaggregation
10 himself?

11 A No. He does not rely on the datasets that's typically
12 used like RDH, and he writes his own code and formulas to do
13 the disaggregation.

14 Q What are your high-level opinions of Dr. Trende's Black
15 CVAP estimation methods?

16 A Well, I think all the different ways in which Dr. Trende
17 attempts to disaggregate block group data rests on, you know,
18 untenable assumptions that we don't necessarily need to make if
19 we just basically take the BCVAP and times it by the BVAP --
20 block-to-block-group BVAP ratio.

21 Q Okay. I think we touched on this a little bit, but can we
22 just take ACS's Black CVAP estimates at the block group level
23 and apply them to estimate the Black CVAP of the Illustrative
24 District SD7?

25 A No. We cannot do that, because SD7 splits block groups

1 between district boundaries.

2 Q And is it common to split block groups when drawing
3 districts?

4 A Yes. It absolutely is. Because, you know, block groups
5 don't neatly correspond with precinct lines, and one of the
6 redistricting principles is that you try to keep whole
7 precincts to the extent that's possible while also paying
8 attention to all the different redistricting principles.

9 As a function of abiding by one of the redistricting
10 principles, you are going to draw districts in which you're
11 naturally going to break block groups up between district
12 lines.

13 Q How do you overcome the issue of split block groups when
14 estimating Black CVAP?

15 A The sensible approach is to disaggregate the block group
16 data that the ACS presents to blocks and then aggregating up
17 all the blocks that are inside a district and then computing
18 the proportions by race and ethnicity.

19 Q What data is available at the block level to help estimate
20 Black CVAP?

21 A We have Black Voting Age Population available at the block
22 level by the decennial census.

23 Q And what if you use total VAP data at the block level
24 instead to estimate Black CVAP?

25 A You know, that wouldn't be good, because if you rely on

1 total VAP, then what you're assuming is that across all the
2 blocks, inside a block group you have the same ratio of BVAP.
3 It could be the case that in certain blocks, we have higher
4 concentration of BVAP. In other blocks, you have much lower
5 concentration. So if you use just total VAP, you are not
6 picking up these differences that could alter the estimate that
7 you end up with at the end of the day.

8 Q Okay. Let's use an example to illustrate the effect that
9 using total VAP data at the block level instead of Black VAP
10 can have on a Black CVAP estimate.

11 If we could please pull up Plaintiffs' demonstrative
12 Exhibit 7.

13 Dr. Oskooii, please explain this example block group and
14 its component blocks, Block A and Block B?

15 A All right. So in this example, we have a block group that
16 consists of only 2 blocks -- Block A, which is inside our
17 illustrative district, and Block B, which is outside of
18 illustrative district.

19 The information we have about the block group is that it
20 has 2,000 Voting Age Population of which 1,000 are BVAP or
21 Black VAP. And then based on ACS estimate, we have 1,000 Black
22 CVAP in this block group. And then if we look at the blocks,
23 right, we see that while both Block A and B in this example
24 have the same total VAP, which is 1,000 in each, the
25 concentration by BVAP is vastly different.

1 Block A has 900 BVAP, which is 90 percent of that block,
2 while Block B, which is outside the district, has only 100
3 BVAP.

4 Q Okay. Let's use total VAP to allocate the Black CVAP to
5 Block A and to Block B. How much Black CVAP is allocated to
6 Block A inside the district?

7 A So if we use total VAP rather than BVAP, what we would
8 have to do is we have to take -- we know there's 1,000 total
9 VAP in Block A, and we would divide that by 2,000 VAP which is
10 in the block group, which gets us a block-to-block group ratio
11 of .5 or 50 percent.

12 Then we take that 50 percent and times that by the 1,000
13 BCVAP, which is available at the block group level, and
14 50 percent of 1,000 is 500. So we get an estimate of 500 BCVAP
15 in Block A.

16 Now, we also have to do the same in Block B And in Block
17 B, we have the same formula. We would take 1,000 block VAP
18 total VAP, which because that is what is inside Block B and
19 divide it by 2,000 block group VAP, and we get the same
20 ratio -- 50 percent. And we times that by the bloc group
21 BCVAP, and here in Block B, we also get 500 BCVAP.

22 Q Does this allocation of Black CVAP to each block make
23 sense to you?

24 A Well, it doesn't. And that's because, you know, we know
25 that Block B has a BVAP of 100. But using this allocation

1 technique, we're overestimating BCVAP by five times. We are
2 saying there are 500 BCVAP although there is only 100 BVAP, and
3 that's just wrong. And so depending on whether this block is
4 inside or outside our district, that could alter the point
5 estimate that we get.

6 Q Now, let's use Black VAP to allocate the Black CVAP to
7 Block A and to Block B. How much Black CVAP is allocated to
8 Block A inside the district?

9 A Yeah. So if you use Black VAP specifically, we know that
10 Block A has 900 Black VAP. And we know that the block group
11 BVAP is 1,000. So we take 900 divided by 1,000, and the
12 block-to-block BVAP ratio that we get is 90 percent or .9.
13 90 percent of total BCVAP in the block group is 900.

14 So we get 900 BCVAP in Block A. And then we use the same
15 formula for Block B. We know that Block B has much less BVAP.
16 So in this case, it's 100 BVAP divided by 1,000 block group
17 BVAP. That's the ratio of .10, which is 10 percent, and
18 10 percent of 1,000 is 100 BCVAP that gets allocated from block
19 group to Block B.

20 Q In summary, what does this example illustrate?

21 A Well, it illustrates that if you use total VAP, you are
22 going to make the assumption that BVAP is equally distributed
23 across blocks. And when BVAP is not equally distributed, you
24 are getting essentially nonsensical or bizarre outcomes just as
25 a function of the formula that you selected.

1 Q Let's turn to page 19 of Dr. Trende's report and his use
2 of overall citizenship rate in the paragraph -- DX-7 -- page
3 19, DX-7.

4 The paragraph beginning, Regardless there have been
5 attempts to do this. Page 19 of the report.

6 What is your reaction to Dr. Trende's use of an overall
7 citizenship rate in a Black CVAP estimate?

8 A Yeah. So one of the methods that Dr. Trende uses is a
9 BCVAP rate -- I'm sorry -- a citizenship rate, not BCVAP.

10 And by using a citizenship rate, what he's assuming is
11 that citizenship is equally distributed across different racial
12 and ethnic groups, and we know that's not the case.

13 In fact, he admits so at the end of this paragraph that
14 this, however, forces us to assume that citizenship is spread
15 evenly across the block group. And so that's untenable
16 assumption, and we don't need to rely on this assumption if we
17 just use BCVAP and then use the corresponding BVAP
18 block-to-block group ratio.

19 Q In the Illustrative District SD7, if you used an overall
20 citizenship rate rather than the black citizenship rate, would
21 that produce a lower Black CVAP estimate?

22 A Yes, it would. And the reason for that is that we know
23 that in this jurisdiction, you have 10.1 percent of the Voting
24 Age Population is composed of Hispanic Voting Age Population.
25 But their citizenship rate is less than 50 percent, that

1 they're area only 4.4 percent of, you know, HCVAP.

2 So if you have a group, you know, that has substantially
3 different citizenship rate, you are going -- you know, going to
4 underestimate the BCVAP if you just apply a general, you know,
5 overarching citizenship rate to the blocks.

6 Q Turning to the next paragraph of Dr. Trende's report at
7 the bottom of page 19 and continuing on to the next page and
8 starting making matters worse, what is your reaction to
9 Dr. Trende's method here in which he caps CVAP at the level of
10 VAP in his --

11 A Well, because he's relying on this technique of creating
12 an overarching, you know, citizenship rate, if there are cases
13 in which at the block group level total CVAP exceeds total VAP,
14 he's forced to artificially set this CVAP rate at 100 percent,
15 which means that he's removing observations from the ACS,
16 deleting data essentially to come up with the BCVAP percentage
17 of this illustrative district.

18 You don't need to do that if you just don't rely on that
19 overarching citizenship rate. Again, there's a better way of
20 doing it. You don't have to do it this way.

21 Q And is this criticism of CVAP exceeding VAP present at
22 larger geographic areas such as the district level?

23 A No. In fact, I show that in my report that at the county
24 level, at the larger units, as you have more observations, and,
25 in fact, this is what we are attempting to describe the BCVAP

1 of a Senate legislative district, you don't have this issue in
2 which total CVAP would exceed total VAP.

3 Q Now, let me raise a different situation. How would you
4 allocate CVAP counts where ACS is reporting CVAP in a block
5 group but the decennial census is reporting zero VAP in the
6 same block group?

7 A Yeah. In those rare circumstances, the most sensible
8 approach is whatever BCVAP you have, you allocate it evenly
9 across the blocks imbedded within block groups, because the
10 alternative approach is deleting data, because the alternative
11 approach is we have zero because there's zero observations at
12 the block level. And you would times zero by whatever the
13 BCVAP estimate is, zero times whatever number is zero.

14 So essentially, if you don't account for this, you are
15 going to delete or remove observations from the American
16 Community Survey and potentially understate the BCVAP of the
17 district.

18 Q How does Dr. Trende address the allocation of CVAP counts
19 where ACS reports CVAP in a block group, but the decennial
20 census reports a zero VAP in that same block group?

21 A He does not consider it. His formula of disaggregation
22 technique doesn't account for it. So if you don't account for
23 it, then his formula is going to produce a situation in which
24 zero is times whatever value of BCVAP is, which is zero. And
25 there's no other way of keeping those data points. It's just

1 removing those data points essentially.

2 Q You mentioned that this is a rare occurrence. Does that
3 fact change your opinion about whether the CVAP counts should
4 be deleted?

5 A No. You know, I -- if there are other sensible approaches
6 that one can take, why remove data or delete data? I'm not
7 saying he's doing it intentionally. It's just his technique is
8 not accounting for that possibility. And there are sensible
9 approaches of dealing with those scenarios.

10 Q Now, let's talk about the racial categories Dr. Trende
11 used in his Black CVAP estimates.

12 Did Dr. Trende use all available categories of Black CVAP
13 data alone or in combination in his estimates?

14 A Yeah. So he did not, and I noticed this in his code where
15 he actually has a variable for black or African-American in
16 combination with American Indian Alaska native. But then when
17 he tries to create the BCVAP variable, he does not include it.
18 He just includes black alone and black and white.

19 Q What is the effect of not including black in combination
20 with American Indian or Alaskan native?

21 A Well, to the extent that you have those individuals in a
22 district, you are going to undercount if your goal is to
23 calculate black alone or black in combination.

24 Q Do you know the magnitude of the Black CVAP undercount by
25 not including people who are black and either American Indian

1 or Alaskan native?

2 A No, I don't, because I included it, and that's part of the
3 RDH data that it includes those categories. So, no.

4 Q What did you estimate Black CVAP to be in Plan 1's
5 Illustrative District SD7?

6 A 50.11 percent.

7 Q Please explain what a Black CVAP point estimate is.

8 A So a point estimate is the best estimate. It's the best
9 approximation of a district, because it is what the data is
10 telling us. So the point estimate is based on the data.

11 Q Would you consider your Black CVAP estimate of
12 50.11 percent to be a point estimate?

13 A Yes.

14 Q What is a confidence interval?

15 A So confidence interval is a range above and below the
16 point estimate that the true unknown value likely falls in
17 within a certain degree of probability.

18 Q How do you create a confidence interval?

19 A So the way you create a confidence interval, you take the
20 margin of error of a survey, and you just add it and subtract
21 it by the point estimate to get the range.

22 Q What is a margin of error?

23 A So margin of error is the value that you obtain that is
24 based on the standard error of the survey and as well as a
25 critical value or Z score that corresponds to a particular

1 confidence interval. So, for instance, if you wanted a
2 confidence level of 95 percent, we would like 1.96, which is
3 the Z value, and for us, it's in the charts. It's easy to
4 select, and you times that by the standard error, and the
5 standard error is the standard deviation divided by square root
6 of the sample size.

7 Q Does the point estimate change if you apply a confidence
8 interval?

9 A No. The point estimate is what the data is telling us.
10 It's constant. It's not changing. What changes, however, is
11 the confidence interval depending on the confidence level that
12 we select.

13 Q What is your opinion of Dr. Trende's effort to calculate a
14 margin of error for the Illustrative District SD7?

15 A Well, I think he actually admits this in his report that
16 he is unable to accurately calculate it, because, again, in
17 SD7, we have block groups that are split between district
18 boundaries, and the American Community Survey does not give us
19 a margin of error at the block level. So you actually don't
20 have the margin of error at the block level once you do the
21 disaggregation to accurately compute the margin of error of
22 BCVAP or of the composition of this district.

23 Q What is your opinion of Dr. Trende's margin of error
24 calculation using entire block groups that are wholly or
25 partially contained within the illustrative district?

1 A In this case, it's not good, because he's essentially
2 computing a margin of error for a district that Mr. Fairfax did
3 not draw. And you can see that in his figures where he does
4 that. He is essentially expanding the district boundaries to
5 something that is not Illustrative District 7.

6 Q You testified that adding more population increases the
7 sample and tends to decrease the margin of error. So would
8 including block groups that are not fully included within the
9 district boundaries necessarily decreased the margin of error?

10 A Not necessarily, because you could be adding block groups
11 that are very low population that have high margin of errors,
12 and you could actually inflate the margin of error when you do
13 that. So it's not necessarily always the case that that would
14 happen.

15 Q Is it appropriate to rely on the Black CVAP point estimate
16 to report the share of eligible voters in the Illustrative
17 District SD7 without including an confidence interval?

18 A Yes. Absolutely.

19 Q Taking everything into consideration, what can you tell us
20 about the likelihood that Black CVAP is over 50 percent in the
21 Illustrative District SD7?

22 A So we know what the data is telling us, the data of the
23 five-year survey is telling us it's 50.11.

24 Now, the good thing is that, you know, we didn't get
25 dropped from Mars to this jurisdiction not knowing anything

1 else besides the point estimate. What we do know about this
2 jurisdiction is that BVAP is very close to 50 percent. We also
3 know that BVAP and White VAP citizenship rates are similar and
4 very high. We also know that 10.1 percent of the Hispanic VAP
5 reduces to 4.4 percent Hispanic CVAP because its citizenship
6 rate is so much lower.

7 When we take all of those factors into consideration, in
8 addition to what the data is telling us, you know, it gives us
9 confidence that more probable than not, this is a BCVAP
10 majority district.

11 Q When describing the Citizen Voting Age Population
12 composition of a district, have you ever applied a confidence
13 interval?

14 A No.

15 Q Have you ever seen jurisdictions include a confidence
16 interval around CVAP estimates?

17 A No, I have not.

18 Q Have you ever applied a confidence interval to a CVAP
19 point estimate when drawing a map?

20 A No.

21 Q Can you discuss whether you are aware of any map drawer
22 for a jurisdiction looking at confidence intervals applied to
23 CVAP point estimates?

24 A You know, with the exception of this case in which
25 Dr. Trende for the first time that I'm seeing he's doing it, I

1 have not seen it.

2 Q You explained that social scientists like yourself do not
3 use confidence intervals when describing the Citizen Voting Age
4 composition of districts, but do you use confidence intervals
5 in your racially-polarized voting studies?

6 A Yes.

7 Q Why the difference in approach?

8 A Yeah. So, you know, not every tool is for every task.
9 Like, you know, if you wanted to drill a hole in the wall, you
10 know, a hammer is probably not the best tool.

