

# **Exhibit B**

**THOMAS M. BRYAN**  
**The Christian Ministerial vs Thurston**

October 03, 2024

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<p style="text-align: right;">Page 1</p> <p>1 UNITED STATES DISTRICT COURT</p> <p>2 FOR THE EASTERN DISTRICT OF ARKANSAS</p> <p>3 - - - - -x</p> <p>4 THE CHRISTIAN MINISTERIAL )</p> <p>5 ALLIANCE, et al., )</p> <p>6 Plaintiffs, ) Civil Action No.:</p> <p>7 V. ) 4:23-CV-471-DPM-DRS-JM</p> <p>8 JOHN THURSTON, in his )</p> <p>9 official capacity as the )</p> <p>10 Secretary of State of )</p> <p>11 Arkansas, )</p> <p>12 Defendant. )</p> <p>13 - - - - -x Pages 1-324</p> <p>14</p> <p>15 DEPOSITION OF THOMAS MARK BRYAN</p> <p>16 Thursday, October 3, 2024</p> <p>17 Washington, DC</p> <p>18</p> <p>19 Reported by: Sherry L. Brooks</p> <p>20 Certified LiveNote Reporter</p> <p>21 Job No. J11818702</p>	<p style="text-align: right;">Page 3</p> <p>1 ON BEHALF OF THE PLAINTIFFS:</p> <p>2 Leah C. Aden, Esquire</p> <p>3 John S. Cusick, Esquire</p> <p>4 NAACP Legal Defense Fund</p> <p>5 40 Rector Street</p> <p>6 5th Floor</p> <p>7 New York, NY 10006</p> <p>8 (212) 965-2200</p> <p>9 E-mail: LAden@naacpldf.org</p> <p>10 E-mail: JCusick@naacpldf.org</p> <p>11</p> <p>12 ON BEHALF OF THE DEFENDANT:</p> <p>13 Jordan Broyles, Esquire</p> <p>14 Office of the Attorney General</p> <p>15 323 Center Street</p> <p>16 Suite 200</p> <p>17 Little Rock, AR 72201</p> <p>18 (501) 682-9482</p> <p>19 E-mail: Jordan.Broyles@ArkansasAG.gov</p> <p>20</p> <p>21</p>
<p style="text-align: right;">Page 2</p> <p>1 October 3, 2024</p> <p>2 10:13 a.m.</p> <p>3</p> <p>4</p> <p>5 Deposition of Thomas Mark Bryan at:</p> <p>6</p> <p>7 O'Melveny &amp; Myers</p> <p>8 1625 Eye Street, NW</p> <p>9 Washington, DC 200006</p> <p>10</p> <p>11 Pursuant to notice, before Sherry L. Brooks,</p> <p>12 Certified LiveNote Reporter and Notary Public, in and</p> <p>13 for the District of Columbia.</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p>	<p style="text-align: right;">Page 4</p> <p>1 APPEARANCES CONTINUED:</p> <p>2</p> <p>3 ALSO PRESENT:</p> <p>4 Elizabeth Kimbrough, Esquire - O'Melveny Myers</p> <p>5 For Plaintiffs</p> <p>6</p> <p>7 VIA ZOOM</p> <p>8 Arkie Byrd, Esquire</p> <p>9 Michael Skocpol, Esquire</p> <p>10 For Plaintiffs</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p>

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<p>1 C O N T E N T S</p> <p>2 EXAMINATION OF THOMAS MARK BRYAN PAGE</p> <p>3 BY MS. ADEN 6</p> <p>4</p> <p>5</p> <p>6 EXHIBITS PAGE</p> <p>7 Exhibit 1 Christian Ministerial Alliance v. 40</p> <p>8 State of Arkansas - 9/16/24</p> <p>9 Expert Demographic Report of</p> <p>10 Thomas M. Bryan</p> <p>11 Exhibit 2 Christian Ministerial Alliance v. 289</p> <p>12 State of Arkansas - 9/23/24</p> <p>13 Rebuttal Expert Demographic</p> <p>14 Report of Thomas M. Bryan</p> <p>15 Exhibit 3 Christian Ministerial Alliance v. 304</p> <p>16 State of Arkansas - 10/1/24</p> <p>17 Supplemental Expert Demographic</p> <p>18 Report of Thomas M. Bryan</p> <p>19</p> <p>20</p> <p>21 (Exhibits attached to transcript.)</p>	<p>Page 5</p> <p>1 record on behalf of plaintiffs I'm joined by my</p> <p>2 colleague John Cusick with the Legal Defense Fund,</p> <p>3 also for the plaintiffs, and my co-counsel, Elizabeth</p> <p>4 Kimbrough, also for the plaintiffs with O'Melveny &amp;</p> <p>5 Myers.</p> <p>6 MS. BROYLES: Jordan Broyles on behalf of</p> <p>7 defendant John Thurston, Secretary of State of</p> <p>8 Arkansas. And we do not have anyone on Zoom today,</p> <p>9 at least right now.</p> <p>10 Dylan Jacobs and/or Justin Brascher may be</p> <p>11 appearing throughout the day. And then, obviously, I</p> <p>12 have here Mr. Bryan, who is our expert in this</p> <p>13 matter, but that should cover anyone who may be</p> <p>14 attending by Zoom in and out. But none of them will</p> <p>15 be speaking.</p> <p>16 MS. ADEN: It's also the case that there</p> <p>17 are two people on the Zoom who will not be speaking,</p> <p>18 but if they would like to come off mute and note</p> <p>19 themselves for the record, we'd appreciate that.</p> <p>20 MS. BYRD: This is Arkie Byrd. I'm</p> <p>21 plaintiff's counsel.</p>
<p>Page 6</p> <p>1 P R O C E E D I N G S</p> <p>2 * * * * *</p> <p>3 THOMAS MARK BRYAN</p> <p>4 was called for examination by counsel and, after</p> <p>5 having been duly sworn by the Notary, was examined</p> <p>6 and testified as follows:</p> <p>7 EXAMINATION BY COUNSEL FOR PLAINTIFF</p> <p>8 BY MS. ADEN:</p> <p>9 Q. Good morning, Mr. Bryan. For the record,</p> <p>10 I am Leah Aden. I am one of the attorneys for the</p> <p>11 plaintiffs in this case, CMA versus Thurston.</p> <p>12 Could you please go ahead and state your</p> <p>13 name fully for the record?</p> <p>14 A. My name is Thomas, T-H-O-M-A-S, Mark,</p> <p>15 M-A-R-K, Bryan, B-R-Y-A-N.</p> <p>16 MS. ADEN: And I'd like everyone else in</p> <p>17 the room with Mr. Bryan and myself to go ahead and</p> <p>18 please also note themselves for the record, and then</p> <p>19 we'll follow up by those who are making an appearance</p> <p>20 virtually.</p> <p>21 And I'll just make clear that for the</p>	<p>Page 8</p> <p>1 MR. SKOCPOL: This is Michael Skocpol also</p> <p>2 for the plaintiffs.</p> <p>3 BY MS. ADEN:</p> <p>4 Q. So, Mr. Bryan, for today's deposition, I'm</p> <p>5 going to go over some basic ground rules so that</p> <p>6 we're operating on the same page. You are testifying</p> <p>7 under oath today, which means that you are testifying</p> <p>8 with the same duty to answer questions truthfully as</p> <p>9 though we were before a judge in a courtroom.</p> <p>10 Do you understand?</p> <p>11 A. I understand.</p> <p>12 Q. And the court reporter, Ms. Brooks, is</p> <p>13 transcribing the deposition. And with that in mind,</p> <p>14 if you can, and I will try to do the same, please</p> <p>15 answer questions audibly and clearly, refrain from</p> <p>16 nodding or shaking your head so that we can have a</p> <p>17 clear transcript.</p> <p>18 Let me know if you do not understand a</p> <p>19 question or need me to repeat any part of it because</p> <p>20 it may be a bad question that I've asked, which may</p> <p>21 happen, and I will do my best to rephrase. I am not</p>

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<p style="text-align: right;">Page 9</p> <p>1 trying to trick you with questions. So let me know</p> <p>2 if I need to try a question in a different way.</p> <p>3 Do you understand that?</p> <p>4 A. Thank you. I understand, thank you.</p> <p>5 Q. Okay. If I ask you a question, though,</p> <p>6 please answer the question and I will assume that by</p> <p>7 your answering the question you understand me.</p> <p>8 Does that make sense?</p> <p>9 A. That makes sense.</p> <p>10 Q. Regarding any attorney objections, the</p> <p>11 primary people having a conversation today will be</p> <p>12 you and I. And, from time to time, Ms. Brooks as the</p> <p>13 court reporter may ask a question if she needs</p> <p>14 something from us. But you may also have -- or hear</p> <p>15 your counsel, Ms. Broyles, object to questions.</p> <p>16 If she does, that objection will be noted</p> <p>17 by Ms. Brooks, but you must still provide an answer</p> <p>18 unless Ms. Broyles specifically instructs you not to</p> <p>19 answer.</p> <p>20 Do you understand?</p> <p>21 A. I understand.</p>	<p style="text-align: right;">Page 11</p> <p>1 Q. And besides Ms. Broyles, are there other</p> <p>2 attorneys that you've worked with with that office?</p> <p>3 A. Yes. There are two other attorneys,</p> <p>4 Justin Brascher, who she mentioned earlier, and</p> <p>5 Dylan, who she also mentioned earlier. There's also</p> <p>6 a new associate there -- his name is David. I think</p> <p>7 he goes by Dru -- who has been part of some</p> <p>8 conversations that we have had, but on the periphery.</p> <p>9 Q. What's David's last name again?</p> <p>10 A. I don't know.</p> <p>11 MS. BROYLES: He just started in our</p> <p>12 solicitor general's office. So he's just learning</p> <p>13 right now, but I'll double-check what his last name</p> <p>14 is. I honestly can't remember, but I'll get it for</p> <p>15 the record.</p> <p>16 A. I'm not trying to be evasive. He just</p> <p>17 listened to some calls, and I'm trying to be thorough</p> <p>18 with my answer. But yeah.</p> <p>19 BY MS. ADEN:</p> <p>20 Q. You mentioned Dylan and that's Dylan</p> <p>21 Jacobs?</p>
<p style="text-align: right;">Page 10</p> <p>1 Q. Is there any reason why you are unable to</p> <p>2 answer or understand any questions -- excuse me --</p> <p>3 let me say that again.</p> <p>4 Is there any reason why you are unable to</p> <p>5 understand or answer my questions truthfully today?</p> <p>6 A. No.</p> <p>7 Q. This is not an endurance test. If at any</p> <p>8 time you would like to take a break, let me know. I</p> <p>9 will work in some breaks throughout the day.</p> <p>10 Probably every hour we'll check in about whether we</p> <p>11 need a break. The only thing I ask is that before we</p> <p>12 go on break if there is a pending question that you</p> <p>13 answer it first.</p> <p>14 Do you understand?</p> <p>15 A. Of course, I understand.</p> <p>16 Q. So are you represented by counsel today?</p> <p>17 A. I am represented by counsel for the</p> <p>18 defendants, Ms. Broyles.</p> <p>19 Q. Okay. And do you know which entity or</p> <p>20 office she is affiliated with?</p> <p>21 A. The Arkansas Attorney General's office.</p>	<p style="text-align: right;">Page 12</p> <p>1 A. Yes.</p> <p>2 Q. Do you have a signed engagement letter or</p> <p>3 retainer for this case with the Attorney General's</p> <p>4 office?</p> <p>5 A. Yes, I do.</p> <p>6 Q. When did you sign that letter or retainer?</p> <p>7 A. I cannot give you a specific date. It</p> <p>8 would be the beginning of 2024.</p> <p>9 Q. 2024?</p> <p>10 A. Early of 2024, yeah.</p> <p>11 Q. And I assume you're being paid for your</p> <p>12 services in this case?</p> <p>13 A. Yes, I am.</p> <p>14 Q. How much?</p> <p>15 A. My hourly rate is \$450 per hour.</p> <p>16 Q. That's a flat rate?</p> <p>17 A. It is.</p> <p>18 Q. And is that your customary rate for</p> <p>19 expert-related work in court cases?</p> <p>20 A. Yes, it is.</p> <p>21 Q. What about for any consulting work?</p>

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<p style="text-align: right;">Page 13</p> <p>1 A. It is the same for other consulting work</p> <p>2 in general, with the exception of pro bono, community</p> <p>3 service, or charitable work that I provide at my</p> <p>4 discretion.</p> <p>5 Q. How much time -- strike that.</p> <p>6 How much do you estimate you billed in</p> <p>7 this case thus far?</p> <p>8 A. I know the approximate dollar amount is</p> <p>9 \$110 to \$120,000.</p> <p>10 Q. Is there a cap on the amount of money that</p> <p>11 you can bill for this case?</p> <p>12 A. The agreement we have is a not-to-exceed</p> <p>13 amount of \$153,000, including expenses.</p> <p>14 Q. Do you have an understanding that if you</p> <p>15 are likely to exceed that cap that there could be an</p> <p>16 addendum to it and it could go above that amount?</p> <p>17 A. That is my understanding, correct.</p> <p>18 Q. And is the \$153,000 approximate cap -- do</p> <p>19 you expect that to include any testimony -- outside</p> <p>20 trial testimony or any additional work that you would</p> <p>21 do in the case?</p>	<p style="text-align: right;">Page 15</p> <p>1 redistricting in Arkansas?</p> <p>2 A. No, I have not.</p> <p>3 Q. Any attorneys for Arkansas' Senate?</p> <p>4 A. No, I have not.</p> <p>5 Q. Any attorneys for Arkansas's house?</p> <p>6 A. No, I have not.</p> <p>7 Q. Any attorneys associated with the Impact</p> <p>8 Management Group?</p> <p>9 A. No, I have not.</p> <p>10 Q. Any attorneys associated with the National</p> <p>11 Republican Redistricting Trust?</p> <p>12 A. No, I have not.</p> <p>13 Q. Any attorneys associated with any of the</p> <p>14 major political parties?</p> <p>15 A. No, I have not.</p> <p>16 Q. Did you work with anyone in or outside of</p> <p>17 Arkansas's General Assembly regarding Arkansas's post</p> <p>18 2020 redistricting prior to this lawsuit?</p> <p>19 A. In an early stage of this case there was</p> <p>20 another expert who was working for the state of</p> <p>21 Arkansas. His name is Dr. Peter Morrison.</p>
<p style="text-align: right;">Page 14</p> <p>1 A. I do not expect that will include trial</p> <p>2 testimony or trial preparation.</p> <p>3 Q. In addition to Ms. Broyles, and without</p> <p>4 going into the content of any of the discussions,</p> <p>5 have you sought legal advice from any other attorneys</p> <p>6 about this case?</p> <p>7 And let me tweak that. In addition to Ms.</p> <p>8 Broyles or Mr. Brascher or Mr. Jacobs or David, whose</p> <p>9 last name --</p> <p>10 MS. BROYLES: If you want to say me, we</p> <p>11 can understand that to be everyone in the AG's office</p> <p>12 if that's easier for just --</p> <p>13 BY MS. ADEN:</p> <p>14 Q. So understanding that in addition to the</p> <p>15 counsel team that you've identified already and</p> <p>16 without going into the content of those</p> <p>17 conversations, have you sought legal advice from any</p> <p>18 other attorneys about this case?</p> <p>19 A. No, I have not.</p> <p>20 Q. Have you sought legal advice from any</p> <p>21 attorneys or non-attorneys about any form of</p>	<p style="text-align: right;">Page 16</p> <p>1 MS. BROYLES: Hold on one second. Is your</p> <p>2 question whether he worked with the legislature on</p> <p>3 the plan?</p> <p>4 MS. ADEN: I'll restate my question.</p> <p>5 MS. BROYLES: Sorry. I think he -- are</p> <p>6 you talking about prior to the litigation?</p> <p>7 MS. ADEN: I'll restate the full question.</p> <p>8 BY MS. ADEN:</p> <p>9 Q. Did you work with anyone in or outside of</p> <p>10 Arkansas's General Assembly regarding Arkansas's post</p> <p>11 2020 redistricting, any redistricting, prior to this</p> <p>12 lawsuit?</p> <p>13 A. No, not -- no.</p> <p>14 Q. Did you do any lobbying work regarding</p> <p>15 redistricting after the 2020 census?</p> <p>16 A. No.</p> <p>17 Q. Any political consulting work?</p> <p>18 A. No, not for Arkansas.</p> <p>19 Q. For other states?</p> <p>20 A. No.</p> <p>21 Q. Now, you started to explain your</p>