11 So in the first instance, when we're describing the
12 population of BCVAP, we're providing descriptive statistics.
13 And in this particular instance, we know again that block
14 groups don't correspond to precinct boundaries very well, and
15 that's completely normal. So you abide by traditional
16 redistricting principles in trying to keep the precincts whole
17 as much as possible, then you are going to have a district
18 that's going to split block groups.

19 Once you have that, you have to disaggregate the CVAP to
20 the block level from block group. And you don't have a margin
21 of error at the block level to compute an accurate confidence
22 interval or margin of error.

23 Now, what about racially-polarized voting analysis? In
24 racially-polarized analysis, we are doing something different,
25 like we are interested potentially in the proportion of votes

1 between candidates and racial ethnic groups.

2 And in those circumstances, confidence intervals can give
3 us a guide as to whether the difference in proportions are
4 statistically significant. But even in those circumstances,
5 when you're using King's Ecological Inference, whether it's a
6 two-by-two method or whether it's an iterative method or
7 whether you use King's and Rosen's Ecological Inference,
8 rows-by-column method, the point estimate is the most-likely
9 outcome.

10 And so you can even in those circumstances look at the
11 point estimates and compare them across candidates and racial
12 groups to draw inferences about whether it's more probable or
13 not whether this group is voting for this candidate and this
14 group is voting for that candidate.

15 Q You said with the exception of Dr. Trende's recent use of
16 a confidence interval that you haven't seen anyone apply a
17 confidence interval to CVAP point estimate.

18 Has Dr. Trende applied a confidence interval to CVAP point
19 estimates in the past?

20 A So Dr. Trende and I have had the pleasure of facing each
21 other a few times. And in the state of Washington where I drew
22 the remedial plans, Dr. Trende was also an expert witness where
23 he calculated CVAP ratios, CVAP percentages of districts. And
24 those districts had barely above 50 percent and below
25 50 percent ratios. And not once, not once, did he talk about

1 margin of error. Not once did he calculate confidence
2 intervals. And he simply relied on the point estimate, which
3 is by the way standard practice.

4 In Dodge City, Kansas, I drew 12 illustrative maps.
5 Dr. Trende in that case created the dot density plots that he
6 has created in this case. However, in Dodge City, Kansas, he
7 used CVAP, not VAP, so and he used it at the block group level.
8 So he's giving us on his dot plots a precise count of CVAP by
9 race and ethnicity at the block group level, which is an
10 extremely small -- much smaller geographic unit. And he raises
11 no issues about estimation uncertainty, about confidence
12 intervals, about margin of errors.

13 And he uses that to describe the CVAP concentration of
14 different areas in Dodge City.

15 And by the way, Dodge City has about 28,000 people. And
16 the ideal size of a district in a five district plan is 5,555.
17 And so when you are looking at these block group levels, they
18 are exceptionally low-population block groups.

19 Q Let's turn to your view of Dr. Trende's thoughts about
20 applying CVAP data by removing people who are ineligible to
21 vote due to a disqualifying felony conviction. What is your
22 understanding of what Dr. Trende says in his report about this?

23 A So what appears to me is that Dr. Trende is arguing that
24 if we're going to measure the eligible voting population, then
25 we should also remove those who have felonies. But in this

1 particular case, he does not have the records of data to be
2 able to do this properly, because he relies on a secondary
3 unverified statewide citizenship rate that he uses from a
4 percentage that another expert in another report has supplied,
5 and so that's just not -- not good analysis.

6 Q What is your opinion of using statewide data to remove
7 people from illustrative districts?

8 A Let's assume even his dataset was completely accurate,
9 that about 8 percent or so I think he said is felony rate for
10 black Americans. There's still a big issue. The issue is that
11 that percentage is not available at the block level for you to
12 accurately be able to remove BCVAP for SD7.

13 If you use the statewide citizenship -- sorry -- not
14 citizenship rate -- the felony rate, what you're assuming is
15 that every single block in the state of Alabama has the exact
16 same felony, black felony rate. And that's just like untenable
17 assumption that you -- you know, I would never make.

18 Q What about using other data that is not in Dr. Burch's
19 report?

20 A Well, other data is -- on this, to my knowledge is not
21 available, certainly the U.S. census does not provide this
22 data, nor does the American Community Survey.

23 Q Have you seen an expert adjust a district's CVAP by felony
24 convictions?

25 A No, I have not.

1 Q What is your high-level opinion on Dr. Trende's method for
2 removing those with disqualifying felony convictions from an
3 illustrative district?

4 A Problems with the data, the data is not verified or
5 detailed enough for to you accurately do this for SD7.

6 Q Okay. Let's turn to your opinion about Dr. Trende's dot
7 density maps.

8 If we could turn to Dr. Trende's report, DX-7 at page 24,
9 please.

10 Dr. Oskooii, what is your understanding of what this dot
11 density map purports to do?

12 A So this dot density map appears to show population
13 concentration in different regions of this district, in this
14 case, Illustrative District 7.

15 Now, below it, Dr. Trende says one blue dot represents ten
16 black citizens. To his credit, I think it's a typo. He means
17 BVAP here. But you should ask him that. And then one orange X
18 represents ten White Voting Age Population.

19 Q Looking at this map, can you tell me if certain areas are
20 higher density white than black?

21 A So this is the problem with this map, and he has presented
22 this before and faced similar criticism in that what he's doing
23 is that -- and I looked at his code. What he's doing, he's
24 superimposing the blue dots on top of the orange Xs effectively
25 hiding the concentration of White VAP in this district.

1 Q What is the effect of obscuring white population?

2 A Well, if you're make claims in that there are certain
3 areas that are more or less concentrated with BVAP, and if you
4 can't see White VAP, you might assume that those are all like
5 really high concentrated areas, but they could be areas that
6 also have equal amounts or similar amounts of white people in
7 them.

8 Q Let's turn to page 25. Do you have the same criticism for
9 this map?

10 A So I believe here he provides block level BVAP and White
11 VAP. And once again, he's putting -- superimposing blue dots
12 on top of yellow Xs, which doesn't give us a good understanding
13 of the population concentration by race and ethnicity between
14 whites and blacks.

15 Q And let's turn to page 27. Do you have the same criticism
16 for this map?

17 A So this is for Illustrative District 25. And as you can
18 see, this is the same issue. And mind you, the more population
19 you have in certain regions of the map, the more dots you will
20 have, blue and gold, because not -- populations are not equally
21 distributed across this district. So you have some areas that
22 are not populated, so you can actually see the blue in excess.

23 But like on the northern end when you have a lot of
24 population concentration, when you superimpose blue on top of
25 gold, you're hiding all the White VAP that's there.

1 Q Let's pull up Exhibit PX-195, please, and place pages 1
2 and 2 side by side. Yes, 195.

3 Dr. Oskooii, what is this on the screen?

4 A So what you see -- first of all, Figure 1 on the left,
5 that's Dr. Trende's figure. And then what I did, I used his
6 dataset and his exact code to produce Figure 2 here on the
7 right. And the only thing that I did is that I switched the
8 order in which the X, gold X and blue dots appear.

9 So this time instead of having blue dot over gold X, I
10 took gold X and put it on top of blue dot. And as you can see,
11 you get like a completely different depiction of population
12 concentration in this district when you do it that way.

13 Q What area did these maps depict?

14 A Illustrative District 7.

15 Q Let's pull up Exhibit PX-196, please, and also place pages
16 1 and 2 side by side.

17 What is this document?

18 A So this is the same illustrative district. On the
19 left-hand side, you have Dr. Trende's figure, which is at the
20 block level, White VAP and Black VAP. And then on the
21 right-hand side is the same data. This time everything is a
22 dot instead of having Xs, which are bigger in this case and
23 dots, and the dots are the same size, only different color.

24 And then if you put white dots over black dots, again, you
25 get a completely different picture of what the population

1 concentrations are in this region.

2 Q And what area do these maps show?

3 A This is the area around Illustrative District 7, 7 and the
4 areas around it.

5 Q Okay. Let's pull up Exhibit PX-198, please, and similarly
6 place pages 1 and 2 side by side.

7 And now what are these maps?

8 A So this is comparing Illustrative District 25. On the
9 left-hand side, you have Dr. Trende's plot. On the right-hand
10 side, I simply changed the order of the, you know, gold Xs and
11 blue dots. And as you can see, the area that we previously
12 thought was predominantly black is also very highly
13 concentrated with White VAP.

14 So, yeah.

15 MR. GENBERG: Plaintiffs offer PX-195, 196, and 198.

16 THE COURT: 195, 196, and 198?

17 MR. GENBERG: Yes.

18 THE COURT: Any objection?

19 MR. SEISS: No objection, Your Honor.

20 THE COURT: All right. Admitted.

21 (Plaintiffs' Exhibit 195 admitted in evidence.)

22 (Plaintiffs' Exhibit 196 admitted in evidence.)

23 (Plaintiffs' Exhibit 198 admitted in evidence.)

24 BY MR. GENBERG:

25 Q Dr. Oskooii, in your opinion, do the maps with white VAP

1 layer over black VAP more accurately depict the location of
2 population?

3 A Neither do, because they both have the effect of
4 essentially superimposing one group over another. That's why I
5 don't like these dot density plots, and Dr. Trende has been
6 criticized before presenting these plots.

7 Perhaps a better way would be to have some sort of jitter,
8 where you can separate and zoom in to different areas to be
9 able to see both White VAP and Black VAP to know more
10 information about population concentration.

11 Q Let's turn back to Dr. Trende's report, DX-7, page 23.
12 Does reading the dot density maps along with this choropleth
13 map help you to see the concentration of black population
14 within the Illustrative District SD7?

15 A This is what Dr. Trende claims, and my answer is no. And
16 the reason for that is we're comparing apples to oranges.

17 So first of all, this Figure 9 is showing precinct-level
18 BVAP concentrations, not block or block groups. Precincts are
19 larger geographies in this case.

20 And so if I look like, for example, look at the top left
21 precinct, based on the color, it suggests that it is 30 percent
22 BVAP. By doing it this way, you assume that all the blocks and
23 block groups within this precinct have the same BVAP population
24 distribution. It could be that the lower end of this, you
25 know, precinct has more white or black population, and this

1 doesn't capture that.

2 In addition to that, this is not a plot of SD --
3 Illustrative 7 or 25. This is just three counties shaded by --
4 he says BCVAP, but as you can see, it's probably typo, because
5 he has BVAP.

6 Q Thank you, Dr. Oskooii.

7 MR. GENBERG: I have no further questions at this
8 time.

9 THE COURT: All right.

10 CROSS-EXAMINATION

11 BY MR. SEISS:

12 Q Good afternoon, Dr. Oskooii.

13 A Good afternoon. Good to see you again.

14 Q Yes. We have met already. But just to reintroduce myself
15 on the record, my name is Ben SEISS, and I represent Secretary
16 of State Wes Allen in this lawsuit.

17 Just to start, did you listen to Mr. Fairfax's testimony
18 this morning?

19 A I believe I came in at the tail end of the testimony, so I
20 missed probably more than 95 percent of the testimony.

21 Q Okay. Thank you.

22 What ACS data did you use to analyze Mr. Fairfax's Plan 1?

23 A I used the 2021 five-year ACS estimate that was block
24 group-level estimate disaggregated to blocks by the RDH, which
25 is Redistricting Data Hub.

1 Q Had Redistricting Data Hub's disaggregation for the 2022
2 five-year data been release when you submitted your report?

3 A No. At that point, I looked, and the 2022 data
4 disaggregated was not available or released.

5 Q Has it since been released?

6 A I would imagine so, because some time has passed. We're
7 almost December now, so I think perhaps it is up there now,
8 although I would have to check.

9 Q So using that disaggregated 2021 five-year data, you
10 estimated SD7's BCVAP at 50.11 percent, correct?

11 A That is correct.

12 Q Have you checked to see if your estimate remains above
13 50 percent using the 2022 five-year data?

14 A No, I have not.

15 Q So if Mr. Fairfax testified that using the 2022 data that
16 point estimate was below 50 percent, you wouldn't have any
17 reason to dispute that, correct?

18 A Well, I believe when I came in, Mr. Fairfax was talking
19 about different disaggregation techniques, so I would have to
20 know what specific data on the disaggregation technique he used
21 to be able to tell you that.

22 Q But you don't presently have any reason to dispute that
23 using 2022 data, that the BCVAP point estimate is below
24 50 percent for Plan 1?

25 A It's possible, but I can't verify that since I wasn't able

1 to independently check that.

2 Q Dr. Oskooii, are you familiar with the *Gingles*
3 preconditions?

4 A Yes.

5 Q As a non-lawyer, what is your understanding of what the
6 first precondition requires?

7 A So as a non-lawyer, my understanding is that as part of
8 *Gingles* 1, you're trying to show whether you can draw a --
9 whether the black population in this case is numerous and
10 compact enough to form a majority in a single-member district.

11 Q Are you offering the opinion that Senate District 7 in
12 Mr. Fairfax's Plan 1 is sufficiently large or numerous as you
13 say to satisfy the first precondition?

14 A Sorry. Sufficient large and numerous?

15 Q Numerous.

16 A Oh. Well, I mean, all I can tell you is that I calculated
17 the BCVAP of SD7, and it shows the point estimate is
18 50.11 percent. Ultimately, it's up to the Court to decide if
19 it's -- if *Gingles* 1 is satisfied.

20 Q I think you testified earlier that you believed that it
21 was more probable than not that SD7 -- Senate District 7's true
22 BCVAP value in Plan 1 was above 50 percent; is that correct?

23 A Well, I'm not sure how you're using true in this context.
24 All I said is that it is more probable than not that it is
25 50.11 percent, that it is over 50 percent.

1 Q When you say it, what are you referring to?

2 A The composition of BCVAP in SD7.

3 Q So you believe that it is more probable than not that the
4 racial composition of SD7's CVAP is above 50 percent BCVAP?

5 A Based on the 2021 ACS data and based on the priors that we
6 have knowledge about, the Voting Age Population composition of
7 this district and differential citizenship rates, I think it is
8 more probable than not that it is over 50 percent BCVAP.

9 Q Did you offer this opinion anywhere in your report?

10 A I don't recall if I said specifically whether it's more
11 probable or not. I just reported the estimate.

12 Q When did you develop this opinion?

13 A Well, so here's the thing: What Dr. Trende has done, he's
14 trying to bring in confidence intervals or margin of errors
15 into the equation in which this is not the standard practice
16 and typically not done.

17 So, you know, we're not making claims about the
18 probability of the point estimate when describing the BCVAP
19 with district. So this is in response to essentially such
20 claims.

21 Q My question was: When did you develop this opinion that
22 the BCVAP value is more likely or more probable than not above
23 50 percent?

24 A Well, in my report, I talk about different composition of
25 BVAP and White VAP and also HVAP and differential citizenship

1 rates. So in that report, that's what I'm basically implying,
2 that 50.11 percent is a good approximation of the BCVAP.

3 Q Would it be fair to say that the building blocks of this
4 more probable than not opinion were in your initial report but
5 that you did not ultimately come to that conclusion in your
6 report?

7 A Again, because I estimated BCVAP, I relied on the point
8 estimate. I said the point estimate is best approximation. So
9 that's implied in the report, maybe not specifically stated,
10 but I believe you also asked me this question in the
11 deposition, and I shared my opinion.

12 Q So I understand that you are testifying that the point
13 estimate is the best approximation. Could you go through the
14 other evidence that you say that allows us to conclude that
15 SD7's BCVAP is more probable than not above 50 percent?