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<p style="text-align: right;">Page 17</p> <p>1 association with Peter Morrison. That's someone you</p> <p>2 work pretty regularly with.</p> <p>3 Is that fair to say?</p> <p>4 A. He is, yes.</p> <p>5 Q. And is it fair to say that you understood</p> <p>6 that he was involved in this case at issue prior to</p> <p>7 your involvement?</p> <p>8 A. That's correct.</p> <p>9 Q. Did you have any conversations with him</p> <p>10 about this case if he, for example, was being phased</p> <p>11 off of working on it and you were taking over it?</p> <p>12 Did you have any conversations with him?</p> <p>13 A. No.</p> <p>14 Q. Have you had any conversations with him</p> <p>15 about this case or the work you're doing on it since</p> <p>16 you've been retained?</p> <p>17 A. The extent of my conversation was to tell</p> <p>18 him that I was working on the case, and that's the</p> <p>19 extent of it. He's aware that I am doing this work</p> <p>20 right now.</p> <p>21 Q. Okay. Do you have any documents in front</p>	<p style="text-align: right;">Page 19</p> <p>1 Cooper? Is that in your binder?</p> <p>2 A. I cannot remember.</p> <p>3 MS. BROYLES: You can look.</p> <p>4 BY MS. ADEN:</p> <p>5 Q. Would you like to reference it to see?</p> <p>6 A. Sure. So the first declaration of Cooper.</p> <p>7 I do have the expert report -- the original expert</p> <p>8 report of Dr. Liu and the rebuttal declaration of Mr.</p> <p>9 Cooper and the rebuttal report of Dr. Liu.</p> <p>10 Q. And you mentioned your original report,</p> <p>11 your rebuttal report?</p> <p>12 A. Yes.</p> <p>13 Q. Does this binder include your supplemental</p> <p>14 report as well?</p> <p>15 A. The -- I've created three reports in</p> <p>16 total. I will refer to them as my original expert</p> <p>17 report, then there was the first rebuttal report, and</p> <p>18 then just the other day I produced a third document</p> <p>19 -- which I don't know how we're referring to that --</p> <p>20 second rebuttal report, which is basically a review</p> <p>21 of Mr. Cooper's third alternative plan.</p>
<p style="text-align: right;">Page 18</p> <p>1 of you?</p> <p>2 A. I do.</p> <p>3 Q. And can you tell me what they are?</p> <p>4 A. Sure. I have a binder in front of me.</p> <p>5 The binder includes the Amended Complaint. It</p> <p>6 includes a copy of the expert reports from Mr. Cooper</p> <p>7 and Dr. Liu, and it includes a copy of my original</p> <p>8 expert report and my rebuttal report.</p> <p>9 There are no handwritten notes or any</p> <p>10 other information in that binder besides what I've</p> <p>11 just described to you.</p> <p>12 Q. And by Amended Complaint you're</p> <p>13 referencing the Amended Complaint in this case?</p> <p>14 A. That is correct.</p> <p>15 Q. And you mentioned expert reports of Mr.</p> <p>16 Cooper. Which ones in particular?</p> <p>17 A. The original expert report of Mr. Cooper</p> <p>18 and the -- it would be the rebuttal report that was</p> <p>19 provided by Mr. (sic) Liu. I don't believe I have</p> <p>20 the original report of Dr. Liu in the folder.</p> <p>21 Q. What about the rebuttal report of Mr.</p>	<p style="text-align: right;">Page 20</p> <p>1 So I do not have a copy of that third --</p> <p>2 what I'll refer to as the third rebuttal or third</p> <p>3 report that I created. Only my first two reports are</p> <p>4 in there.</p> <p>5 Q. And you mentioned there are no notes</p> <p>6 within the documents that you brought in the binder</p> <p>7 today?</p> <p>8 A. There are not.</p> <p>9 Q. And I notice you have a notepad in front</p> <p>10 of you.</p> <p>11 A. I do.</p> <p>12 Q. Is it fair to say there are no notes</p> <p>13 written in that notepad either?</p> <p>14 A. It's completely blank, nothing in here</p> <p>15 except for white sheets of paper.</p> <p>16 Q. Thank you. So I want to turn to the topic</p> <p>17 of your deposition preparation right now.</p> <p>18 When were you first contacted by counsel</p> <p>19 about potentially being deposed today?</p> <p>20 A. I have been aware of the likelihood of</p> <p>21 being deposed for this case through the year. I</p>

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<p style="text-align: right;">Page 21</p> <p>1 think the first time that we started talking about</p> <p>2 dates and the fact that I was actually going to be</p> <p>3 deposed for this was probably two or three months</p> <p>4 ago.</p> <p>5 Q. And was that communicated to you by phone?</p> <p>6 How was it communicated to you?</p> <p>7 A. It would have been through phone calls</p> <p>8 discussing the progression of the case.</p> <p>9 Q. For purposes of this particular deposition</p> <p>10 today, did you receive written notice that you were</p> <p>11 being subpoenaed to be here today?</p> <p>12 A. I did.</p> <p>13 Q. In the binder that you brought with you,</p> <p>14 do you have a copy of the subpoena?</p> <p>15 A. I do not.</p> <p>16 Q. What did you do to prepare for today's</p> <p>17 deposition?</p> <p>18 A. As is my best practice, I reviewed -- I</p> <p>19 rereviewed my original report, I rereviewed my</p> <p>20 rebuttal report, and I reviewed Mr. Cooper and Dr.</p> <p>21 Liu's original and rebuttal reports.</p>	<p style="text-align: right;">Page 23</p> <p>1 with counsel to prepare for today's deposition?</p> <p>2 A. Yes.</p> <p>3 Q. Who?</p> <p>4 A. Ms. Broyles.</p> <p>5 Q. How many times?</p> <p>6 A. Once.</p> <p>7 Q. Where?</p> <p>8 A. At the Hilton Hotel across the street.</p> <p>9 Q. When was that?</p> <p>10 A. This morning.</p> <p>11 Q. And about how long did you meet?</p> <p>12 A. One hour.</p> <p>13 Q. Was anyone else present besides Ms.</p> <p>14 Broyles and yourself?</p> <p>15 A. No.</p> <p>16 MS. BROYLES: Well, a lot of people were</p> <p>17 there in the lobby. There was a lot going on this</p> <p>18 morning in the hotel.</p> <p>19 BY MS. ADEN:</p> <p>20 Q. Were you aware of anyone who was engaged</p> <p>21 in the conversation that you were having with Ms.</p>
<p style="text-align: right;">Page 22</p> <p>1 I reviewed the series of documents that</p> <p>2 were part of the beginning of the case. And by that</p> <p>3 I mean the Amended Complaint, the motion to dismiss,</p> <p>4 objection to the motions to dismiss. I cannot think</p> <p>5 of another -- any other documents that I reviewed to</p> <p>6 prepare.</p> <p>7 Q. Okay.</p> <p>8 MS. BROYLES: And I've got a copy of your</p> <p>9 supplemental -- the third report, if you want to have</p> <p>10 it over there.</p> <p>11 MS. ADEN: And I'll -- just for the</p> <p>12 record, I understand that -- you're welcome to what's</p> <p>13 in your binder. We have prepared documents. And</p> <p>14 when I want you to look at them I will mark them and</p> <p>15 hand them to you, but I appreciate that.</p> <p>16 A. Okay. Thank you. And I just flipped this</p> <p>17 and there's no notes or any other mention in here</p> <p>18 besides a plain document.</p> <p>19 BY MS. ADEN:</p> <p>20 Q. Thank you. Without going into the</p> <p>21 substance of any of the conversations, did you meet</p>	<p style="text-align: right;">Page 24</p> <p>1 Broyles this morning?</p> <p>2 A. No.</p> <p>3 Q. Did you discuss today's deposition with</p> <p>4 anyone else besides your counsel in this case?</p> <p>5 A. No.</p> <p>6 Q. And so is it fair to say that you didn't</p> <p>7 discuss today's deposition with any current or former</p> <p>8 Arkansas legislators or legislative staff?</p> <p>9 A. No.</p> <p>10 MS. BROYLES: It is fair to say yes. So</p> <p>11 the way he answered it was a double negative. Sorry.</p> <p>12 BY MS. ADEN:</p> <p>13 Q. You did not speak with any Arkansas</p> <p>14 legislators or legislative staff in preparation for</p> <p>15 today's deposition?</p> <p>16 A. No, I have not.</p> <p>17 Q. Did you review -- you indicated a number</p> <p>18 of documents that you reviewed in preparation for</p> <p>19 today's deposition.</p> <p>20 Did you review any deposition transcripts?</p> <p>21 A. I did.</p>