16 A Yes. As I described, the composition of BVAP and White
17 VAP and that, you know, BVAP is close to 50 percent and that
18 citizenship rates of whites and blacks is similar and very high
19 and that the HVAP is 10.1 percent, but only 4.4 percent of
20 Citizen Voting Age Population, the HCVAP and so you have a much
21 lower citizenship rate for Hispanics. And when you consider
22 that in the context of what the data is telling you, you know,
23 I'm confident in the point estimate that more probable than
24 not, the point estimate is an accurate estimate.

25 Q When you say you're more confident than not that the --

1 never mind.

2 What was the BVAP in Mr. Fairfax's SD7 in Plan 1?

3 A I believe it was around 47 percent or so.

4 Q If I said 46.8 percent, would that sound right to you?

5 A Seems reasonable.

6 Q And so you're saying that 46.8 percent is pretty close to
7 50 percent?

8 A Yeah. In the context of considering the citizenship
9 rates, again, of different populations. I can see how BCVAP is
10 higher and over 50 percent. Again, that's what the data is
11 telling us at the end of the day.

12 Q So I see how the BVAP being close to 50 percent white and
13 black citizenship rates being higher than the Hispanic
14 citizenship rate and then looking at the ratio of HCVAP to BVAP
15 would suggest that the BCVAP would be higher than the BVAP
16 value. But how do we get to 50 percent from 46.8 percent VAP?
17 How do we know that it's not just a 2 percent increase?

18 A Great question. Because the data is telling us that.
19 That's what the point estimate is saying, that the five-year
20 estimate, when you compute it, the BCVAP ratio is telling us
21 that it's 50.11 based on the 2021 five-year estimate.

22 Q Aren't you comparing apples to oranges? You're using a
23 point estimate, a CVAP estimate and then other sources of data
24 to then combine. Is that not comparing apples and oranges?

25 A No. You are bringing additional information to bear in

1 forming a -- an opinion about what is likely, more likely than
2 not.

3 Q I'd like to pull up page 14 of PX-14, which is your
4 report. Do you see that, Dr. Oskooii?

5 A I see -- yes, I do.

6 MR. SEISS: Could we pull that up on my screen? It
7 looks like it's trying, but -- okay. We're good.

8 THE COURT: Do you have it, Mr. Seiss?

9 MR. SEISS: Yes.

10 BY MR. SEISS:

11 Q And can we zoom in to paragraph 36?

12 Would bit fair to say that you endorse Mr. Fairfax's
13 approach of using CVAP data to assess the electoral influence
14 of black Alabamians?

15 A As I said here, I think that's a valid approach if you're
16 trying to look into ineligible voters, CVAP, or in this case,
17 BCVAP is a sensible approach.

18 Q Could we now go to page 50 of Plaintiffs' Exhibit 6, which
19 is Mr. Fairfax's initial report?

20 And could you zoom in on paragraph 97?

21 Dr. Oskooii, do you endorse Mr. Fairfax's conclusion that
22 the black population in the state of Alabama is sufficiently
23 large to create a map with an additional majority-black
24 district in Huntsville?

25 A Well, my focus was not an geographic compactness. So on

1 that, I did not conduct that kind of analysis. So what I would
2 have to defer to Mr. Fairfax himself and other experts and also
3 the Court to make that conclusion on *Gingles* 1, where the
4 *Gingles* 1 is satisfied.

5 Q So I was just asking about this sufficiently large
6 component. Is it the same answer for the sufficiently large
7 conclusion that he has?

8 A Well, they go hand in hand sufficiently large and
9 geographically compact. But what I find is that the BCVAP
10 again based on my calculations is 50.11 percent, so if majority
11 is the threshold to meet *Gingles* 1, then it is above
12 50 percent.

13 Q So you would endorse the conclusion that Senate District 7
14 is sufficiently large as required by *Gingles* 1?

15 A Well, I think that evaluation also takes into
16 consideration whether it's geographically compact, like what if
17 I drew, I don't know, a district that, I don't know, went from
18 east side of Alabama to the west side, and I said, well, it's
19 sufficiently large, but I didn't make the case of whether it's
20 also reasonably compact, that affects that answer. So I can
21 only talk about what the BCVAP percentage is because that's
22 what I did in calculating.

23 Q Yes. And that is all that I am asking you about. I am
24 not asking you about geographic compactness. Do you endorse
25 Mr. Fairfax's conclusion that SD7 is sufficiently large as is

1 stated in this paragraph?

2 A Well, the only thing that I can endorse is that if he uses
3 BCVAP, using the 2021 five-year ASC estimate, that BCVAP is
4 over 50 percent based on the point estimate.

5 Q Okay. I want to shift gears a little bit.

6 If the census had a citizenship question, would there be
7 any reason to rely on the ACS for CVAP data?

8 A If you have the enumeration then and you have a
9 citizenship question, then you could, you know, rely on the
10 enumeration.

11 Q Is the census more accurate than the ACS?

12 A They're two different things. Census is an enumeration.
13 It's a count of the population. And the ACS is a sample of the
14 population, so two different things.

15 Q If we are just looking at, say, the Black Voting Age
16 Population in Senate District 7, would the census provide more
17 accurate information than the ACS?

18 A I guess my question would be accurate relative to what?

19 Q The actual count of the Black Voting Age Population in the
20 Senate District 7?

21 A The underlying truth basically.

22 Q Yes.

23 A And so, you know, if you count every person, then you have
24 the underlying truth. And, therefore, you know you have that
25 number. You don't need to find it.

1 Q I think you wrote in your report that one reason that you
2 might use the ACS over the census is because it provides more
3 recent information if you wanted to look at more recent trends;
4 is that fair?

5 A Yeah. You know, because ACS, you know, is a one-year
6 survey published every year, if you wanted to look at trends in
7 population growth or shifts, you could use the ACS for that.

8 Q Does the 2021 five-year data that you relied on provide
9 more recent data than the 2020 census does?

10 A With some respects, yes, in the sense that it includes the
11 2021-year and the 2020-year, depending on when the census
12 closed, finished its enumeration. But it also includes the,
13 you know, years before that.

14 Q Would it be fair to say that a majority of the data is
15 older than what the 2020 census provides?

16 A I wouldn't say majority of data is older. It's an
17 aggregate. So it includes those years and also includes more
18 updated information.

19 Q Do you agree that three of the five years are from before
20 2020?

21 A Yes.

22 Q You testified earlier that Voting Age Population from the
23 census can be overinclusive when determining a group's
24 electoral power; is that correct?

25 A That sounds about right.

1 Q And you've advised jurisdictions about how to comply with
2 the Voting Rights Act?

3 A I have.

4 Q How would you advise a jurisdiction about balancing the
5 overinclusiveness of VAP versus the increased accuracy that the
6 census gives you?

7 A Well, it depends what the jurisdiction is looking for. If
8 they want to know the eligible voting population, I would say
9 that VAP is overinclusive, and that includes a lot of
10 non-citizens potentially, particularly for immigrant-based
11 population. In that case, I would suggest that they look at
12 CVAP.

13 Q Is there a standard that tells you when VAP becomes so
14 overinclusive that a jurisdiction should be willing to accept
15 the lower accuracy from the ACS?

16 A Well, you keep saying lower accuracy. There are different
17 things. You know, as you said, apples and oranges. One
18 doesn't even include citizenship variable. One includes
19 citizenship rates.

20 So, you know, that's a big differentiating factor between
21 the two.

22 Q Is your opinion that whenever this overinflation problem
23 exists that ACS CVAP data should be used instead of census VAP
24 data?

25 A Census VAP data?

1 Q Yes.

2 A In this case, we're looking at -- sorry. Could you repeat
3 that question?

4 Q Sure. Is your opinion that whenever this overinflation
5 problem that VAP has, whenever that problem exists, ACS data
6 should be used instead of census Voting Age Population data?

7 A If we're trying to again describe the eligible voting
8 population of a district and if there are disparities by groups
9 in terms of citizenship rate, then in that case, I would
10 suggest CVAP is a better more appropriate data to use.

11 Q Are we trying to -- I'm sorry. I missed the first part of
12 what you said, so feel free to correct me.

13 Are we trying to estimate the characteristics of the
14 non-citizen voting population in this case?

15 A I'm not sure --

16 MR. GENBERG: Objection. That's a vague question.

17 BY MR. SEISS:

18 Q Mr. Fairfax says that we should use CVAP when a meaningful
19 number of non-citizens are present. Do you agree with
20 Mr. Fairfax's standard?

21 A And I would add that you have differential citizenship
22 rates to that.

23 Q What do you understand a meaningful number of non-citizens
24 to mean?

25 A Well, you would have to look at the district and see, you

1 know, what the proportion of the different population is. And
2 if you have -- again, that's why I said it's really important
3 to look at citizenship rates, differences between populations.

4 If you have that scenario, you want to account for
5 citizenship, because if you have, you know -- any percentage of
6 let's say, you know, Hispanic CVAP in there, that could impact
7 your BCVAP.

8 Now, there's no bright line rule to say, you know, is it
9 10 percent, is it 9 percent? There's no magic number. I would
10 just analyze that and see how the results are impacted by the
11 percentage that you have and report it. This is why, you know,
12 you know, I would report both VAP and CVAP. And so we can look
13 at all the information.

14 Q Do you have an opinion about whether there's a meaningful
15 number of non-citizens in the Huntsville area?

16 A All I can tell you is that there are non-citizens, and
17 that citizenship for Hispanic population is below 50 percent,
18 and that Hispanic Americans comprise 10.1 percent or so of the
19 Voting Age Population.

20 So that's what I can tell you.

21 Q Do you agree that when drawing illustrative districts, ACS
22 VAP data is typically used when the minority group involved
23 like Hispanics or Asians typically has a lower citizenship
24 rate?

25 A It is used in those cases, but if those immigrant

1 populations impact the share of other populations, then that
2 should be accounted for, too.

3 Q Do you know what the citizenship rate of the Black Voting
4 Age Population in Senate District 7 is?

5 A I believe, you know, because it's really easy when I
6 aggregate it up, and basically all I'm doing is I'm taking the
7 blocks within Senate District 7 and aggregating up the counts
8 of BVAP, and I get total BVAP essentially of Senate district,
9 and you aggregate up, you know, BCVAP, and you can get a
10 percentage. And I believe, you know, it's over 95 percent or
11 so, but I don't recall 100 percent, but it's really high,
12 especially relative to the Hispanic population.

13 In fact, in my report, I show that this is why both white
14 and Black CVAP is a larger pie than White VAP or BVAP because
15 precisely of the Hispanic, low Hispanic citizenship rate, the
16 dropoff you see from 10.1 percent HVAP to 4.4 percent HCVAP.

17 Q Have you ever been involved in any case where CVAP data
18 was used to conclude that a minority Voting Age Population
19 illustrative district satisfied *Gingles* 1?

20 A You said minority voting -- sorry. Citizen Voting Age
21 Population?

22 Q Minority Voting Age Population, but majority Citizenship
23 Voting Age Population?

24 A Could you repeat that just so I can make sure I understand
25 your question?

1 Q Sure.

2 Have you been involved in any case where CVAP data was
3 used to conclude that a minority Voting Age Population district
4 satisfied *Gingles* 1?

5 A You just used CVAP and then you said Voting Age
6 Population. I'm confused what you mean by that. Like are you
7 asking if I use CVAP to conclude that a certain minority group
8 is over 50 percent? Is that what you are asking?

9 Q No. So in this case, Senate District 7 based on Voting
10 Age Population is below 50 percent, correct?

11 A BVAP is below 50 percent.

12 Q But the CVAP point estimate that you report in this case
13 is above 50 percent?

14 A Yes.

15 Q And you assert that it is more probable than not that
16 SD7's BCVAP is above 50 percent, correct?

17 A Yes.

18 Q Have you ever been involved in any case with those same
19 circumstances?

20 A Not a case that I submitted a specific report for or drew
21 illustrative districts or remedial districts. But I have
22 advised as a confidential expert in areas in which you actually
23 have that scenario where BCVAP exceeds BVAP precisely because
24 you have immigrant-based populations.

25 Q But you said that you were not drawing illustrative

1 districts in that case, so you were not engaged in the *Gingles*
2 exercise?

3 A To the extent that I can share this as a confidential
4 expert, I was asked to evaluate *Gingles* 1 districts based on
5 the demographics BCVAP, BVAP, you know, other groups, as well,
6 in a jurisdiction and advise the people who hired me to let
7 them, you know, get them the information.

8 Q Are you referring to Wicomico County, Maryland?

9 A Wicomico County, Maryland is -- I believe is one of
10 those -- yeah, is one of those where I looked at BCVAP and
11 BVAP. But come to think of it, actually, I used BCVAP and BVAP
12 in one of my reports in the state of Florida, although it was
13 not about *Gingles* 1, but I shared both BCVAP and BVAP, and that
14 was for Benchmark Congressional Legislative District 5, which
15 was a black performing district that went from Jacksonville to
16 Tallahassee, and I was reporting the composition of that
17 district.

18 And I believe in that scenario because you also had, you
19 know, Hispanic population there of Jacksonville, the BCVAP
20 exceeded BVAP which is normal. I mean, it's common sense.

21 Q So we talked about Wicomico County, Maryland in your
22 deposition, if you recall, and I remember there being
23 confidentiality issues. So I don't want to overstep into that.

24 But have you since submitted an expert report in the
25 Wicomico County case?

1 A Only an RPV report, which was prior to my confidential
2 expert evaluation of the districts.

3 Q By prior, do you mean after?

4 A So I submitted an RPV report, and then after I submitted
5 that, I was asked to evaluate the districts in Wicomico.

6 Q Okay. So just to be clear, you have not been involved in
7 any case where a plaintiff has used CVAP data to argue that a
8 minority Voting Age Population district satisfies *Gingles* 1?

9 MR. GENBERG: Objection. Mischaracterizes his
10 testimony.

11 THE COURT: It's a question. He says just to be
12 clear. He's free to disagree.

13 THE WITNESS: Sorry. Could you repeat that, please?
14 Thank you.

15 THE COURT: I will read it back. So just to be clear,
16 you have not been involved in any case where a plaintiff has
17 used CVAP data to argue that a minority voting page population
18 district satisfies *Gingles* 1.

19 THE WITNESS: Well, I mean, in Dodge City, I used
20 HCVAP to show that *Gingles* 1 is satisfied for one to two
21 districts in a five-district plan. So if I understand your
22 question correctly, I used HCVAP in that area.

23 BY MR. SEISS:

24 Q Were those districts majority HVAP?

25 A Those districts were a majority HVAP. But because, you

1 know, there's concerns about voting power, you know, HCVAP was
2 produced -- not just majority HVAP, but it's also majority
3 HCVAP.

4 Q So in that case, both by VAP and CVAP, the districts had
5 above 50 percent plus one?

6 A Yes.

7 Q But that's not the case here, correct?

8 A No. That's not the case here, again, because you have
9 differential citizenship rates as I described numerous times.

10 Q Do you agree that ACS CVAP data has an error margin
11 associated with it?

12 A An error margin is reported for ACS, yes.

13 Q And that's the block group level?

14 A The lowest level in which margin of error is reported is
15 at the block group level.

16 Q And that error margin is usually reported at 90 percent
17 confidence?

18 A Yes. ACS reports it -- or once you say calculates the
19 margin of error based on a 90 percent confidence level.

20 Q Is 95 percent confidence the standard for peer-reviewed
21 literature?

22 A I would say it's the most common is 95, but 90 percent is
23 also used, and in some cases depending, you know, on the
24 research question at hand, I have seen 67 percent or 80 percent
25 also be used.