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<p style="text-align: right;">Page 25</p> <p>1 Q. Which ones?</p> <p>2 A. There was a rough draft of Dr. Liu's</p> <p>3 deposition. It's not a final. It was not</p> <p>4 represented to me as being a final, and I reviewed</p> <p>5 that.</p> <p>6 Q. Any other depositions?</p> <p>7 A. No.</p> <p>8 Q. And that was a deposition in this case?</p> <p>9 A. Yes. That's correct.</p> <p>10 Q. Have you reviewed at any time the</p> <p>11 deposition transcript of Arkansas former state</p> <p>12 Senator Rapert?</p> <p>13 A. No, I have not.</p> <p>14 Q. How about the deposition transcripts in</p> <p>15 this case of Arkansas legislative staff Lori Bowen?</p> <p>16 A. No, I have not.</p> <p>17 Q. Michelle Davenport?</p> <p>18 A. No, I have not.</p> <p>19 Q. In preparation for this deposition have</p> <p>20 you reviewed expert reports from Dr. Traci Burch?</p> <p>21 A. I read Dr. Traci Burch's report. I have</p>	<p style="text-align: right;">Page 27</p> <p>1 A. By counsel in the case, Ms. Broyles. I</p> <p>2 don't recall if it was -- if I can just say it was</p> <p>3 Ms. Broyles on behalf of her team.</p> <p>4 MS. BROYLES: I think it was Justin or</p> <p>5 Dylan, but it's fine.</p> <p>6 A. I don't remember whether it was Justin or</p> <p>7 Dylan or -- someone in the office provided those.</p> <p>8 BY MS. ADEN:</p> <p>9 Q. Were you instructed to review them for</p> <p>10 purposes of this deposition?</p> <p>11 A. No.</p> <p>12 Q. Is it fair to say that you were reviewing</p> <p>13 them for your -- let me ask you: Why did you review</p> <p>14 those deposition -- the deposition transcript of Dr.</p> <p>15 Liu and his reports?</p> <p>16 A. Sure. Dr. Liu's work includes reviews and</p> <p>17 criticisms of my work and I wanted to make sure that</p> <p>18 I was aware of the work that he was done -- that he</p> <p>19 had done and I was aware of the criticisms of my work</p> <p>20 that he had written.</p> <p>21 Q. What do you understand to be his criticism</p>
<p style="text-align: right;">Page 26</p> <p>1 not used any part of that report for my preparation</p> <p>2 because none of that report was relevant to the work</p> <p>3 that I did.</p> <p>4 Q. And how about Ryan Smith? Have you read</p> <p>5 an expert report produced in this case from Ryan</p> <p>6 Smith?</p> <p>7 A. I don't believe so.</p> <p>8 Q. Now, you've mentioned several times that</p> <p>9 you have reviewed the original and rebuttal reports</p> <p>10 of Dr. Liu, L-I-U?</p> <p>11 A. That's correct.</p> <p>12 Q. And in preparation for today's deposition</p> <p>13 you also reviewed a rough copy of his deposition in</p> <p>14 this case?</p> <p>15 A. I did.</p> <p>16 Q. Did someone instruct you to do that?</p> <p>17 A. No, they did not. No one specifically</p> <p>18 instructed me to review those documents. They were</p> <p>19 provided to me and I reviewed them to help my</p> <p>20 understanding of the case.</p> <p>21 Q. Provided to you by who?</p>	<p style="text-align: right;">Page 28</p> <p>1 of your work?</p> <p>2 A. Dr. Liu takes a purely statistical</p> <p>3 approach to his analysis. He has attempted to create</p> <p>4 a differentiation of the impact of race and politics</p> <p>5 using a combination of statistical approaches,</p> <p>6 including ecological inference and envelope analysis.</p> <p>7 Dr. Liu's criticism of my approach is that</p> <p>8 I take what is known as a univariate approach</p> <p>9 analyzing the demography of the plans and analyzing</p> <p>10 the political performance of the plans and I do not</p> <p>11 do a statistical analysis that tries to differentiate</p> <p>12 the impact of race and statistics -- race and</p> <p>13 politics together using a statistical tool.</p> <p>14 Q. As you sit here today, you have not</p> <p>15 provided a written response to that criticism.</p> <p>16 Is that fair to say?</p> <p>17 A. That is fair to say, yes.</p> <p>18 Q. And, as you sit here today, do you expect</p> <p>19 to provide an opinion about Dr. Liu's criticism of</p> <p>20 your analysis?</p> <p>21 A. I assume so.</p>



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<p style="text-align: right;">Page 29</p> <p>1 Q. How do you plan to go about doing that?</p> <p>2 A. I have a good understanding of his</p> <p>3 criticisms, I have a good understanding of his</p> <p>4 methods, and I have a good understanding of what was</p> <p>5 said about those methods in a recently decided</p> <p>6 Supreme Court case in South Carolina.</p> <p>7 Q. Have you been provided information about</p> <p>8 the expert discovery deadlines in this case?</p> <p>9 A. Not that I can remember.</p> <p>10 Q. And do you have any expectation that</p> <p>11 you're going to be providing additional written</p> <p>12 reports in this case?</p> <p>13 A. I don't know.</p> <p>14 Q. Have you listened in on any depositions</p> <p>15 being taken in this case?</p> <p>16 A. I have not.</p> <p>17 Q. Turning to the work that you did in</p> <p>18 preparation of your expert reports in this case, did</p> <p>19 you work with anyone in preparing the original</p> <p>20 rebuttal or third report, the supplemental report, in</p> <p>21 this case besides attorneys representing the</p>	<p style="text-align: right;">Page 31</p> <p>1 Eric has an independent process that he</p> <p>2 runs to create those numbers which we test against my</p> <p>3 process to ensure consistency and that we come up</p> <p>4 with the same answer and that our answers are</p> <p>5 accurate.</p> <p>6 Q. Is he running those analyses simultaneous</p> <p>7 with you or do you run your analyses and then he runs</p> <p>8 them separately to see whether they match up?</p> <p>9 A. We run the analyses separately and</p> <p>10 independently to help ensure quality control of the</p> <p>11 work product. He doesn't know what I'm doing and I</p> <p>12 don't know, you know, what his answers are until</p> <p>13 we're done. And then we compare and say, yep, we got</p> <p>14 it.</p> <p>15 Q. If there are conflicts in what you've</p> <p>16 done, how is that reconciled?</p> <p>17 A. Laboriously, in great detail. We're</p> <p>18 fortunate that our process involves the original data</p> <p>19 that come from the U.S. Census Bureau on the</p> <p>20 demographics, so we start with raw Census Bureau data</p> <p>21 files.</p>
<p style="text-align: right;">Page 30</p> <p>1 defendant in this case?</p> <p>2 A. I did.</p> <p>3 Q. Who?</p> <p>4 A. In my company I have an individual who is</p> <p>5 my director of analytics. His name is Eric</p> <p>6 Wienckowski, W-I-E-N-C-K-O-W-S-K-I.</p> <p>7 Q. Anyone else?</p> <p>8 A. No.</p> <p>9 Q. What is the name of your company?</p> <p>10 A. Bryan, Geo, G-E-O, demo, D-E-M-O. I also</p> <p>11 refer to it in short as BGD.</p> <p>12 Q. What did Mr. Wienckowski -- can you</p> <p>13 describe what he did to support your work in this</p> <p>14 case?</p> <p>15 A. Sure. In order to ensure the quality and</p> <p>16 accuracy of our work, our process is that we have</p> <p>17 redundant processes to run and test the different</p> <p>18 metrics that we provide in our report. Those metrics</p> <p>19 are things such as compactness and core retention,</p> <p>20 and in this case there was also analysis of voting</p> <p>21 behavior and voting turnout.</p>	<p style="text-align: right;">Page 32</p> <p>1 We start with the original U.S. Census</p> <p>2 Bureau's TIGER files, T-I-G-E-R, shaped files for our</p> <p>3 geographic information systems, and we have the</p> <p>4 original electoral data from the Arkansas Secretary</p> <p>5 of State which we used in this case.</p> <p>6 So in the case of any inconsistencies we</p> <p>7 would go examine forensically the -- number by number</p> <p>8 and find out where the difference was until that</p> <p>9 number is reconciled and we know the source of the</p> <p>10 difference.</p> <p>11 Q. Did you encounter inconsistencies in the</p> <p>12 statistical findings you found as compared to Mr.</p> <p>13 Wienckowski in doing work in this case?</p> <p>14 A. There are almost always small</p> <p>15 inconsistencies, and when we find those it helps us</p> <p>16 better understand the data and the metrics and helps</p> <p>17 us ensure that the number that we are creating and</p> <p>18 representing to the court is correct and accurate.</p> <p>19 Q. How is he -- how is Mr. Wienckowski --</p> <p>20 MS. BROYLES: If you want to say Eric --</p> <p>21 BY MS. ADEN:</p>