1 Q Have you used a confidence interval lower than 90 percent?

2 A Well, in -- so, we have one-tailed and two-tailed
3 hypotheses; which is one-tailed would be of a directional
4 hypothesis we're creating, you know, a certain effect in one
5 direction; and then you have two-tailed, where you're, you
6 know, claiming in both directions based on theoretical priors.
7 Again, hypothesis not just mere conjecture, but it's based on
8 previous research and theoretical framework.

9 In a one-tailed, if you use 90 percent, then your
10 two-tailed is below 90 percent. So I may have used that in my
11 research before, and that's common. I see it, in fact, in top
12 journals where people report 90 percent one-tailed, which would
13 be below 90 percent two-tailed.

14 Q Can you say what level of confidence that would be at
15 two-tailed, 80, 85? Can we pin it down to a number?

16 A Yeah. It's basically, you know, you know, you draw
17 5 percent down in that case.

18 Q Okay. Would it be fair to call the error that the ACS
19 reports the sampling error?

20 A Sampling error with a confidence level that the ACS has
21 used.

22 Q What is the -- if I refer to this error as the sampling
23 error, will you understand what I mean?

24 A Yes.

25 Q What is the source of this sampling error?

1 A Well, the main source, and with any sample where we're
2 concerned is that one is non-response bias in, which, you know,
3 once you sample a population, what percentage of that
4 population actually provides you the responses. And as I
5 mentioned in -- for the American Community Survey, the response
6 rate is exceptionally high. It's about 90 percent.

7 But you if you look at like public opinion polls that we
8 see about elections, you know, some of the best surveys, the
9 response rate is like 5 or 10 percent, much lower than the ACS.

10 So that's one of the sources. And because we're sampling,
11 randomly sampling the population, we are not counting every
12 single person.

13 Q Let's talk about non-responses for a little bit.

14 Do you know how the ACS handles situations where a
15 respondent fails to answer a question?

16 A Well, they have -- sorry. Question or the entire survey?

17 Q A question on the ACS?

18 A That's an item non-response, which could happen also where
19 someone's filling out the survey, and they leave certain
20 questions blank or they don't fill it out.

21 Q Do you know how the ACS handles situations where there is
22 an item non-response?

23 A Well, they use a sophisticated weighting technique to
24 account for item non-response and sample non-response. And
25 that's what they do.

1 Q Do you know how often the ACS has to allocate responses to
2 the citizenship question?

3 A You mean weight, not allocate.

4 Q Allocate as in when a citizenship question gets a
5 non-response and the ACS is filling in that -- filling in those
6 gaps?

7 A Well, I'm not sure they it's accurate to say they fill in
8 the gaps. They weight the data and they provide a margin of
9 error based on item non-response and sample non-response.

10 Q So do you dispute that the census bureau uses allocation
11 as in using statistics to impute missing values?

12 A Imputation is different thing than what you just said.
13 Imputation is that you impute based on other information what
14 this citizen voting -- what the citizenship status of a
15 respondent is. And imputation could very well be part of ACS,
16 as well.

17 Q I want to make sure I'm clear about what you just said.

18 So I understand the ACS to do two different things when it
19 has a non-response. There's assignment, which is where you'd
20 logically impute something like using school grade to assess
21 the highest level of school completed?

22 A So I guess I was just confused by your characterization of
23 assignment. When you used imputation, I understood your
24 question. So imputation is the proper term that I understood.

25 Q Okay. And so to be clear, I'm not talking about

1 assignment. I'm talking about allocation.

2 A Or imputation, yes.

3 Q Do you know how often the ACS has to allocate or impute
4 responses to the citizenship question?

5 A No. I don't believe I know the exact count or number, no.

6 Q If I told you that was over 10 percent of the time for the
7 citizenship question in 2021, would you have any reason to
8 doubt that?

9 A I mean, I have not independently checked that or verified
10 that, so that's your characterization.

11 Q Does this imputation process generate error?

12 A Well, imputation by definition is you're imputing. You
13 don't actually know. So, you know, you're -- so as a result,
14 there's some uncertainty about the process because -- and the
15 reason you have uncertainty is because you're trying to impute.
16 If you knew it, then why would you impute.

17 Q Is that, yes, this process generates error?

18 A You could say error in this case, yes.

19 Q Is that error measurable?

20 A If you have the underlying truth. That's one way you
21 could do it. But, yeah, I think typically -- so in my
22 experience, because survey imputation is a standard technique.
23 When you have people who are skipping questions, you could
24 impute. Like that happens a lot with income actually because
25 people don't like to report their income. And you impute it.

1 But in my experience, you know, people don't assign a
2 margin of error on that, just that imputation or confidence
3 interval. They just impute it, and then use that imputation in
4 their models like regression analysis and so on and so forth.

5 Q Is this error related to non-response, is that reflected
6 in the sampling error that we were talking about earlier?

7 A Well, the margin of error my understanding is that it
8 accounts for item non-response, as well as sample non-response.

9 Q Can we calculate the sampling error associated with the
10 BCVAP estimate for Senate District 7 in Plan 1?

11 A As I mentioned, not accurately for the reason that block
12 groups are split between district boundaries. So at that
13 point, you're guesstimating, and this is something Dr. Trende
14 acknowledges himself.

15 Q So we don't even have a ballpark estimate of what the
16 sampling error is for SD7?

17 A I mean, you could guesstimate it if you want. But that's
18 not a precise calculation of a margin of error.

19 Q So the ACS reports the error at the block group level,
20 correct?

21 A Yes.

22 Q And I think in your report, you talk about aggregating
23 block groups to increase the sample size to reduce the margin
24 of error; is that fair?

25 A Well, as a sample size increases -- so there are two

1 factors that go into play in the margin of error. One is
2 definitely the sample size. So typically speaking statistics,
3 the larger sample size you have, the lower the margin of error.
4 But another factor that goes into the margin of error is also
5 the standard deviation, which is how far each of the values are
6 from the mean.

7 And so sometimes you have standard deviation that is
8 large, and that could impact also, you know, the margin of
9 error. Sometimes you have a standard deviation that's pretty
10 tight around the mean that the observations that you're getting
11 are all right around the mean.

12 So those two factors go into how large or small the
13 ultimate margin of error is with a certain degree of confidence
14 like 90 percent.

15 Q So can't we aggregate those two factors for each block
16 group to calculate the margin of error for District 7?

17 A Well, again, maybe I'm misunderstanding your question.
18 Block groups are split between districts. So you have block
19 groups in District 7 that are not fully in District 7.

20 Q Why can't we use all the block groups regardless if
21 they're in whole or in part to get a ballpark, a guess of what
22 the margin of error is?

23 A Two factors: One, now you're giving -- now you're giving
24 a margin of error for district that Mr. Fairfax did not draw.
25 You just expanded the boundaries of a district.

1 And, two, you are assuming that the standard deviation is
2 constant in all the blocks that you're adding. So what if
3 you're -- the blocks that are partially included, they'll have
4 higher standards of deviation and also low sample size and have
5 higher margin of error, and you're pushing that into your
6 overall margin of error calculation and inflating your margin
7 of error artificially.

8 This is why in standard practice and this is something
9 Dr. Trende had never done before when me and him have faced
10 each other, you're providing descriptive statistics and you're
11 reporting the point estimate in the cases of talking about the
12 composition of districts.

13 Q So the way we've been talking about, is that how you
14 understand Dr. Trende to have calculated the sampling error for
15 Senate District 7?

16 A Well, I understand that he included blocks essentially --
17 sorry, block groups that are not fully entailed in the
18 boundaries of SD7 as a method of guesstimating. And, I mean,
19 he admits in his report, got to read his report, and that he's
20 guesstimating. He says there's no good way, but one could
21 maybe do this basically hand waving.

22 Q You talked earlier about potential inflation from
23 including a whole block group that might only have a small
24 portion of the block in Senate District 7; is that right?

25 A Yeah. That could happen, yes.

1 Q Did you check to see if that impacted Dr. Trende's code?

2 A His code?

3 Q His calculation?

4 A Oh.

5 Q Of the margin of error for Senate District 7?

6 A No. Because in the first place, I don't think this is a
7 good method to use. So, again, because you're providing a
8 margin of error for this district that Mr. Fairfax did not
9 draw.

10 Q Isn't it likely that any error coming from disaggregating
11 data to the block group level would be larger than any error
12 from including zero population block group or small population
13 -- sorry. Let me restate that.

14 Never mind.

15 Doesn't Dr. Trende's method give us the best approximation
16 of the margin of error?

17 A He gives you a margin of error for boundaries of a
18 district that Mr. Fairfax did not draw.

19 Q Are you aware of a better approximation of the margin of
20 error for Mr. Fairfax's Senate District 7?

21 A As I said, there is no good way when block groups are
22 split, and that's why I think one of the reasons practitioners
23 and experts in this area standard practice they rely on the
24 point estimate, and they don't get involved with the whole
25 margin of error scenario.

1 Q So there is no better calculation of the margin of error
2 other than what Dr. Trende provided?

3 A There's no good or sensible I guess I should say
4 calculation. I don't find his quite convincing as you can
5 tell.

6 Q Are you aware that Mr. Fairfax calculated the error margin
7 for Senate District 7 in Plan 2 to be 2.7 percent?

8 A I did not review any other plans of Mr. Fairfax besides
9 his February 2nd report.

10 Q Are you aware that Dr. Trende calculated the margin of
11 error for Plan 2 to be at 2.7 percent at 90 percent confidence?

12 A No. As I said, I did not evaluate any other reports from
13 Dr. Trende.

14 Q And you didn't even try to calculate the sampling error in
15 this case, correct?

16 A Yeah. Because it's also -- again, it's not relevant in
17 describing the composition of the CVAP composition of this
18 district. It's descriptive statistic. You're just reporting
19 the composition of district. So why is he calculating
20 confidence intervals?

21 Q Do you typically report error margins in your published
22 work?

23 A In -- we talked about that in the case of like RPV
24 analysis where you're trying to see if a difference between two
25 variables is significant, you could use confidence interval as

1 a guide, but that's not descriptive statistics, which we're
2 doing here.

3 So the -- it's about applying the right tool to the right
4 situation. You can't again just use a hammer for lack of
5 better description to drill holes. That's probably not the
6 best way to do things.

7 Q Is it correct that you did not reporter error margins
8 because you wanted to answer the question of what is our best
9 approximation of the Citizen Voting Age Population in District
10 7?

11 A No. Even if you have error margins, I can still tell you
12 what's your best approximation, because the best approximation
13 is the point estimate.

14 All the -- all that the confidence interval is telling us
15 is whether the underlying truth, which we don't know, falls
16 somewhere in the range of confidence interval. That's all it's
17 telling us. It doesn't basically say that's it's not
18 50 percent.

19 Q Is it possible to know the underlying truth, the
20 underlying true BCVAP value in this case?

21 A Well, if it was possible, we wouldn't be calculating, you
22 know, this stuff. If we had the enumeration, then we would
23 know the underlying true value. We don't know it.

24 Q Don't polls typically report error margins? What's the
25 difference between presidential approval rating poll and the

1 ACS?

2 A Yeah. So, again, even when polls report margin of error,
3 all they're trying to tell you is that -- let's say, a poll
4 said that, I don't know, 55 percent of respondents supported
5 President Trump and there's an error margin around that. All
6 the poll is telling you is that we don't know the underlying
7 true that the underlying truth support for President Trump, it
8 could be within the margin of error at the 95 -- let's say
9 confidence interval. But the polls still emphasized, and we've
10 seen this just this presidential election, the point estimate.
11 All they talk about the point estimate, point estimate. Oh,
12 look this candidate is up by .7 percent, and this candidate is
13 down by 1 percent in Pennsylvania, and they focus essentially
14 on the point estimate.

15 Q Why do polls report confidence intervals -- never mind.

16 If it's useful for a poll to include a confidence
17 interval, why is it not useful to include the confidence
18 interval for BCVP point estimates in this case?

19 A Depends what the question is. All the confidence interval
20 is telling you is whether the underlying truth is contained
21 within the interval. So you can present that, but I'm not sure
22 what relevance it has to that descriptive statistics that we're
23 providing.

24 Q What do you think the question is in this case?

25 A Well, whether --

1 MR. GENBERG: Objection. That's vague.

2 MR. SEISS: He was going to answer the question. He
3 understood the question. He understood the question in his
4 deposition.

5 THE COURT: You can answer if you understand.

6 THE WITNESS: Well, my understanding is that we're
7 talking about *Gingles* 1, whether *Gingles* 1 is satisfied or not,
8 in addition obviously, to other factors.

9 BY MR. SEISS:

10 Q Is your testimony that the confidence interval does not
11 matter when assessing whether *Gingles* 1 is satisfied?

12 A Yeah. No. It doesn't when it comes to -- because it just
13 gives us just a range of which underlying truth could fall, and
14 people don't report confidence intervals and margin of errors
15 when it comes to *Gingles* 1. I have never seen it, and
16 Dr. Trende has never done it himself until this case.

17 Q So it doesn't matter where the underlying truth might fall
18 in this case?

19 A We don't know the underlying truth, and that's why we rely
20 on the point estimate. We say this is the point estimate, this
21 is the best estimate. This is what the data is telling us.
22 Remember, 50.11 percent, we're not just like taking it out --
23 out of a theoretical statistical approach of calculating
24 confidence intervals. The point estimate is always constant.
25 The confidence interval is variable and could get smaller or

1 larger based on the confidence level that you select.

2 I guess you could take confidence interval to a pretty
3 ridiculous level. Let's say I wanted to have 100 percent
4 confidence that the underlying truth is within the range of my
5 estimates. Sounds great, 100 confidence, beautiful, right?
6 Like I am 100 percent confident.

7 Well, in that case, you would have to include all the real
8 numbers between 0 and 100 percent at 100 percent confidence
9 interval, so you would go in front of Court and say, Judge, I
10 am 100 percent confident that the BCVAP is between 0 percent
11 and 100 percent.

12 And we know it's not 100 percent. We know it's not 100
13 percent, because you have other Voting Age Population
14 populations that are not black in this jurisdiction. So we can
15 take confidence interval if we are going to use it in this
16 descriptive statistics to a ridiculous nonsensical level, even
17 100 percent confidence, but that wouldn't be sensible, right?
18 That wouldn't be good. Like I am going to stand in front of
19 the Court and say, well, it could be 0 to 100 percent. That
20 wouldn't be very reasonable.

21 Q Are we using unsensible confidence intervals in this case?

22 A Well, we're using confidence intervals to talk about, in
23 this case, Dr. Trende is using 90 and 95 percent, which
24 extremely high threshold, right? It's not more likely or not.
25 It's extremely high threshold. And I have never seen that

1 applied in a *Gingles* 1 case, that kind of a threshold.

2 Different tools for different applications.

3 Q Do you agree that a point estimate provides less
4 information than an interval estimate?

5 A What do you mean by less information?

6 Q Do you agree that a confidence interval provides -- I'm
7 sorry. Do you agree that a point estimate provides just a
8 single data point?

9 A Well, it is -- it's a point estimate. It's not point
10 estimates.

11 Q Do you agree that a confidence interval provides a range
12 of potential options for the true underlying value?

13 A To fall in, yes. But that's not necessarily more
14 information. It's just telling you what the underlying truth
15 might fall in.