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<p style="text-align: right;">Page 33</p> <p>1 Q. How is he paid for his work with you in 2 this case?</p> <p>3 A. Sure. I pay him at a different rate than 4 I get paid and that is handled as part of the budget 5 for the project.</p> <p>6 Q. But you're not aware that he has a 7 separate retainer with the Arkansas Attorney 8 General's office?</p> <p>9 A. No.</p> <p>10 Q. How long has he been working with you?</p> <p>11 A. About four years.</p> <p>12 Q. Would you say that the work he is doing in 13 this case -- let me strike that.</p> <p>14 Does he perform the same work with you in 15 this case that he would in other cases that you've 16 been involved in on a testifying basis?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. And so in preparation for your 19 expert reports, in addition to Eric and excluding 20 counsel for this case, did you work with any current 21 or former members of Arkansas's General Assembly?</p>	<p style="text-align: right;">Page 35</p> <p>1 beginning I've worked with throughout the case. 2 Dylan, Justin, and then, again, Dru was part of some 3 of the conversations but more in a listening, 4 learning capacity. But no other attorneys that I'm 5 aware of were part of those conversations.</p> <p>6 Q. And did you receive line edits in response 7 to your written drafts in this case?</p> <p>8 A. I received feedback on each one of those 9 reports, yes.</p> <p>10 Q. In the form of line edits?</p> <p>11 A. Not within the document. I received a 12 separate document that had comments that drew my 13 attention to parts of the report to discuss.</p> <p>14 Q. Okay. And how did you receive those 15 documents? Was it through email?</p> <p>16 A. They were through email.</p> <p>17 Q. Is there anything else that you did to 18 prepare for today's deposition other than what you've 19 discussed thus far that you can remember?</p> <p>20 A. No, I cannot.</p> <p>21 Q. What is your understanding of what</p>
<p style="text-align: right;">Page 34</p> <p>1 A. No, I did not.</p> <p>2 Q. Any lawyers from in or outside of 3 Arkansas?</p> <p>4 A. No, I did not.</p> <p>5 Q. Outside of the counsel in this case?</p> <p>6 A. No, I did not.</p> <p>7 Q. And any nonlawyers in or outside of 8 Arkansas besides Eric?</p> <p>9 A. No, I did not.</p> <p>10 Q. In preparation for your final expert 11 reports in this case, who were the attorneys that you 12 worked with?</p> <p>13 A. I'm sorry. Ask the question again.</p> <p>14 Q. In preparation for finalizing your expert 15 -- in the process -- strike that.</p> <p>16 In preparing your expert reports in this 17 case can you -- you have done three?</p> <p>18 A. Yes.</p> <p>19 Q. Can you tell me for each report which 20 attorneys you worked with?</p> <p>21 A. The attorneys that I mentioned at the</p>	<p style="text-align: right;">Page 36</p> <p>1 plaintiff's lawsuit is about?</p> <p>2 A. So in the plaintiff's complaint and the 3 Amended Complaint which I've focused on, it's my 4 understanding that plaintiffs feel that the voting 5 rights of African Americans of Pulaski County have 6 been infringed by the drawing of the second 7 congressional district and the splitting of the 8 balance into congressional districts 1 and 4.</p> <p>9 Q. Are you aware of particular claims that 10 plaintiffs have brought?</p> <p>11 A. That's a -- my representation of the 12 complaint is that each one of whatever the individual 13 claims are culminate in the infringement. I don't 14 have an inventory of all of the claims. They're in 15 my report if we need to refer to them.</p> <p>16 Q. Okay. And what do you mean by 17 "infringement"?</p> <p>18 A. In the Amended Complaint the plaintiffs 19 state that there is a growing African American 20 population in Arkansas, which is true.</p> <p>21 They bring the example of a recent</p>

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<p style="text-align: right;">Page 37</p> <p>1 congressional race, which a state was a close race</p> <p>2 and that the plan was drawn in a way to take away the</p> <p>3 African American's ability to elect a candidate of</p> <p>4 their choice.</p> <p>5 Q. And is the recent congressional close race</p> <p>6 the one involving Senator Elliott and Congressman</p> <p>7 French Hill --</p> <p>8 A. It is.</p> <p>9 Q. -- in 2020? Is that the race that you're</p> <p>10 --</p> <p>11 A. Yes. Thank you.</p> <p>12 MS. BROYLES: And if you need to look at</p> <p>13 the Amended Complaint, feel free to do that. It</p> <p>14 isn't a memory contest. You can refer to whatever</p> <p>15 you need to.</p> <p>16 BY MS. ADEN:</p> <p>17 Q. You are not a lawyer; is that correct?</p> <p>18 A. I am not.</p> <p>19 Q. Have you ever worked with any members of</p> <p>20 Christian Ministerial Alliance?</p> <p>21 A. No, I have not.</p>	<p style="text-align: right;">Page 39</p> <p>1 A. State.</p> <p>2 Q. When was that?</p> <p>3 A. The latest round of redistricting, 2020,</p> <p>4 2021.</p> <p>5 Q. And was that for a particular map at</p> <p>6 issue?</p> <p>7 A. The work was done to draw hypothetical</p> <p>8 maps when the Virginia map drawing committee were at</p> <p>9 an impasse. None of those maps were used or</p> <p>10 considered. Two special masters were appointed and</p> <p>11 they drew the maps subsequent to my work.</p> <p>12 Q. Okay. Have you ever done any work for any</p> <p>13 Republican candidate?</p> <p>14 MS. BROYLES: Object to the form.</p> <p>15 A. No, I have not.</p> <p>16 BY MS. ADEN:</p> <p>17 Q. What about for any Republican political</p> <p>18 action committees?</p> <p>19 A. No, I have not.</p> <p>20 Q. What about for any think tanks?</p> <p>21 A. No, I have not.</p>
<p style="text-align: right;">Page 38</p> <p>1 Q. Are you familiar with someone named Bishop</p> <p>2 Kennebrew?</p> <p>3 A. I don't remember that name.</p> <p>4 Q. Do you know or have you met or worked with</p> <p>5 someone named Patricia Brewer?</p> <p>6 A. Not that I remember.</p> <p>7 Q. Carolyn Briggs?</p> <p>8 A. Also do not remember.</p> <p>9 Q. Lynette Brown?</p> <p>10 A. Also do not remember.</p> <p>11 Q. Mabel Bynum?</p> <p>12 A. Also do not remember.</p> <p>13 Q. Velma Smith?</p> <p>14 A. I do not remember.</p> <p>15 Q. Have you ever done any work for any</p> <p>16 political party including the Republican Party, the</p> <p>17 national Republican Party?</p> <p>18 A. I did analytic work in the state of</p> <p>19 Virginia for the Republican Party and that was it.</p> <p>20 Q. Do you know if it was the national party</p> <p>21 or the state party?</p>	<p style="text-align: right;">Page 40</p> <p>1 Q. Have you ever worked with Arkansas</p> <p>2 Representative Nelda Speaks?</p> <p>3 A. I have not.</p> <p>4 Q. Arkansas Senator Jane English?</p> <p>5 A. No.</p> <p>6 Q. Arkansas former Senator Jason Rapert?</p> <p>7 A. No, I have not.</p> <p>8 Q. Any member of the Arkansas General</p> <p>9 Assembly, past or present?</p> <p>10 A. No, I have not.</p> <p>11 Q. Have you ever been a party to any lawsuit</p> <p>12 whether in your professional or personal capacity, a</p> <p>13 named party?</p> <p>14 A. No, I have not.</p> <p>15 Q. Okay. Let me show you what I'm going to</p> <p>16 mark as Exhibit 1, which is your September 16th, 2024</p> <p>17 opening report.</p> <p>18 (Exhibit Number 1 was marked for</p> <p>19 identification and was attached to the deposition.)</p> <p>20 BY MS. ADEN:</p> <p>21 Q. I'm giving you one copy of that and I'll</p>

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<p style="text-align: right;">Page 41</p> <p>1 hand your counsel a copy as well.</p> <p>2 MS. BROYLES: I've got copies of the</p> <p>3 report. If there's something I don't have a copy of,</p> <p>4 I'll let you know. That way you don't have to get up</p> <p>5 and hand it to me.</p> <p>6 MS. ADEN: Okay.</p> <p>7 MS. BROYLES: But I do appreciate you</p> <p>8 making -- bringing all of this for us. Thank you.</p> <p>9 BY MS. ADEN:</p> <p>10 Q. Do you recognize this document that I've</p> <p>11 handed to you?</p> <p>12 A. Yes, I do.</p> <p>13 Q. And does this appear to be a complete copy</p> <p>14 of your September 16th, 2024 opening report in this</p> <p>15 case?</p> <p>16 A. It appears to be.</p> <p>17 Q. And looking at pages 113 through 132 of</p> <p>18 that document, does that include your full, complete,</p> <p>19 and accurate curriculum vitae, CV?</p> <p>20 A. This is current.</p> <p>21 Q. Okay. Have you been deposed before</p>	<p style="text-align: right;">Page 43</p> <p>1 San Juan County Board of Commissioners?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. Is that another case that you would</p> <p>4 have been deposed in?</p> <p>5 A. That is, yes.</p> <p>6 Q. Post the 2020 census?</p> <p>7 A. Yes. That's correct.</p> <p>8 Q. And Petteway, P-E-T-T-E-W-A-Y, versus</p> <p>9 Galveston County? Does that refresh your memory?</p> <p>10 A. That's correct.</p> <p>11 Q. You were deposed in that case --</p> <p>12 A. Yes.</p> <p>13 Q. -- following the 2020 census?</p> <p>14 A. Yes.</p> <p>15 Q. You mentioned maybe two or more -- I think</p> <p>16 you said five or six for depositions?</p> <p>17 A. Yeah.</p> <p>18 Q. What jurisdictions beyond the three that</p> <p>19 we just identified have you been deposed in?</p> <p>20 A. So it would have been the Robinson case in</p> <p>21 Louisiana and there was a combination of Merrill,</p>
<p style="text-align: right;">Page 42</p> <p>1 whether in your personal or professional capacity?</p> <p>2 A. I have.</p> <p>3 Q. Let's focus on in your personal capacity.</p> <p>4 Have you ever been deposed in your personal capacity?</p> <p>5 A. No.</p> <p>6 Q. Now focusing on your professional</p> <p>7 capacity, can you describe when you have been</p> <p>8 deposed?</p> <p>9 A. Sure. Yes. There was a case in Dallas</p> <p>10 many years ago, I'd say ten or more years ago. It</p> <p>11 was Harding -- the Harding case.</p> <p>12 And then there was a long period of time</p> <p>13 when I was not engaged in any trial activity. And</p> <p>14 then in the most recently -- in the most recent round</p> <p>15 of redistricting, I was deposed in, I think, four or</p> <p>16 five different cases.</p> <p>17 Q. So just focusing on depositions, you</p> <p>18 mentioned was it the Harding versus County of Dallas</p> <p>19 case that you're referencing?</p> <p>20 A. Yes. That's correct.</p> <p>21 Q. Are you familiar with Navajo Nation versus</p>	<p style="text-align: right;">Page 44</p> <p>1 Milligan cases in Alabama.</p> <p>2 Q. And the Robinson case, is it fair to say,</p> <p>3 involves Louisiana's congressional redistricting?</p> <p>4 A. Yes.</p> <p>5 Q. And the Alabama case that you're</p> <p>6 referencing, is it fair to say that that involves</p> <p>7 Alabama's congressional redistricting?</p> <p>8 A. It also did, yes.</p> <p>9 Q. And both Louisiana's congressional and</p> <p>10 Alabama's congressional, these were post 2020</p> <p>11 litigation?</p> <p>12 A. Yes, they were.</p> <p>13 Q. Now I'm focusing just now on deposition</p> <p>14 testimony like today. And is it your recollection</p> <p>15 that you were deposed in the Louisiana and Alabama</p> <p>16 redistricting cases as compared to testifying in</p> <p>17 court in those cases?</p> <p>18 A. I vividly remember being deposed in the</p> <p>19 Alabama case. I know I testified in Louisiana. I</p> <p>20 can't recall if I was deposed as well as testified,</p> <p>21 but I'm certain that I testified in the Louisiana</p>