16 Q Why is it not more information?

17 A Well, it's not more relevant information, because that
18 information is not based on what the -- what the data -- just
19 what the data is telling us. The data is telling us is this is
20 the point estimate. The confidence interval, more information
21 is subject to change based on the confidence level that one
22 selects.

23 Again, if I gave you 100 percent confidence, I would tell
24 you that 0 to 100 percent. And that right there, I just gave
25 you more information, right? But that's not sensible.

1 Q Are you saying that the data does not affect the size of
2 the confidence interval?

3 A The data is one of the -- the standard error of the data
4 in the confidence level you select produces the confidence --
5 the confidence interval.

6 Q Do you agree that reporting just the point estimate can
7 give someone less familiar with statistics a false sense of
8 confidence in the estimate?

9 A No. But if it's well explained, you know, how we're
10 interpreting the point estimates and what are the conclusions
11 we're drawing.

12 Q In your opinion, is that a confidence interval is not
13 needed to determine whether the 50 percent plus one threshold
14 is crossed?

15 A The best estimate is the point estimate, and that's what
16 the data is telling us. Outside of that, all we're -- if we
17 use confidence interval, all we're trying to do is whether the
18 underlying truth, that's the only question we can answer with
19 confidence interval, whether the underlying truth falls
20 somewhere in the range. That's a different thing.

21 Q So you talked with Mr. Genberg on direct about -- I'm
22 sorry.

23 THE COURT: Mr. Seiss, I should ask you: Is this a
24 convenient time for our afternoon break? I sense you might be
25 about to move to a different line of questions.

1 MR. SEISS: This is a perfect time, Your Honor.

2 THE COURT: Great. All right. It's 3:22. Let's come
3 back at 3:35.

4 MR. ROSBOROUGH: Your Honor?

5 THE COURT: Yes?

6 MR. ROSBOROUGH: I'm so sorry. Could -- just because
7 we have additional witnesses here, and I don't want to keep
8 people unnecessarily, are you able to give an estimate of how
9 much longer you might have?

10 MR. SEISS: I can say that based on the raw pages in
11 my outline, I am two-thirds through, so.

12 THE COURT: Will the plaintiffs have redirect?

13 MR. GENBERG: I don't know that at this time. I don't
14 have any plans at this time.

15 THE COURT: Is the plaintiffs' next witness
16 anticipated to testify only for a brief amount of time?

17 MR. ROSBOROUGH: My understanding is that our next
18 witness is, yeah, probably, Your Honor, maybe 30, 40 minutes.
19 We have two witnesses here, though. We have the next one and
20 the one after, so I'm more concerned about the one after.

21 THE COURT: Got it.

22 I think you can certainly release the one after.

23 MR. ROSBOROUGH: Okay.

24 THE COURT: And as to the next one, that's a little
25 hard for me to predict.

1 MR. ROSBOROUGH: Understood. Thank you for both of
2 your indulgence.

3 THE COURT: All right.

4 (Recess.)

5 THE COURT: Please be seated.

6 All right. Mr. Seiss, you may proceed.

7 BY MR. SEISS:

8 Q Welcome back, Dr. Oskooii.

9 A Thank you.

10 Q You testified earlier that we don't know the true sampling
11 error; is that correct?

12 A Oh, we can't calculate it accurately for SD7 for the
13 reasons that I mentioned.

14 Q But you agree that that error exists, correct?

15 A If we can calculate it, yeah. A sample does come with a
16 margin of error.

17 Q You said if we can calculate it, or are you saying that if
18 we can't calculate it, then the margin of error doesn't exist?

19 A No, no, no.

20 Q Does disaggregating block group level data down to the
21 block level produce error?

22 A If you don't do it the right way, as I mentioned through
23 the example where, you know, you're using total VAP as opposed
24 to BVAP, then you're introducing problems that could change
25 your point estimate.

1 Q Are you saying that Redistricting Data Hub's method does
2 not produce error?

3 A I guess, in what context are you referring to error? I
4 don't believe that they're doing it the wrong way. And I think
5 they deal with all that different issues such as even zero
6 population blocks, and their formula is the best formula.

7 Q Does disaggregating block group level data down to the
8 bloc level produce additional uncertainty?

9 A In what sense?

10 Q With regard to our point estimate.

11 A No, because you still get a point estimate. We don't have
12 block level CVAP. That's why we're disaggregating. But you
13 still get the point estimate.

14 Q Does that point estimate account for any uncertainty
15 associated with disaggregating data down to the block level?

16 A Uncertainty such as? What are we talking about?

17 Q Well, so ACS data is reported at the lowest level of the
18 block group level, correct?

19 A Yes, sir.

20 Q And so when a block group is split in Mr. Fairfax's SD7,
21 we have to decide how to allocate the block group level CVAP
22 data down to the block level, correct?

23 A Yes.

24 Q And we don't know at the block level where the Citizen
25 Voting Age Population is, correct?

1 A We don't have that at the block level, yes.

2 Q So is there additional uncertainty associated with having
3 to disaggregate that data down to the block level?

4 A Well, I'm not sure in what context you're using
5 uncertainty. What we're doing is we're taking in this case the
6 BCVAP count, and we're just simply allocating it by the BVAP
7 concentration. That's the only variable that's available
8 because there's no citizenship question at the block level.

9 Q Does that disaggregation process give us less confidence
10 that the point estimate reflects the true BCVAP population in
11 SD7?

12 A Less confidence in terms of like a confidence interval, or
13 what are we talking about?

14 Q That the point estimate reflects the true BCVAP population
15 of SD7?

16 A So here's the trouble, because when you're talking in
17 those terms, now you're inserting margin of errors in
18 confidence interval. And that's a frequentist approach to
19 statistics, in which what the confidence interval cannot tell
20 us what the underlying true population parameter actually is.
21 It's just telling you whether the underlying true population
22 parameter falls within the confidence interval. So...

23 Q And the point estimate doesn't tell us what our true
24 underlying population is?

25 A It's our best approximation given the data, but we still

1 didn't know the true underlying value. It's a sample. It's
2 not an enumeration of the population.

3 Q Can we quantify the error associated with disaggregating
4 block group level data down to the block level?

5 A Again, I guess, maybe I'm not understanding your use of
6 error as it is -- are we talking about like if someone
7 disaggregates using like the wrong cell, the wrong column, such
8 as total Voting Age Population instead of BVAP? Is that the
9 kind of error you are talking about?

10 Q No. I'm referring to the overall process of having to
11 take block group level data and allocate that at the block
12 level when we do not have any block level CVAP data.

13 A Well, we're allocating based on BVAP. And if you use a
14 consistent manner of doing it across all the blocks, then we
15 don't change our approach midway, then we get a consistent
16 estimate.

17 Q Do we know that the allocation of Voting Age Population is
18 the same as the Citizen Voting Age Population?

19 A What do you mean by allocation?

20 Q Well, you're saying you're comparing the block group level
21 CVAP data with the VAP data at the block level, correct?

22 A Yes.

23 Q And that relies on the assumption that Citizen Voting Age
24 Population data at the block level is apportioned similarly to
25 just Voting Age Population data, correct?

1 A It doesn't assume it. That's how we're disaggregating it.

2 Q Isn't that an assumption that your disaggregation methods
3 relies on?

4 A What is the exact assumption? I just described -- we just
5 described the disaggregation. What is the precise assumption?

6 Q What reason do we have to believe that the distribution of
7 Voting Age Population at the block level mirrors at -- of the
8 Citizen Voting Age Population at the block level?

9 A Well, we don't have that data. That's why we're using the
10 sample. And so we're using the BCVAP estimate and then we're
11 just allocating to BVAP. If we had that data, the census --
12 had that citizen question, we wouldn't be doing all this
13 disaggregation, right, in this way.

14 Q Is there additional uncertainty from assuming that Citizen
15 Voting Age Population data is allocated similarly at the block
16 level to Voting Age Population data?

17 A Well, when you say similarly, it depends what kind of
18 disaggregation method you use. If you use an overall
19 citizenship rate, then you're making that assumption. But in
20 this case, again, I said you're allocating BCVAP by
21 block-to-block group ratio of BVAP. So I'm not using, you
22 know, total citizenship or citizenship rate, which assumes
23 that, you know, there's even distribution across the different
24 blocks and groups.

25 Q Do we know that the Black Citizen Voting Age Population is

1 distributed similarly to the Black Voting Age Population at the
2 block level?

3 A Could you repeat that again? Sorry.

4 Q Do we know that at the block level that the Black Citizen
5 Voting Age Population is distributed similarly to the Black
6 Voting Age Population at the block level?

7 A Well, we don't know the BCVAP at the block level. That's
8 why we're disaggregating. So I'm not sure I understand your
9 question.

10 Q Okay. Do you talk about this disaggregation issue
11 anywhere in your report?

12 A Which disaggregation issue?

13 Q Never mind.

14 I'd like to pull up a section of your report. Could we
15 pull up page 13 of Plaintiffs' Exhibit 14?

16 And could we blow up paragraph 32, please?

17 Dr. Oskooii, could you read out loud the first two
18 sentences in this paragraph?

19 A Sure.

20 However, Mr. Fairfax's aim is not to determine BCVAP
21 counts at the bloc-group level, where larger margin of error --
22 in parenthesis MEO -- are often observed due to the smaller
23 sample size. Instead, Mr. Fairfax is computing CVAP
24 proportions at a significantly larger geographic scale, namely
25 State senatorial districts.

1 Q Thank you.

2 A Sure.

3 Q But if we have a split block group between Districts 2 and
4 7, don't we have to know how many people there are to allocate
5 between Districts 2 and 7?

6 A Yeah. We would have to know -- in this case, if we're
7 doing BCVAP, the BVAP at the block level and also the block
8 group BVAP count.

9 Q What I'm getting at is why are we not just focusing on the
10 error margin for the individual split block group that we're
11 having to allocate to the block level?

12 A Why you're not just focusing on that?

13 Q Yes.

14 A Because that's not representative of the error margin for
15 the Senate SD7, which is a much larger geographic unit.

16 Q But you're only focusing on how to allocate the reported
17 Citizen Voting Age Population in that split block group?

18 A Well, I guess depends which kind of allocation technique
19 you're using.

20 The way Redistricting Data Hub for example does it is you
21 take all the block group and disaggregate them to the blocks
22 using the particular groups as block-to-block group ratio.

23 Dr. Trende uses yet another technique, which me and you
24 talked about, about whether it's method 5 or 6, whether, you
25 know, and where he just says, okay, let's just look at the

1 block groups that are split, and he uses a function that's
2 really used for split precinct analysis. And he tries to
3 disaggregate only those to compute his CVAP estimates.

4 Q Okay. So in this paragraph 32, what I understand you to
5 be saying, and feel free to correct me, is that when we're
6 looking at a geographic unit as big as a Senate district with
7 140,000 people, the sample has increased so much that the
8 margin of error has decreased compared to the margin of error
9 at the block group level; is that fair?

10 A Yeah. I think that's a fair representation, yes.

11 Q So my question is: When we're just looking at the split
12 block groups, we're not using that 140,000-person sample size,
13 correct?

14 A Yeah. But you calculating margin of error for the Senate
15 district, not the block group. So I'm not sure.

16 Q But we're focused on how to allocate the block group level
17 data to blocks that are split between two districts?

18 A Yes.

19 Q Why is the 140,000-person sample size relevant to that?

20 A Well, because part of the reason you're doing this
21 disaggregation is to compute the Citizen Voting Age Population
22 by race and ethnicity proportion for the district. You're not
23 just saying, oh, I'm just going to give you margin of error for
24 just this one bloc, because that's not the ultimate
25 calculation. That's just a building, for lack of better word,

1 building block of a larger thing that we're calculating.

2 Q Do you agree that there are many block groups in Senate
3 District 7 where the margin of error includes zero?

4 A I believe that's something Dr. Trende mentioned when he
5 tried to cast doubt or appears to cast doubt about the ACS.
6 Although, I've heard him many times before say ACS is highly
7 reliable, and he uses it.

8 Q Do you dispute that there are block groups where zero
9 population is included in the margin of error?

10 A I don't have any reason to.

11 Q So do you agree that it's possible that we're allocating
12 zero citizens in a situation with a split block group?

13 A Well, we're not relying on the margin of error in our
14 disaggregation. We're relying on the counts at the block group
15 level for citizenship, in this case, BCVAP, and then we're
16 relying on the enumeration count of BVAP and its ratio from
17 block-to-block group level, so that's a different thing.

18 Q Do you know how many block groups are included in whole or
19 in part in Senate District 7?

20 A I don't recall the precise number, but I think Dr. Trende
21 mentions that.

22 Q If I told you it was 119, would that sound about right?

23 A I'm not sure if -- you're saying 119 are split?

24 Q Block -- block groups included in whole or in part?

25 A Oh, okay. Thank you. Thank you for clarifying. I was

1 going to say I thought you meant 119 are split.

2 No. I don't have reason to doubt that number.

3 Q Do you know how many block groups are split?

4 A Like I said, I don't recall the specific number.

5 Q Would about a third of the block groups sound right?

6 A Again, I don't recall. Is that what Dr. Trende claims?

7 Q So with each of these splits, split block groups, are we
8 having to guess where the black Citizen Voting Age Population
9 is if it's either on the side that's included in senate
10 District 7 or the side that's not?

11 A What do you mean by guess?

12 Q Well, we don't know the BCVAP data at the block level,
13 correct?

14 A Right. That's why we allocated it using BVAP, and we know
15 the concentration of BVAP in each block and whether those
16 blocks are inside or outside the district.

17 Q But we're assuming that at the block level, the BVAP data
18 is apportioned similarly to the BCVAP data, correct?

19 A Well, once again, we don't have BCVAP block data, so I'm
20 not sure what you're implying.

21 Q So we have to guess, right?

22 MR. GENBERG: Asked and answered. Objection.

23 THE COURT: It's not been answered. But it's been
24 asked.

25 THE WITNESS: Well, it's not -- we are not guessing.

1 We're allocating. We're using technique of allocation that is
2 sensible from block group to blocks as I had described in my
3 report and also examples that we have today.

4 BY MR. SEISS:

5 Q So Mr. Fairfax's point estimate for Senate District 7 was
6 50.16 percent, and your estimate was 50.11 percent, correct?

7 A Correct.

8 Q Do you know why your estimate is different?

9 A He does not use the RDH disaggregated data, although one
10 could use it obviously. And I believe his disaggregation is
11 through the Maptitude software where the Maptitude software
12 does it. And I am not 100 percent -- or actually too familiar
13 with how precisely Maptitude the kind of formula they use to
14 disaggregate.

15 Q Do you know what definition of black that Mr. Fairfax used
16 in his BCVAP calculation?

17 A I believe he says non-Hispanic black, alone, or in
18 combination.

19 Q Do you know if his definition includes black in
20 combination with American Indian and -- I forget the exact
21 language.

22 A I think that was something that Dr. Trende responded to
23 that the reason he left out black with combination with
24 American Indian and Alaskan and Hawaiian was because
25 Mr. Fairfax had not included it. That's his reason. So I

1 assume then Mr. Fairfax did not include it.

2 Q And you testified earlier that if that third black
3 population was included in the definition, that the BCVAP
4 estimation should be higher?

5 A To the extent those populations exist, yes, it's simple
6 logic. You have more of a count.

7 Q But you didn't use -- you used the three-part definition,
8 correct?

9 A Three-part definition?

10 Q You included the black plus Native American and Alaskan in
11 your BCVAP estimation, correct?

12 A Yes. That is included, yes.

13 Q So the population should have been bigger than
14 Mr. Fairfax's estimation?

15 A Well, we're not relying on the same RDH disaggregated
16 data. So, again, I said I don't know precisely how Maptitude
17 disaggregates. But we both get over 50 percent despite
18 different perhaps disaggregation differences.

19 Q So you'd agree that different disaggregation methods can
20 lead to different CVAP point estimates?

21 A I think that's been made clear in this case, because
22 Dr. Trende somehow always gets below 50 percent despite using
23 like all these different methods. And when you use independent
24 data as I have used, I didn't come up with my own
25 disaggregation technique.

1 In fact, the data I use is used by experts in the area of
2 redistricting if they rely on Dave's Redistricting application,
3 because Dave's Redistricting application relies on RDH data for
4 its CVAP counts and calculations. So, you know, of course,
5 then, you know, to answer your question, you use different
6 disaggregation techniques, you could have different point
7 estimates.

8 Q How would you advise a jurisdiction on these different
9 disaggregation methods?

10 A Well, I would advise them to do what RDH does in the sense
11 that when you're considering how to disaggregate by race and
12 ethnicity, you should look at, you know, citizenship by race
13 and ethnicity at the block group level, and then you should use
14 the corresponding race and ethnicity Voting Age Population the
15 block-to-block group ratio.

16 Q So I will represent to you that the Alabama Legislature
17 uses Maptitude. And let's say that Maptitude came out with a
18 point estimate of 49.9 percent, and Redistricting Data Hub came
19 out with your point estimate of 50.11 percent. How would you
20 advise the Legislature to handle that situation?

21 THE COURT: You may answer.

22 THE WITNESS: Well, I would first look into Maptitude
23 software to see precisely how they're disaggregating. And then
24 once I have that information, I can advise the Legislature and
25 say, hey, listen, you know, this is perhaps a better method and

1 so on and so forth.

2 BY MR. SEISS:

3 Q What if the situation were reversed and RDH reported a
4 point estimate of 49.9 percent, but a different disaggregation
5 method reported a point estimate of above 50 percent?

6 A Same advice. I would say, hey, I need to look at, you
7 know, the disaggregation method that this other method
8 produces, and, you know, maybe that method is artificially, you
9 know, raising it. And in that case, we would want to know
10 what's the logic behind the disaggregation and how it's
11 implemented.

12 Q We cannot know the true BCVAP value of Senate District 7
13 in Plan 1 using ACS data, correct?

14 A You mean the underlying truth, because we don't have an
15 enumeration of the Citizen Voting Age Population in SD7.

16 Q Yes.

17 A That's right.

18 Q Let's say we have a poll where a politician's approval
19 rating is 50 percent, and our error margin is plus or minus
20 2.5 percent at 90 percent confidence.

21 Can you explain what the confidence interval tells us in
22 that situation?

23 A So I would say that the point estimate, as you said, is
24 50 percent. And then that the confidence interval would be
25 adding 2.5 percent to 50 percent, so the highest bound of the

1 90 percent confidence interval would be 52.5 percent.

2 And the lowest bound, you subtract by the point estimate,
3 it would be 47.5 -- I'm getting tired -- and that would say
4 that the underlying truth, you know, 90 percent confidence, the
5 underlying truth is in this range, but the point estimate is
6 50 percent.

7 Q Would you agree that that confidence interval tells us
8 that if we conducted the poll 100 times, that we would expect
9 90 of those polls to have the true approval rating within
10 2.5 points either side of our point estimate?

11 A That's one way to explain confidence intervals. And I
12 think you showed me a statistics book that says we shouldn't be
13 doing that, because, you know, it's not quite accurate.

14 But for simplicity's sake, we could say something like
15 that, because in reality, you're not going to run a poll 100
16 times.

17 Q Do we know whether this hypothetical poll that we're
18 talking about is one of the 10 percent where the true value
19 falls outside of the confidence interval?

20 A Sorry. What was that again?

21 Q So we're talking about this poll of a politician's
22 approval rating?

23 A Yes.

24 Q At 50 percent with a 2.5 margin of error either side?

25 A Very high approval rating, yes.

1 Q Yes. Do we know whether this poll result is one of the
2 10 percent as in not the 90 percent from the confidence
3 interval, whether it's one of the 10 percent where the true
4 value falls outside of the 2.5 error margin either way?

5 A That's a very confusing -- with all due respect --
6 confusing way of putting it.

7 What we could say is we're 90 percent confident that the
8 true unknown approval rating is somewhere in that range of the
9 confidence interval.

10 Q But that poll could be one of the 10 percent where the
11 true value is not within the confidence interval, correct?

12 A Well, the reverse of that is that 10 percent of the time,
13 the true value would be outside that range.

14 Q How do we know whether this one poll is one of the 90 or
15 the 10?

16 A Well, that's not how the question is asked. You have only
17 one poll, and the whole point of, you know, talking about what
18 the probability is for the underlying true value to fall in is
19 to compute that confidence interval. We could be wrong
20 10 percent by the time in the sense that we're only 90 percent
21 as you said confident that the true value falls within that
22 range. So by definition, 10 percent, it could not fall in that
23 range. It could be higher, it could be lower, you know.

24 Q So there's a 10 percent chance that the true value lies
25 outside the 47.5 to 52.5 range?

1 A To very simplify because -- to simplify, we're only
2 90 percent sure -- that means we're 10 percent not sure -- that
3 the true value falls within that range.

4 Q Do we know where in the confidence interval the true
5 approval rating falls?

6 A Confidence -- when you use confidence intervals, you
7 cannot make statements about the probability of where exactly
8 the true value is. All you can say is, you know, whether the
9 underlying true value falls in that range.

10 Q So could we rule out the possibility that the politician's
11 true approval rating is 52 percent?

12 A Well, the 52 percent is within your confidence interval,
13 right?

14 Q Yes.

15 A So the true value could be 52. -- 52 percent based on the
16 confidence interval that you calculated.

17 Q What about 53 percent?

18 A You're 90 -- I would say we're 90 percent confident that
19 it's not outside that range, so 53 would be outside that range.

20 Q Does this same reasoning apply to the error margins
21 associated with CVAP data?

22 A What precise reasoning? This -- the way you interpret
23 confidence intervals?

24 Q Yes.

25 A So the way you interpret confidence intervals with CVAP,

1 because it is also sample, you say that I'm 90 percent
2 confident that the true unknown value falls within that range,
3 same thing.

4 Q So let's take Dr. Trende's reported confidence interval of
5 plus or minus 2.6 percent at 90 percent confidence.

6 We don't know where in the confidence interval the true
7 BCVAP percentage falls, correct?

8 A We don't, but the point estimate is what the data is
9 telling us, and it's the best estimate. It's what we're most
10 confident of because that's what the data is telling us.

11 Q Can we rule out the possibility that the true BCVAP value
12 of SD7 in Plan 1 is below 50 percent?

13 A But that's not how the interpretation -- all we can say is
14 whether it's a 90 percent probability that the true value falls
15 within that range.

16 Q Are you aware of any BCVAP estimate in this case that is
17 not within 2.6 percent of 50 percent?

18 A Again, I didn't see any other reports, so I can't speak to
19 things that I didn't see.

20 Q Your estimate of 50.11 percent is within 2.6 percent of
21 50 percent, correct?

22 A According to who?

23 Q If you subtract 2.6 -- what is the confidence interval if
24 our point estimate is 50.11 and our error margin is 2.6 percent
25 either side?

1 A Assuming that's even an accurate error margin.

2 Q Yes.

3 A Then in that case, we simply add -- you said 2.6, I
4 believe.

5 Q Yes.

6 A To 50.11 to get the highest bound of the confidence
7 interval, and you subtract it by the point estimate to get the
8 lowest bound of the confidence interval based on the confidence
9 level that you selected.

10 Q So 50 percent is included in that confidence interval
11 associated with 50.11 percent?

12 A Yeah. That's our point estimate.

13 Q And is 50 percent within the confidence interval of
14 Mr. Fairfax's estimate of 50.16 percent?

15 A That's his point estimate.

16 Q That was a yes?

17 A Well, yeah, that's the point estimate. So, you know, if
18 that's the point estimate, it falls within the confidence
19 interval if you calculated it, because the confidence interval
20 is adding the margin of error to the point estimate and
21 subtracting it from the point estimate.

22 Q I'm asking whether 50 percent falls within the confidence
23 interval associated with a 2.6 percent margin of error. So add
24 2.6 to 50.16 percent and subtract 2.6 from 50.16 percent. Is
25 50 percent included in that range?

1 A Yeah, because, again, that's the point estimate.

2 Q I'd like to pull up pages 10 and 11 of Plaintiffs'
3 Exhibit 6, which is Mr. Fairfax's report, and if you could
4 focus on paragraph 19, which should span the two pages.

5 A Just a point of clarification. Which report is this?

6 Q This is Mr. Fairfax's report.

7 Could you go to paragraph 19? Looks like I have got the
8 page number wrong.

9 This is Mr. Fairfax's rebuttal report. I apologize.

10 A This is the report that I did not see?

11 Q Well, I think you saw it at the deposition, but, yes,
12 that's correct.

13 A Okay.

14 Q Can you see that on the screen, Dr. Oskooii?

15 A I see a paragraph 19 it seems and then a second section of
16 -- I assume it's paragraph 19 or.

17 Q Yes. That's the next page. This paragraph spans
18 two pages.

19 A Oh, okay. I got you.

20 Q Do you agree with Mr. Fairfax's statement that if you have
21 a point estimate above 50 percent that there's a greater chance
22 that the true BCVAP value is above 50 percent than it is below
23 50 percent?

24 A Well, one thing I learned early in academia is never take
25 a statement in a larger report and evaluate it, because I don't

1 know what the context of this statement is.

2 Q Is there a context that would make you agree with this
3 statement?

4 A I mean, it's hard to think of it right now as I'm sitting
5 here. I am sure there are reasons to disagree if I know the
6 context or agree, for that matter.

7 Q So not knowing the context, do you disagree with the
8 statement?

9 A Well, I don't know if I should agree or disagree, because
10 I don't know the context.

11 Q So let's say we have a --

12 A Because I didn't read this report. You showed me like
13 literally a section of it, and in the deposition, I also said I
14 don't know what the context is.

15 Q Okay. Regardless of Mr. Fairfax's statement here, if you
16 have a point estimate above 50 percent, does that mean that
17 there is a greater chance that the true BCVAP value is above
18 50 percent than it is below 50 percent?

19 A Sorry. Say again.

20 Q Just based on a point estimate above 50 percent, does that
21 mean that it is more likely than not that the true BCVAP value
22 is above 50 percent?

23 A What statistical approach are we taking?

24 Q Just the point estimate.

25 A So you're agnostic as to what statistical approach, just

1 the point estimate?

2 Q Yes.

3 A Well, I can just tell you that's the point -- that's what
4 the data is telling us. That's all I can say.

5 Q So it does not tell us that it's more likely than not that
6 the true BCVAP value is above 50 percent?

7 A You would have to give me more context and more
8 information. That's why I said, what is the statistical
9 approach here?

10 Q Are you saying that there is a difference between
11 different statistical approaches?

12 A Yes, absolutely.

13 Q Could you explain that?

14 A Well, we have a frequentist approach to statistics, and we
15 have a Bayesian approach to statistics.

16 Q Which of those approaches allows us to -- never mind.

17 I think you've testified throughout today that the point
18 estimate is the best approximation of the underlying data; is
19 that fair?

20 A Yeah.

21 Q So the point estimate is what the data is showing us?

22 A That's what the data is telling us, yes.

23 Q The data being used to generate the point estimate is just
24 the sample that we took, correct?

25 A Yeah. It's the sample. Absolutely.

1 Q So if we conducted the ACS again and surveyed a different
2 set of people within Senate District 7, our best approximation
3 could be different, correct?

4 A Sorry. Say again.

5 Q If we ran the ACS again and surveyed a different set of
6 people within Senate District 7, could our point estimate be
7 different?

8 A It could.

9 Q So say we have a poll of likely voters in the state of
10 Alabama for the presidential race, and we get that poll, and it
11 shows 65 percent for President Trump, and then at the same
12 time, we run a different poll with a different sample, we could
13 get a different best approximation, correct?

14 A Well, it depend. You know, it depends on the weighting
15 technique, what the response rate is, how they're identifying
16 likely voters. So those are different factors that could also
17 play a roll in you getting different point estimate -- if you
18 do get the different point estimate.

19 Q What if we controlled for all those factors and just got a
20 different sample, could we get a different point estimate?

21 A Well, so you ask the same people basically.

22 Q No.

23 A Well, you just said control for those factors. So that by
24 definition we have the same people, right, because it's the
25 same responses, same likely voters, same sample.

1 Q Can't we get just as representative of a sample from
2 different parts of a population?

3 A If you use random sampling.

4 Q So let's say we took two different random samples at the
5 same time, could we get different best approximations?

6 A You could get different point estimates.

7 Q So if we conducted the ACS again, our best approximation
8 of the BCVAP of Senate District 7 in Plan 1 could be under
9 50 percent, correct?

10 A Hypothetically, or it could be over 50 percent. The point
11 is that I think -- this is what people get caught up with
12 confidence intervals -- you can usually do not -- it's not
13 feasible for you to keep running the same study controlling for
14 all the same factors that you said.

15 Q Would your opinion in this case change if your point
16 estimate came out as 49.9 percent?

17 A I would still stand by the point estimate being the best
18 estimate. If that's what the ACS said, I would say the same
19 thing. Just because it's over 50 percent doesn't change my
20 opinion.

21 Q Would you say it's more probable than not that the true
22 BCVAP value is above 50 percent if you had a point estimate of
23 49.9 percent?

24 A Am I bringing into consideration other information?

25 Q Well, you've brought that other information into

1 consideration with your conclusion in this case, correct?

2 A Yes. So am I doing the same thing?

3 Q Yes.

4 A Yeah. I would still say it just below 50 percent
5 probably, because, again, that's the point estimate is the best
6 estimate we have, and the differential citizenship rates didn't
7 rise to a point where you would get a point estimate that's
8 higher.

9 Q What does best mean in best approximation?

10 A This is the value that -- I don't know how to describe --
11 best represents the -- or describes the composition of the
12 jurisdiction. This is what the data is essentially telling us.

13 Q Do we know how good of an approximation it is?

14 A Yeah. I mean, I think I see it as a highly reliable
15 survey that on a yearly basis surveys 3.5 million households
16 and you're aggregating it by five years, so you're getting
17 different averages, and then you're aggregating the average.
18 So it gives me a lot of confidence that that's -- the point
19 estimate is good.

20 Q So your point estimate was 50.11 percent correct?

21 A Yes.

22 Q Can you tell us how much better of an approximation
23 50.11 percent is than 49.9 percent?

24 A Where did you get 49.9 percent?

25 Q I'm just giving you a hypothetical.

1 A Well, that's not my point estimate. The point estimate is
2 50.11. That's the best approximation.

3 Q So best is a relative term, right?

4 MR. GENBERG: Objection. It's vague.

5 THE WITNESS: I don't understand.

6 THE COURT: Can you rephrase the question?

7 BY MR. SEISS:

8 Q Does best imply that the point estimate is better than
9 other values, other approximations of the true BCVAP value in
10 SD7?

11 A I guess another way to say it, I'm most confident the
12 point estimate because that's what the data is telling me as
13 opposed to other values that are not point estimates. I am not
14 as confident in them.