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<p style="text-align: right;">Page 45</p> <p>1 case.</p> <p>2 Q. Was the Alabama deposition recent?</p> <p>3 A. Three years ago. I'm not trying to be</p> <p>4 evasive. I just can't -- like in the blur of those</p> <p>5 cases, I don't remember.</p> <p>6 Q. I believe the redistricting cycle has been</p> <p>7 a blur for many people, not just you.</p> <p>8 A. Yes. Thank you.</p> <p>9 Q. So you mentioned about five cases that you</p> <p>10 believe you were deposed in following the 2020</p> <p>11 census.</p> <p>12 Is that fair to say?</p> <p>13 A. Yes.</p> <p>14 Q. Okay. Any others that come to mind?</p> <p>15 A. No.</p> <p>16 Q. Can you walk me through each of the cases</p> <p>17 that you described -- and I can help with the names</p> <p>18 of the cases that I believe that I know --</p> <p>19 A. Sure.</p> <p>20 Q. -- and just tell me generally what the</p> <p>21 nature of the dispute was, as far as you understand</p>	<p style="text-align: right;">Page 47</p> <p>1 their plan, and the question was could there or</p> <p>2 should there have been a different draw of the plan</p> <p>3 that would have changed the representation of the</p> <p>4 Navajo Nation in that case.</p> <p>5 There were a variety of competing</p> <p>6 interests both within the Navajo Nation, as well as</p> <p>7 within the state, that had interests in different</p> <p>8 potential draws of the Navajo Nation that would have</p> <p>9 resulted in different kinds or amounts of</p> <p>10 representation for them.</p> <p>11 Q. And do you recall if this involved the</p> <p>12 Navajo Nation and the county for San Juan?</p> <p>13 A. Yes. That's correct.</p> <p>14 Q. And did you provide testimony on behalf of</p> <p>15 the Navajo Nation or on behalf of the County?</p> <p>16 A. On behalf of San Juan County.</p> <p>17 Q. Who were the defendants?</p> <p>18 A. Yes. Correct. That case was settled.</p> <p>19 Q. Okay. The Petteway versus Galveston case,</p> <p>20 what was that about?</p> <p>21 A. So that's a more recent case and that case</p>
<p style="text-align: right;">Page 46</p> <p>1 it? So maybe we can start with the Dallas County</p> <p>2 case.</p> <p>3 A. So the Dallas County case was a novel</p> <p>4 case. There was -- with the changing demographics of</p> <p>5 the state of Texas and Dallas in particular, the</p> <p>6 characteristics of the county had changed in such a</p> <p>7 way that there were more minorities than there were</p> <p>8 white non-Hispanics.</p> <p>9 So the case was testing whether the law</p> <p>10 would withstand a claim that white non-Hispanics</p> <p>11 could also as a minority be protected for a claim for</p> <p>12 a seat on the county commissioners.</p> <p>13 Q. And did you provide testimony on behalf of</p> <p>14 the white plaintiffs or the jurisdiction in defense?</p> <p>15 A. That was on behalf of the white</p> <p>16 plaintiffs.</p> <p>17 Q. What about the Navajo Nation case? What</p> <p>18 was that generally about?</p> <p>19 A. So that was the case that was testing the</p> <p>20 veracity of the lines that were drawn and how they</p> <p>21 impacted the representation of the Navajo Nation in</p>	<p style="text-align: right;">Page 48</p> <p>1 revolved around the drawing of county commissioner</p> <p>2 districts. There's four there. And so my work there</p> <p>3 was not defending a plan. It was -- I drew the plan</p> <p>4 and then that plan subsequently -- there was a suit</p> <p>5 that was filed against it, and in the process of that</p> <p>6 litigation I was asked to testify.</p> <p>7 And that testimony is recorded. And as</p> <p>8 far as I know, that case is still ongoing debating</p> <p>9 whether that was a legal draw or not. It has been</p> <p>10 all the way up and down the courts, as far as I know.</p> <p>11 But my participation in that case has ended now, as</p> <p>12 far as I know.</p> <p>13 Q. And your testimony was on behalf of the</p> <p>14 plaintiffs, the minority -- racial minority</p> <p>15 plaintiffs or the defendant jurisdiction?</p> <p>16 A. That was on behalf of the defendants on</p> <p>17 behalf of Galveston County, right.</p> <p>18 Q. And then you mentioned the Alabama</p> <p>19 congressional redistricting. Can you briefly</p> <p>20 describe what that was about?</p> <p>21 A. Yeah, sure. So in both the Alabama and</p>



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<p style="text-align: right;">Page 49</p> <p>1 the Louisiana redistricting cases that case was --</p> <p>2 the fundamentals of that case were that Alabama --</p> <p>3 I'm going to talk about them almost together -- that</p> <p>4 they were drawn in a way that had six predominantly</p> <p>5 white majority districts and one solidly Black</p> <p>6 majority district.</p> <p>7 And then the case was over whether there</p> <p>8 should be two smaller majority Black districts drawn,</p> <p>9 And in both of those cases I worked for the state of</p> <p>10 Alabama and the state of Louisiana.</p> <p>11 Q. What do you mean by "solidly" -- and I</p> <p>12 don't remember exactly what you said -- but solidly</p> <p>13 Black districts as compared to smaller majority Black</p> <p>14 districts? What do you mean by that?</p> <p>15 A. So I don't remember the numbers precisely.</p> <p>16 But the case revolved around, for example, if there</p> <p>17 was a district that would have 56 percent -- 57</p> <p>18 percent -- a significantly larger than 50 percent</p> <p>19 majority, which is how the plan was drawn originally,</p> <p>20 and then in order to create two districts it would</p> <p>21 still have a majority.</p>	<p style="text-align: right;">Page 51</p> <p>1 Q. I've noticed you used African American and</p> <p>2 Black. Do you consider those two different things?</p> <p>3 A. No, I do not. Currently, you know, we're</p> <p>4 trying to use as encompassing a definition as</p> <p>5 possible. And so frequently we refer to them as</p> <p>6 Black and/or African American.</p> <p>7 Q. And who is "we"?</p> <p>8 A. The people who are -- practice in my</p> <p>9 field, demographers. People who are experts in</p> <p>10 Census Bureau data.</p> <p>11 Q. So having talked about those five cases in</p> <p>12 your depositions, have you ever been deposed in a</p> <p>13 case where you have provided testimony on behalf of</p> <p>14 Black, Latino, Native American, or Asian American and</p> <p>15 Pacific Islander voters or organizations who</p> <p>16 represent them?</p> <p>17 MS. BROYLES: Object to the form.</p> <p>18 A. No, I have not.</p> <p>19 BY MS. ADEN:</p> <p>20 Q. So you mentioned, I believe, having</p> <p>21 testified in court, so after the deposition getting</p>
<p style="text-align: right;">Page 50</p> <p>1 That larger majority would have to be</p> <p>2 diluted to some amount. And, again, I don't remember</p> <p>3 how much that one district was diluted for the other</p> <p>4 two districts. But, for example, say it was 56 or 57</p> <p>5 percent to 51 or 52 percent districts.</p> <p>6 Q. And are you defining dilution as going</p> <p>7 from 56 to 52 or do you mean something else?</p> <p>8 A. No. That's what I mean, just the</p> <p>9 reduction in the -- and I don't mean dilution in a</p> <p>10 legal sense. I'm not representing -- I'm just saying</p> <p>11 that the percent who are -- there's only so many</p> <p>12 people.</p> <p>13 And so if you try to take a minority</p> <p>14 population from one district and put them into two</p> <p>15 districts that the share of each one of those two</p> <p>16 districts is going to go down compared to being in</p> <p>17 one district.</p> <p>18 Compared to having a minority population</p> <p>19 in one district, the alternative of having two</p> <p>20 districts is going to reduce the percent share of</p> <p>21 minorities in those two districts.</p>	<p style="text-align: right;">Page 52</p> <p>1 to testimony in court.</p> <p>2 Is that fair to say?</p> <p>3 A. Yes.</p> <p>4 Q. And all of that testimony has been in your</p> <p>5 professional capacity?</p> <p>6 A. It has.</p> <p>7 Q. Never in your personal capacity?</p> <p>8 A. No.</p> <p>9 Q. So focusing on your professional capacity,</p> <p>10 outside of the cases that you have already discussed,</p> <p>11 have you provided testimony in court -- let me strike</p> <p>12 that.</p> <p>13 In the cases that you've already described</p> <p>14 where you provided deposition testimony, is it</p> <p>15 accurate that you later provided testimony in court</p> <p>16 in all of those five cases.</p> <p>17 So did you provide testimony in court in</p> <p>18 the Dallas Harding case?</p> <p>19 A. No, I did not.</p> <p>20 Q. How about the San Juan County case which</p> <p>21 you said settled? Did you provide testimony in a</p>