15 Q How much less confident would you be in a point estimate
16 of 50.12 percent?

17 A In a point estimate?

18 Q You say that 50.11 percent is the best approximation of
19 the underlying population, correct?

20 A Given what the data -- this is what the data is telling
21 us.

22 Q How much worse of a guess is 50.12 percent?

23 A Well, you just said it's a guess. It's not a point
24 estimate. So I would still rely on the point estimate.

25 Q 50.11 percent is the best guess?

1 A That's the point estimate. That's what the data -- when
2 you compute it is telling us.

3 Q If I were to tell you that I think the true BCVAP value in
4 SD7 is 50.12 percent, what would you say to me?

5 A I would say, on what basis are you saying that?

6 Q We can't know how good of an approximation the point
7 estimate is because we don't know the true value, correct?

8 A No. We know it based on what the data is telling us.
9 That's why it is the best estimate, because that's what the
10 data is telling us.

11 Q Isn't your position that relying on only the point
12 estimate is sufficient for *Gingles* 1?

13 A Well, again, *Gingles* 1 is more than just saying whether a
14 district is majority or not, describing district, there's also
15 the reasonably compact factor that goes in there. So this is
16 just one component of *Gingles* 1.

17 Q For that one component, do you believe that a point
18 estimate is sufficient?

19 A Yeah. I believe I have said that multiple times today for
20 all the reasons that I offered that this is our -- this is what
21 the data is telling us and what is standard practice.

22 Q What if -- can the point estimate alone answer the
23 question of whether it is more likely than not that SD7's true
24 BCVAP is above 50 percent?

25 MR. GENBERG: Asked and answered.

1 THE COURT: He can answer.

2 THE WITNESS: Again, what statistical approach are we
3 using?

4 BY MR. SEISS:

5 Q Well, how about you go through both the frequent test and
6 Bayesian approaches?

7 A Okay. So the frequentist approach relies only on the data
8 at hand to make statements about the underlying truth that we
9 assume is a fixed value.

10 The Bayesian approach is a different approach to
11 statistics in that we not only rely on the data at hand, but we
12 also bring in other relevant information about the question
13 that we're trying to study, which in Bayesian approach, they
14 call it priors, okay?

15 In fact, in an ecological inference, $R \times C$, that's a
16 Bayesian approach of RPV analysis where you have a prior, you
17 have the data, and then you have a posterior distribution,
18 which takes into consideration prior knowledge of what you're
19 studying and also the data to update your beliefs about the
20 underlying truth, which in Bayesian world, is not fixed. It's
21 not a target that you're hitting like, you know.

22 So that's the difference between a Bayesian approach.

23 So in a Bayesian approach when it comes to
24 racially-polarized voting as a general model, you start with
25 the presumption that voting between racial ethnic groups is

1 50/50. And as you get data, as you get more data, you update
2 those beliefs.

3 But you could also have other priors. That's just one
4 example. You could have other priors that you bring into bear
5 into your analysis or your conclusions, I should say.

6 Q Did you conduct a Bayesian analysis in this case?

7 A I didn't conduct a frequentist or Bayesian analysis. I
8 just reported the point estimate, and Dr. Trende used a
9 frequentist approach in his report.

10 Q If you were reporting confidence intervals or error
11 margins, does that indicate using a frequentist approach?

12 A Yes.

13 Q So if Mr. Fairfax calculated the margin of error for his
14 SD7, he was engaged in a frequentist approach?

15 A I would presume so. You would have to ask him that,
16 because you could have credible intervals as well, which that
17 would be a Bayesian approach.

18 Q So using a frequentist approach, when the point estimate
19 is above 50 percent and 50 percent is contained in the
20 confidence interval, what level of confidence can we have that
21 SD7's true BCVAP value is above 50 percent?

22 A This is a Bayesian approach or frequentist approach?

23 Q Frequentist?

24 A All you can do in a frequentist statistics is just make
25 probabilistic statements about whether the unknown true value

1 falls within the range of outcomes that you calculated based on
2 a confidence level. You cannot assign distinct probabilities
3 to any part of the interval.

4 MR. SEISS: Your Honor, if I can have a moment.

5 THE COURT: You may.

6 MR. SEISS: No further questions. Thank you,
7 Dr. Oskooii.

8 THE COURT: All right. Do plaintiffs have redirect?

9 MR. GENBERG: We do not, Your Honor.

10 THE COURT: Okay. All right. Is there any reason I
11 may not excuse Dr. Oskooii?

12 MR. GENBERG: No, Your Honor.

13 MR. SEISS: No, Your Honor.

14 THE COURT: All right. Dr. Oskooii, thank you for
15 being with us. And you are excused.

16 (Witness excused.)

17 THE COURT: All right. Plaintiffs' next witness?

18 MR. UNGER: Your Honor, plaintiffs we call Evan
19 Milligan.

20 EVAN MILLIGAN

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

23 THE COURTROOM DEPUTY CLERK: Thank you. If you will
24 be seated. Speak loudly and clearly into the microphone.
25 State your name and spell it for the Court record.

1 THE WITNESS: My name is Evan Milligan, E-V-A-N,
2 M-I-L-L-I-G-A-N.

3

4 DIRECT EXAMINATION

5 BY MR. UNGER:

6 Q Good afternoon, Mr. Milligan.

7 A Good afternoon.

8 Q How old are you?

9 A I'm 43.

10 Q When it comes to race and ethnicity, how do you identify?

11 A Black American.

12 Q Where do you live?

13 A I live in Montgomery County in the southern end of the
14 central part.

15 Q How long have you lived at that address?

16 A Well, should I say the address or --

17 MR. UNGER: Plaintiffs and defendants stipulate to
18 your address.

19 MR. WALKER: We do.

20 BY MR. UNGER:

21 Q No. You don't need to say your address.

22 A For two years.

23 Q And how long have you lived within Montgomery County
24 altogether?

25 A Off and on since about the age of 5. We moved there from

1 Houston, Texas, where I was born. Around the time, I was in
2 seven -- I'm sorry -- second grade. But I had been spending
3 summers there and even a year there when I was younger.

4 We moved there because that's my mother's hometown, and we
5 moved there to do care giving for her mom and our two
6 grandparents.

7 So we first moved from Houston to Birmingham and lived --
8 lived here for a few years. Then got to Montgomery by the time
9 I was second grade. I pretty much lived there since then with
10 the exception of four years at Birmingham-Southern College for
11 undergrad. About a year spent living in South Africa as a
12 rotary ambassadorial scholar. And then sometime spent in New
13 York where I attended law school.

14 Q Are you registered to vote at your current address?

15 A I am.

16 Q Do you know what Senate district you're in?

17 A District 26.

18 Q Okay. Do you know who your senator is?

19 A Senator Kirk Hatcher.

20 Q Okay. Do you know what his racial background is?

21 A Black American.

22 Q Okay. Is Senate District 25 also in the Montgomery area?

23 A Yes.

24 Q Okay. Do you know who represents District 25 in the
25 Alabama Senate?

1 A Senator Barfoot.

2 Q Okay. Do you know Senator Barfoot's racial background?

3 A White American.

4 Q Where did you go to high school?

5 A I went to high school at Sidney Lanier High School, and I
6 was a part of the magnet program there that was called the
7 Lanier Academic Motivational Program.

8 Q How would you describe the racial demographics of your
9 high school?

10 A So Sidney Lanier was essentially sort of split between
11 non-magnet school and then the magnet program -- I'm sorry.
12 The non-magnet part of the school and the magnet program.

13 So the non-magnet what was called traditional public
14 school is about 1,000 students total, and I would say at least
15 90 percent were black. The magnet program was about 50 percent
16 white, 50 percent non-white. And within the non-white, a
17 contingent black and Asian students were the largest ethnic
18 groups there.

19 Q While you were in high school, what did you observe about
20 how race impacted opportunities for students of different
21 racial background in the Montgomery area?

22 A I experienced something that started when I was in third
23 grade at Forest Avenue. I was a part of the first magnet --
24 the first third grade class in the city. And this was a time
25 when Montgomerians were trying to understand what an integrated

1 public school would look like.

2 So there were -- as students, we were put in positions
3 that our parents didn't even really know how to navigate. And
4 one of the things I remember was in the magnet program there
5 was some teachers, not all, who would refer to the non-magnet
6 students as traditional students, and some might say it in a
7 disparaging way.

8 The racial demographics of that Forest -- of that
9 elementary school looked a lot like what I described about the
10 high school.

11 So that was something I was sensitive to early on because
12 I lived in the neighborhood where Forest Avenue were located.
13 So I knew you the students who were not in the magnet program,
14 as well.

15 I only bring up that story to flesh out that public
16 non-magnet traditional neighborhood schools as they became
17 blacker, they were considered to be substandard by, you know,
18 as far as talking points of things that I would hear in the
19 community.

20 And this was something that had a negative impact on my
21 friends who weren't in the magnet programs.

22 So that was -- that was going on. In addition to that,
23 you had the founding and the launch of predominantly white
24 private Christian academies in Montgomery following the Brown
25 vs. Board decision. And those were schools by the time I was,

1 you know, matriculating through Montgomery Public School
2 System, they were considered to be the sort of highest value of
3 education in the city, also were predominantly.

4 MR. WALKER: Your Honor, I would like to object to
5 hearsay by this witness. If he wants to testify to his own
6 experiences, that's fine. But I believe he is testifying to
7 hearsay.

8 MR. UNGER: Your Honor, Mr. Milligan is testifying to
9 the racial climate of the school system in which he navigated
10 his K-12 years.

11 THE COURT: I think what he is testifying to is to his
12 understanding, which I think is allowed. I don't think it's
13 admissible for the truth of any out-of-court statement. But if
14 he's going to tell you about what his experiences and
15 understanding is, I think that's allowable.

16 BY MR. UNGER:

17 Q Mr. Milligan, could you describe what the other
18 educational options available to students in your time in
19 schools in Montgomery were?

20 A So I mentioned the magnet schools.

21 Q Uh-huh.

22 A I mentioned the neighborhood non-magnet schools. I
23 mentioned the private predominantly white Christian academies.
24 And then there were also a few private predominantly black
25 Catholic schools that have since mostly closed in the city.

1 So those were the four options that were available at the
2 time.

3 Q Growing up, did your family go to church?

4 A We did attend church when we first got to Montgomery. We
5 attended Hall Street Baptist Church, which was the church my
6 mother grew up. And that was how I was first introduced to
7 Johnnie Carr, whose son was a part of the lawsuit that later
8 desegregated Sidney Lanier where I attended high school.

9 So that's where we attended church for a few years. Then
10 we moved to Dexter Avenue Baptist Church. My father became a
11 deacon there, and we spent the most time at Community
12 Congressional United Church of Christ.

13 Q I would like to talk a little bit about Dexter Avenue
14 Baptist Church. Can you describe where it's located within the
15 city of Montgomery?

16 A So Dexter is located on Dexter Avenue. That's a very
17 historic landmark street in the state, really in the world. We
18 have -- that's the site where the telegram was sent that
19 started the Civil War. That's where Mrs. Parks boarded the bus
20 and many other pivotal historical events.

21 And those events were often discussed and, you know,
22 depicted on murals and art work inside of Dexter Avenue Church.
23 So that was the place where I was able to hear an extension of
24 the stories that I would hear at home from the elders in our
25 family that we were care giving for and my parents when they

1 talked about the development of the Civil Rights movement in
2 our city.

3 And also at Dexter, because it's so approximate to the
4 state capital, that's an area that was often preferred as a
5 site for cultural activities, for political protests.

6 So as members of that church, I remember, you know,
7 sitting on the front -- the front steps of the church and
8 seeing political rallies that were inspiring, and then some
9 that were, you know, more frightening.

10 Particularly, I'm thinking about one parade I believe in
11 the late '80s that was a protest march for Ku Klux Klan
12 chapters in the state. And that was my first time actually
13 seeing the hooded robes and sort of seeing some of the symbols
14 that I had heard some stories about from the elders in my
15 family.

16 Q Let's talk about your professional background.

17 Over your career, what kind of jobs have you had?

18 A I've worked mainly in the non-profit sector here in
19 Alabama, working on you know, everything from poverty
20 alleviation, child care advocacy, criminal defense issues, and
21 then more recently, access to the ballot and voting rights.

22 Q And have you -- in your professional career, have you
23 played -- have you taken on organizing roles or managerial
24 roles, or what other kind of roles have you had to take on in
25 your job duties?

1 A So I've served as an organizer, a paralegal, a law fellow.
2 I'm most recently executive director of Alabama Forward, which
3 is a coalition of groups committed to voting rights and really
4 diversifying the electorate and increasing the number of black
5 Alabamians and younger Alabamians committed to civic
6 engagement.

7 So there has been organizing research involved in all of
8 those positions. And then one thing that all of those jobs
9 have required me to do is spend a lot of time listening to
10 community members.

11 So I've facilitated well over 100 presentations. If I
12 start the clock when I was about 12 when my parents first
13 pushed me out to do volunteer work with the different groups
14 they were working with, between then and now, has been at least
15 100, you know, community meetings, virtual meetings, canvassing
16 experiences, and each one of these opportunities allowed me to
17 really get to know another element of our community that I
18 would have otherwise known.

19 Q Mr. Milligan, when you say our community, are you speaking
20 about organizing in Montgomery's black communities or --

21 A I'm talking about Montgomery's black communities, as well
22 as the state more broadly, but certainly Montgomery and the
23 Black Belt.

24 Q Okay. When in your organizing jobs, which state senators
25 would take your meetings?

1 A So the first memories I have of elected officials engaging
2 with the groups that I volunteered with was, you know, members
3 of the legislative black caucus. They were particularly
4 supportive of organization that I worked for as community
5 organizer called the Federation of Child Care Centers of
6 Alabama, FOCAL. And I actually started volunteering with them
7 when I was around 12, 13.

8 So in early community meetings, when I was in high school,
9 middle school, I remembered some of those senators and
10 legislative black caucus members coming to our church, coming
11 to the community meetings. And that trend continued as I've
12 done work in my adult career, the members of the Legislative
13 Black Caucus would be, you know, the most responsive to
14 outreach I've done and to outreach that the groups I've worked
15 with have done.

16 Q Do you remember any state senators in particular who would
17 visit in those meetings or have those conversations?

18 A Senator Vivian Figures, Senator Quinton Ross, Senator Hank
19 Sanders, and then more -- you know, over the last ten years, I
20 forget when he was first elected, but Senator Kirk Hatcher.

21 Q All those --

22 A Oh, and Senator Merika Coleman.

23 Q Were all the senators you just mentioned who would take
24 your meetings, were they all at some point representing your
25 home district, or were they from other districts?

1 A Several of those that I just named are from other -- other
2 districts.

3 Q Okay. And do you happen to know the racial background of
4 those state senators?

5 A Oh. All of the people that I just mentioned were black
6 American.

7 Q Okay. Did you ever reach out to the white state senators
8 who represent the Montgomery area?

9 A Yes. And the protocol that, you know, the way I was
10 trained as an organizer in working with groups like this is to
11 extend an invitation to really a diverse number of elected
12 officials and then at least invite them into a community
13 meeting or attempt to broker some kind of conversation and then
14 follow up with those who respond back.

15 So most consistently, those who responded back were
16 members of the Legislative Black Caucus.

17 Q To be clear, what happened following your outreach to the
18 white state senators representing the Montgomery area?

19 A From what I recall, me directly, there wasn't -- I didn't
20 have those relationships. So often, there wasn't a response
21 back.

22 Q Okay. If there's an issue facing black communities in the
23 Montgomery area and your understanding of the community that
24 you've gained through your career, who in the Alabama Senate do
25 folks reach out to?

1 A In the Senate, to -- you said issues facing black
2 Montgomerians?

3 Q Yes.

4 A Members of the Legislative Black Caucus.

5 Q Okay. Can you describe again where you live within
6 Montgomery County?

7 A So I live maybe about five miles south of the intersection
8 of Woodley Road and the Eastern Boulevard -- Southern
9 Boulevard. I'm sorry. It's just over the city line, so we
10 live in a small predominantly black neighborhood that's in
11 Montgomery County in a more rural, rural area.

12 Q What's the difference between your area now and where you
13 grew up in Montgomery?

14 A So I grew up in and around Interstate 65 and 85, the
15 intersection and the corridor there and west Montgomery. Those
16 are the places that I have spent the most time throughout my
17 childhood and adult life. And those are areas that due to the
18 way that the federal interstates were constructed, they are
19 dead ends and lots of one-way streets. And that part of the
20 city for most of my life that, you know, I remember had less
21 investment in development than the eastern side of the city and
22 the southeastern side.

23 So west Montgomery and in and around the 65, 85 corridor
24 predominantly black communities, older communities,
25 transportation is a little trickier, because, again, the way

1 that the interstates were constructed, they were laying on top
2 of communities. And so that meant that there aren't as many
3 through streets going north and south.

4 Now, where we live now was closer to the southeastern side
5 of the city where there are more options to navigate north to
6 south, as well as east to west.

7 And then as I mentioned before, the southeast and the
8 eastern sides of Montgomery have for most of my lifetime been
9 places where we see newer businesses, newer housing,
10 subdivisions being created.

11 Q You mentioned the impact of Interstate 65 and 85 on that
12 area where you grew up. What is your understanding of how they
13 came to be there?

14 A Well, when was a child and, you know, throughout my
15 childhood, you would hear elders -- I'm sorry if this is
16 breaking the hearsay rule, but I would -- the narrative that I
17 had from our community was that Interstate 65 and 85 were
18 constructed where they were constructed as a retaliation for
19 the gains and successes of the bus boycott as well as Brown v.
20 Board and all of those Civil Rights decisions that were coming,
21 you know, leading into the '50s and throughout the '50s.

22 And I didn't actually have confirmation of these stories
23 until I was about maybe 19. This was the first time I started
24 working with the Jubilee Community Center and where I work
25 there now as executive director part-time.

1 And one of the board members was a staff person, a
2 senior-level staff person with Montgomery city planning office.
3 And so I had a chance to tour that office one day, and they
4 showed me a part of the office where there was a map -- an
5 aerial photo from Montgomery from the mid '50s, and it was
6 about as large -- it would go up to that third star from the
7 ground there and was about as wide, and it basically shows the
8 period when Interstate 85 was being constructed.

9 And it reinforced what I had heard from the elders in my
10 community growing up, because one of the things that city
11 planning staff helped me understand was that there were options
12 with how that particular federal interstate was constructed.

13 There was a thing that was referred to as the yellow book.
14 So after Eisenhower passed the Federal Interstate Act, there
15 was a period of time where engineers developed maps and plans
16 of all the states of how to lay the different interstates.

17 And Montgomery's plan initially had interstate 85 lay
18 above Oak Park and the area where it was actually chosen to be
19 built. So there was an option.

20 And, you know, looking at both what I've heard and since
21 learned and looked at in research about the issue when
22 Montgomery -- when black Montgomerians found out what the plan
23 was to -- as far as building Interstate 85 in a way that
24 required the destruction of communities adjacent to ASU and
25 communities that had housed people that had played a pivotal

1 roll in the Montgomery Improvement Association, there was --
2 they were doing a lot of organizing to reach out to President
3 Kennedy, to reach out to federal level officials, local
4 officials to say this is going to harm our communities. And
5 it's even more expensive than your original plan.

6 However, despite their advocacy that -- you know, that
7 highway was laid there and caused the destruction of black
8 business districts and black residential areas.

9 Q Do you know if any state senators were involved in the
10 decision making at that time?

11 A Yes. So this is actually something that is ironic,
12 because I live in, you know, currently in Senate District 26,
13 and the senator at the time who was responsible was the former
14 -- he had been a state senator. Sam Engelhart was a plantation
15 owner from Macon County.

16 I had first heard about him from my cousin Gwen Patton,
17 who was an activist in SNCC and had been the first black SGA
18 president at Tuskegee University, so she knew a lot about the
19 gerrymandering case there and about some of the protests that
20 were taking place in Tuskegee in the '50s and the '60s.

21 So I had heard about Sam Engelhart's leadership on the
22 white citizens counsel and some of her experiences, but I
23 didn't know about his connection to that federal interstate
24 until later in life when I was able to do that research.

25 Q In your experience living in the Montgomery area, what

1 have you come to understand to be the economic drivers for the
2 region?

3 A So the commodities industry, agricultural industries, you
4 know, things that are produced from the wealth of the land and
5 the rivers, that's sort of the foundation for the economic base
6 there. Local, state, federal government, in particular at
7 Maxwell and Gunter Air Force bases, as well as all of the state
8 departments that are located there because it's the capitol
9 city.

10 Non-profits that plays a roll in servicing advocacy groups
11 and special interests. Auto manufacturing is more of a 21st
12 Century development, but that's been growing. And the
13 hospitals, as well.

14 Q And for jobs associated with those economic engines, how
15 do people travel to those jobs?

16 A So Montgomery is a car town. And if you know the city is
17 definitely associated with travel and travel innovation. Early
18 in the history of the city, we had the Wright brothers come
19 there and bring their experiments -- experimental work with
20 aviation. We had electric street cars innovated there.

21 And those were things that we were taught as children to
22 be points of pride. Following the bus boycott, the mass
23 transit system that had been innovated there through the street
24 cars was divested in and essentially abandoned, or at least
25 underfunded significantly.

1 So that makes -- that means in order to navigate the
2 community, people have to have cars or have a social network
3 that will help them with transportation.

4 A smaller number use our public bus system now. But most
5 of it is relying on cars. And that can be a burden for those
6 who have, you know, income insecurity or are in between jobs.

7 I experienced this personally. I mentioned that I went to
8 law school at NYU or in New York. But in 2012, I had been
9 there for a semester and actually had to take a year-and-a-half
10 leave of absence to assist my mother with some health issues.

11 And it was a difficult period of time. I didn't have a
12 job. I was out of school. There were lots of bills at home.
13 So while I was trying to find work, there was a period of time
14 where, you know, I went and got registered for food stamps or
15 for EBT.

16 And that was my -- I had grown up fairly middle class, so
17 I knew of this, but I didn't know how to navigate that system.
18 And what I found was in order to get these services and these
19 benefits, I was fortunate to have a car, so I could go to our
20 Department of Human Resources office deep in west Montgomery,
21 sit there for the full day, go through the process. And the
22 next thing they told me to do is, okay, you have to go to the
23 work force development center in order to keep the benefits to
24 have a scheduled counseling appointment to show them that you
25 are actively looking for work and to keep a log of every place

1 you're applying.

2 So that was easier for me to navigate because of my social
3 network in having a car. But for many people in the city who
4 don't have that access, even trying to take advantage of those
5 social services and that safety net is difficult without that
6 transportation.

7 Q You said it was easier for you because you had a car.
8 Have you observed racial disparities in transportation access
9 around Montgomery area?

10 A Well, during that period of time, you know, growing up,
11 when the buses were -- there are more buses now than there were
12 when I was a child. But still the ridership is fairly low, but
13 from my experience riding the bus and even observing people,
14 the ridership is I would say at least, you know, over
15 90 percent black -- black African-Americans.

16 Q In your experience, are there ways, if any, that that
17 would impact access to economic opportunities?

18 A Well, we mentioned what happens for people who, you know,
19 are most in need of those opportunities. So they're dealing
20 with multi-generational poverty or they're living in areas that
21 are landlocked due to dead ends and lack of investment.

22 So if a person is -- people I've seen in those conditions
23 can struggle to find access to the programs and the different
24 service providers that can help them navigate a path to more
25 opportunity if they can't make the appointments reliably.

1 And then -- that's been a tricky part of doing social
2 service work and advocacy works in the groups I've worked with.
3 The folks who may have the largest need for the help have the
4 most, the largest number of hurdles standing between them and
5 the help that they actually need.

6 Q Would the transportation challenges or disparities that
7 you observed, in your experience as an organizer, does it have
8 any kind of effect one way or another on access to political
9 participation or voting?

10 A I would say it's similarly to taking advantage of economic
11 opportunity when people are landlocked into -- or isolated into
12 concerns for just basic survival needs that has -- that
13 disincentivizes their participation in civic engagement and
14 really competes for available energy and time for any sort of
15 political involvement.

16 Q In your time as an organizer, have you observed any other
17 barriers to political participation that have come into focus
18 for you?

19 A I've observed criminalization. So folks who have had
20 contact with the justice system, but don't necessarily have
21 access to groups that can help them figure out where their
22 conviction may fall, in terms of the moral turpitude laws and
23 then how to navigate the process of having their voting rights
24 restored if they were, in fact, disenfranchised at all.

25 So because our state doesn't provide that information

1 proactively to people who have had justice system contact,
2 that's a barrier, helping people understand where -- if their
3 rights have been -- have been revoked.

4 And then another barrier would be health care, access to
5 mental health care, access to physical health care. Having
6 less of that usually means less energy and time to be involved
7 in civic engagement.

8 Q When we're talking about barriers like that and in your
9 experience, are those barriers faced in equal measure by black
10 voters and their counterparts in the white community?

11 A In my experience, there is no shortage of struggle and
12 pain and poverty, you know, in our state and in Montgomery.
13 And that's -- that is borne by many communities.

14 The experience of black Alabamians is that in addition to
15 the consequences of individual decisions, family decisions,
16 household decisions, those community members are often coming
17 up against structural decisions that predate their birth, that
18 predate any decision that they actually could have made.

19 So if they don't have access to job development, to basic
20 forms of transportation and medical services, then the sorts of
21 disappointments and traumas and things that they might -- that
22 might be experienced by their white counterparts are amplified
23 because those members of our community have less of an ability
24 to get to a place of safety and a place of help and stay on
25 that path.

1 Q Are you familiar with the State Senate map?

2 A I am.

3 Q The one enacted in 2021?

4 A I am.

5 Q Okay. Which State Senate districts represent Montgomery
6 County?

7 A 25 and 26.

8 Q And how does the State Senate map divide neighborhoods in
9 areas in Montgomery County into District 25 versus 26?

10 A So District 26, where I currently -- where I'm -- our
11 house is associated with 26, basically includes most of the
12 predominantly black communities in Montgomery. So this would
13 be southern, central, southwest, west side, north of
14 Montgomery. That area I explained where I group up mainly and
15 a lot of our family and friends live.

16 In District 25, that connects Elmore County, east
17 Montgomery, and Crenshaw County.

18 And the portion of Montgomery that's included in District
19 25 is basically the most predominantly white neighborhoods in
20 the eastern part of the city. But it's drawn in a way that
21 those communities are drawn into District 25 and not the
22 predominantly black neighborhood -- or to a much less degree,
23 the predominantly black neighborhoods that are also located on
24 the eastern side of the city.

25 Q Why is it important to you personally that black voters

1 have fair representation in the Alabama Senate now?

2 A Representation means access to resources at the end of the
3 day. And sometimes those resources can be life giving.

4 As I've been thinking about what to say today, I've
5 thought about black women in my family, Ella Bell, Gwen Patton,
6 Josephine Bolling McCall, and my mom Clara Milligan. These are
7 all people who, just those four names, those are folks who lost
8 a father who was lynched in Lowndes County I believe in the
9 early '50s.

10 These are people that were assaulted when they were doing
11 SNCC activism and have permanent injuries and scars as a result
12 of that. And as a child I would have to -- as a teenager at
13 least help them move from one place to another.

14 And despite all of that, they didn't consider themselves
15 victims. And they never looked down on our community. They
16 were -- even when they had options to live many more affluent
17 places, they chose to remain in those neighborhoods that I
18 mentioned growing up in.

19 And so that model of service and of commitment to our
20 communities, to me, represents leadership. And I think that
21 political representation gives our communities and the black
22 communities of Montgomery more access to leadership and to
23 people that want to bring new pipe lines and new investment to
24 communities that have been underresourced to date.

25 Q Mr. Milligan, is your mother still living?

1 A Yes.

2 Q And the other women you mentioned, are they still living?

3 A Ella Bell died within -- I believe in 2019. Dr. Gwen
4 Patton died I believe a few years -- a year or so before that.
5 Josephine Bolling McCall is still alive, and my mom is still
6 alive.

7 MR. UNGER: Thank you. No further questions, Your
8 Honor.

9 MR. WALKER: Your Honor, may I consult with my
10 colleagues one second?

11 THE COURT: You may. And as you consult with them, I
12 will add this to the list of things you are consulting about.
13 I have warranted that we will be out of this courtroom by 6:00
14 p.m. every day.

15 I do not want to -- there's no clock back there. I wish
16 there were. It's right here. And that one doesn't quite --
17 that one over there doesn't quite work. But I do not want to
18 limit the examination of Mr. Milligan in any way either on
19 cross or on redirect.

20 So you may consider whether you would prefer us to recess
21 now for the day and begin cross in the morning or whether you
22 would want to go ahead and do it understanding the limitations
23 that --

24 MR. WALKER: Thank you, Your Honor. Just one moment,
25 please.

1 Your Honor, nothing from us.

2 THE COURT: All right. Thank you.

3 Is there any reason I may not excuse Mr. Milligan?

4 MR. UNGER: No, Your Honor.

5 THE COURT: All right. Mr. Milligan, thank you very
6 much.

7 THE WITNESS: Thank you.

8 THE COURT: Thank you.

9 (Witness excused.)

10 THE COURT: All right. Then I think that leaves us at
11 a recess point for the day.

12 Does everybody in the room but me know who the first
13 witness will be tomorrow?

14 MR. ROSBOROUGH: Your Honor, the first witness
15 tomorrow will be Scott Douglas.

16 THE COURT: Understood.

17 MR. ROSBOROUGH: Thank you.

18 THE COURT: Thank you very much.

19 Is there any objection to us starting at 8:30 tomorrow?

20 MR. ROSBOROUGH: No objection.

21 THE COURT: I will see everyone at 8:30.

22 MR. DAVIS: Judge, may I ask one thing? I don't think
23 this is likely to be a problem, but in the event that
24 plaintiffs finish at like 3:00, we don't have anybody lined up.

25 THE COURT: Okay.

1 MR. DAVIS: I think we're well on track. Is the Court
2 okay with that or --

3 THE COURT: What do you think the chances are that the
4 plaintiffs finish late afternoon tomorrow?

5 MR. ROSBOROUGH: No. We -- sorry. We -- no. Let me
6 correct that.

7 I do think that there's a chance -- there is a chance that
8 we finish all of our witnesses tomorrow, but if we do, I think
9 it's going to be going to the very end of the day.

10 THE COURT: Got it.

11 All right. So don't line anybody up for tomorrow.

12 MR. DAVIS: Thank you.

13 THE COURT: Thank you.

14

15 (Whereupon, the above proceedings were concluded at
16 5:08 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

11-13-2024

Christina K. Decker, RMR, CRR

Date

Federal Official Court Reporter

ACCR#: 255