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<p style="text-align: right;">Page 53</p> <p>1 court before it was settled?</p> <p>2 A. No, I did not.</p> <p>3 Q. What about the Petteway case? Did you</p> <p>4 provide testimony in court?</p> <p>5 A. Yes.</p> <p>6 Q. And in the Alabama, Louisiana</p> <p>7 congressional redistricting cases, did you provide</p> <p>8 testimony in court?</p> <p>9 A. Yes, to the best of my recollection, I</p> <p>10 did.</p> <p>11 Q. Okay.</p> <p>12 MS. BROYLES: Did you testify in</p> <p>13 Wisconsin?</p> <p>14 A. I did not. I was not deposed or testified</p> <p>15 in Wisconsin.</p> <p>16 MS. BROYLES: Okay. I was just making</p> <p>17 sure we didn't miss one that was in my recollection</p> <p>18 just while we're on this topic. I just didn't want</p> <p>19 to miss it.</p> <p>20 MS. ADEN: Yes. And just for the record,</p> <p>21 I know you get redirect, but we want to get out of</p>	<p style="text-align: right;">Page 55</p> <p>1 in whole or in part?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. So let's talk about the case</p> <p>4 involving Louisiana's post 2020 congressional</p> <p>5 redistricting that you referenced before.</p> <p>6 A. Yes.</p> <p>7 Q. Looking at your CV on page 115, if you</p> <p>8 want to look at that, you acknowledge in your CV</p> <p>9 that, quote -- you acknowledge in your CV that your,</p> <p>10 quote, testimony and analysis was not credited in the</p> <p>11 court's decision.</p> <p>12 Is that fair to say?</p> <p>13 A. That is fair to say.</p> <p>14 Q. And specifically do you have any reason to</p> <p>15 dispute that a court in the Louisiana congressional</p> <p>16 case after observing you on the stand qualified you</p> <p>17 but found your methodology to be, quote, poorly</p> <p>18 supported?</p> <p>19 Do you have any reason to dispute that?</p> <p>20 MS. BROYLES: Object to the form.</p> <p>21 A. I stand by my methods and the analysis</p>
<p style="text-align: right;">Page 54</p> <p>1 here today. If saving some of these for redirect is</p> <p>2 possible, I would welcome that.</p> <p>3 MS. BROYLES: And I just didn't want to</p> <p>4 get too far down the road and misstate something if</p> <p>5 that was something that could be addressed right now.</p> <p>6 I'm not trying to short-circuit you.</p> <p>7 MS. ADEN: I understand. Okay.</p> <p>8 BY MS. ADEN:</p> <p>9 Q. So is it fair -- so outside of the cases</p> <p>10 that we've mentioned, Petteway that you recall,</p> <p>11 Alabama, Louisiana, did you provide testimony in</p> <p>12 court in any other cases that you can recall?</p> <p>13 A. No.</p> <p>14 Q. And is it fair to say based upon what you</p> <p>15 described about your deposition work that you have</p> <p>16 never provided testimony in court on behalf of Black,</p> <p>17 Latino, Native American, or Asian American and</p> <p>18 Pacific Islander plaintiffs or an organization</p> <p>19 representing those plaintiffs?</p> <p>20 A. That's correct.</p> <p>21 Q. Has a court ever rejected your testimony</p>	<p style="text-align: right;">Page 56</p> <p>1 that I did, and it's their decision and I honor it</p> <p>2 and respect it completely.</p> <p>3 BY MS. ADEN:</p> <p>4 Q. And is the Louisiana case -- was that --</p> <p>5 did you provide testimony before a single judge or a</p> <p>6 panel of judges?</p> <p>7 A. I don't remember.</p> <p>8 Q. You don't remember? It was a blur?</p> <p>9 A. It was a long day in the office.</p> <p>10 Q. I can imagine. Do you have any reason to</p> <p>11 dispute that the court in the Louisiana congressional</p> <p>12 redistricting case further found that your, quote,</p> <p>13 conclusions carried little, if any, probative value</p> <p>14 on the question of racial predominance, end quote,</p> <p>15 that was at issue in the case?</p> <p>16 A. I stand by my methods, but I do not</p> <p>17 dispute their decision or their judgment of my work.</p> <p>18 Q. And by "their" you're not making a</p> <p>19 representation, one way or the other, whether that</p> <p>20 was a single court decision or -- I mean, a decision</p> <p>21 by a single judge or by a panel of judges?</p>



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<p style="text-align: right;">Page 57</p> <p>1 A. I'm not distinguishing that.</p> <p>2 Q. And in particular do you have any reason</p> <p>3 to dispute that the court gave your racial</p> <p>4 predominance opinion little weight because you did</p> <p>5 not, quote, account for compactness, communities of</p> <p>6 interest, or incumbent protection in concluding that</p> <p>7 race predominated in plaintiff's map, end quote?</p> <p>8 A. I stand by my methods and I do not dispute</p> <p>9 their conclusion.</p> <p>10 Q. And do you have any reason to dispute that</p> <p>11 the court found your, quote, analysis lacked rigor</p> <p>12 and thoroughness, which further undermined the</p> <p>13 reliability of your opinions, end quote?</p> <p>14 A. I stand by my methods and I do not dispute</p> <p>15 the findings of the court.</p> <p>16 Q. In that Louisiana congressional</p> <p>17 redistricting case, do you recall providing testimony</p> <p>18 that an illustrative redistricting plan at issue</p> <p>19 used, quote, surgical, end quote, precision in</p> <p>20 splitting Baton Rouge and Lafayette between</p> <p>21 congressional districts?</p>	<p style="text-align: right;">Page 59</p> <p>1 the trial court -- and if I may represent, it was a</p> <p>2 panel of three judges? --</p> <p>3 A. I believe so.</p> <p>4 Q. -- unanimously refused to assign any</p> <p>5 weight to your original opinion that the single race</p> <p>6 Black metric is the, quote, most defensible, end</p> <p>7 quote, metric for the court to use there?</p> <p>8 MS. BROYLES: Object to the form.</p> <p>9 A. I don't have any reason to dispute that.</p> <p>10 BY MS. ADEN:</p> <p>11 Q. Do you have any reason to dispute that the</p> <p>12 trial court further found that your, quote, testimony</p> <p>13 on this issue, end quote, caused them to, quote,</p> <p>14 question your credibility as an expert witness, end</p> <p>15 quote?</p> <p>16 A. I don't have any reason to dispute that.</p> <p>17 Q. Do you have any reason to dispute that the</p> <p>18 trial court, quote, assigned very little weight to</p> <p>19 your testimony, determining that your work was</p> <p>20 considerably less thorough, end quote, than other</p> <p>21 experts?</p>
<p style="text-align: right;">Page 58</p> <p>1 A. I do.</p> <p>2 Q. Such that Black neighbors were included in</p> <p>3 a particular district?</p> <p>4 A. Yes.</p> <p>5 Q. And do you recall further opining that</p> <p>6 those split political divisions tended to show that</p> <p>7 the CD at issue reached a traditional redistricting</p> <p>8 criterion in those locations and raised the</p> <p>9 possibility that that CD divides communities of</p> <p>10 interest based in a single municipality?</p> <p>11 MS. BROYLES: Object to the form.</p> <p>12 A. I recall that.</p> <p>13 BY MS. ADEN:</p> <p>14 Q. Now, turning to the case involving the</p> <p>15 post 2020 Alabama congressional redistricting map, on</p> <p>16 page 116 of your CV -- do you want to look? -- do you</p> <p>17 acknowledge that your, quote, testimony and analysis</p> <p>18 were not credited in the court's decision, end quote,</p> <p>19 in that case as well?</p> <p>20 A. That's correct.</p> <p>21 Q. And do you have any reason to dispute that</p>	<p style="text-align: right;">Page 60</p> <p>1 Do you have any reason to dispute that?</p> <p>2 MS. BROYLES: Object to the form.</p> <p>3 A. I stand by the methods I used, but I do</p> <p>4 not dispute the court's decision.</p> <p>5 BY MS. ADEN:</p> <p>6 Q. Okay. And do you have any reason to</p> <p>7 dispute that in addition to the methodological</p> <p>8 concerns the panel had about the, quote, appropriate</p> <p>9 metric to use to measure the Black voting age</p> <p>10 population, end quote, that they were, quote,</p> <p>11 concerned about numerous other instances in which you</p> <p>12 offered an opinion without a sufficient basis or in</p> <p>13 some instances any basis?</p> <p>14 Any reason to dispute that?</p> <p>15 A. No.</p> <p>16 Q. Additionally, did the court find, quote,</p> <p>17 internal inconsistencies and vacillations, end quote,</p> <p>18 in your testimony that that undermined your</p> <p>19 credibility as an expert witness? Any reason to</p> <p>20 dispute that?</p> <p>21 A. No.</p>

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<p style="text-align: right;">Page 61</p> <p>1 Q. Did they write that during your live 2 testimony they, quote, carefully observed your 3 demeanor, particularly as you were cross-examined and 4 that on more than one occasion when a questioner 5 asked a reasonable question about the bases for your 6 opinions you offered dogmatic and defensive answers 7 that merely incanted your professional opinion and 8 reflected a lack of concern for whether that opinion 9 was well founded? 10 Do you have any reason to dispute that 11 finding? 12 A. No. 13 Q. Do you have any reason to dispute that 14 ultimately because you, quote, consistently had 15 difficulty defending both your methods and your 16 conclusions and repeatedly offered opinions without a 17 sufficient basis and because the court observed 18 internal inconsistencies in your testimony on 19 important issues, end quote, that the court found 20 that your, quote, testimony was unreliable, end 21 quote?</p>	<p style="text-align: right;">Page 63</p> <p>1 report, except as may be asked of him. 2 And so with respect to Dr. Liu, we did 3 provide him that deposition testimony so that he 4 could be aware of the criticisms against him in the 5 event that you asked about it today. 6 And so there's no intention of withholding 7 any kind of opinion, but it was simply for the 8 purpose of ensuring that he had the information 9 available to him in the event that we -- it came up 10 today such that we would not need to have additional 11 deposition testimony, delay any deadlines, anything 12 of that sort. 13 And so just, again, for the record those 14 are not affirmative opinions of his regarding Dr. 15 Liu. We just prepared him in the event that he was 16 questioned about them so that he could respond 17 completely and informed. So that's -- 18 MS. ADEN: And, to be clear, defendant is 19 not intending to have Mr. Bryan or anyone provide any 20 further written testimony or other testimony related 21 to Dr. Liu that has not been disclosed prior to the</p>
<p style="text-align: right;">Page 62</p> <p>1 Any reason to dispute that? 2 A. No. 3 Q. Ultimately, do you have any reason to 4 dispute that the panel of three judges in the Alabama 5 congressional litigation found the testimony of Bill 6 Cooper, quote, highly credible, end quote, and, 7 quote, assigned very little weight, end quote, to 8 your testimony? 9 Any reason to dispute that? 10 A. No. 11 MS. ADEN: Are you okay with time or do 12 you need a break? 13 MS. BROYLES: Let's take a little break 14 real quick, if you don't mind. 15 (A break was taken.) 16 MS. ADEN: Did you want to, Ms. Broyles, 17 indicate anything on the record before we proceed? 18 MS. BROYLES: Yes. And we talked about 19 this off the record. So just for the purpose of 20 ensuring that this is in the transcript, Mr. Bryan is 21 not intending to offer any opinions outside of his</p>	<p style="text-align: right;">Page 64</p> <p>1 expert discovery -- outside of the expert discovery 2 schedule that the court entered? 3 MS. BROYLES: No, except to the extent 4 that if any of the witnesses -- I know Dr. Liu 5 certainly said in his deposition and in his 6 transcript, as well as Dr. -- excuse me, not Dr. -- 7 Mr. Cooper said yesterday that he reserved the right 8 to supplement, amend, all of that. 9 So in the event that they do that then, 10 you know, we certainly reserve our right to do it. 11 And, of course, if he is questioned about any of that 12 information we reserve the right for him to respond 13 fully based on his own opinion. 14 So, yes, I agree with that caveat that if 15 you do ask him a question he is entitled to respond. 16 So that's -- that's more of where I'm going with 17 that, but -- does that make sense? 18 MS. ADEN: I understand where you are 19 right now, I believe, and we will deal with any 20 concerns. 21 MS. BROYLES: Yeah. Not knowing -- you</p>

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<p style="text-align: right;">Page 65</p> <p>1 know, again, Mr. Bryan said yesterday -- excuse me --</p> <p>2 not Mr. Bryan -- Mr. Cooper said yesterday that he is</p> <p>3 going to be providing the affidavit, which, of</p> <p>4 course, was by agreement regarding the new plan that</p> <p>5 was not disclosed until his rebuttal.</p> <p>6 MS. ADEN: Potentially.</p> <p>7 MS. BROYLES: Potentially. And so if that</p> <p>8 happens, that's kind of where we're going with it.</p> <p>9 MS. ADEN: I understand.</p> <p>10 MS. BROYLES: So yes.</p> <p>11 MS. ADEN: Okay.</p> <p>12 BY MS. ADEN:</p> <p>13 Q. Mr. Bryan, I'm going to turn to a new</p> <p>14 topic, which is a little bit more about your</p> <p>15 background before we dive even more into the reports</p> <p>16 that you've written in this case. Is that okay?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. When were you born?</p> <p>19 A. 1970.</p> <p>20 Q. And your place of birth?</p> <p>21 A. Puyallup, P-U-Y-A-L-L-U-P, Washington.</p>	<p style="text-align: right;">Page 67</p> <p>1 A. Several days.</p> <p>2 Q. More than a week?</p> <p>3 A. No.</p> <p>4 Q. And which part of Arkansas?</p> <p>5 A. Around Little Rock.</p> <p>6 Q. Did you go outside of the Little Rock</p> <p>7 area?</p> <p>8 A. Not that I recall. I was a guest.</p> <p>9 Q. Were you a guest on behalf of any Arkansas</p> <p>10 State officials?</p> <p>11 A. No.</p> <p>12 Q. Federal officials?</p> <p>13 A. No.</p> <p>14 Q. Do you have any social media accounts like</p> <p>15 Twitter or Facebook?</p> <p>16 A. I have a Facebook account and I have a</p> <p>17 LinkedIn account.</p> <p>18 Q. Any other social media accounts?</p> <p>19 A. No.</p> <p>20 Q. Would you consider your LinkedIn, Facebook</p> <p>21 accounts personal accounts or professional or a</p>
<p style="text-align: right;">Page 66</p> <p>1 Q. Washington State?</p> <p>2 A. Yes.</p> <p>3 Q. And where did you grow up?</p> <p>4 A. Mostly in the Pacific Northwest between</p> <p>5 Seattle and Portland.</p> <p>6 Q. And where do you currently live?</p> <p>7 A. Montpelier, Virginia.</p> <p>8 Q. And how long have you lived there,</p> <p>9 approximately?</p> <p>10 A. I've lived around Richmond for 15 years.</p> <p>11 Q. Okay. Have you ever lived in Arkansas?</p> <p>12 A. No.</p> <p>13 Q. Have you ever visited Arkansas?</p> <p>14 A. Yes.</p> <p>15 Q. When?</p> <p>16 A. At least ten years ago.</p> <p>17 Q. And outside of at least ten years ago, had</p> <p>18 you been to Arkansas before then?</p> <p>19 A. No. It was a professional visit on that</p> <p>20 one occasion.</p> <p>21 Q. And for how long on that one occasion?</p>	<p style="text-align: right;">Page 68</p> <p>1 combination?</p> <p>2 A. My Facebook account is strictly personal</p> <p>3 for my family and close friends, and nothing about</p> <p>4 work is discussed there. My LinkedIn account is</p> <p>5 professional, but I don't share the nature or</p> <p>6 information about the specific cases that I'm working</p> <p>7 on in there just out of decorum.</p> <p>8 Q. And is your LinkedIn account under your</p> <p>9 name, Thomas Bryan?</p> <p>10 A. It is.</p> <p>11 Q. Any initials or anything associated with</p> <p>12 that account?</p> <p>13 A. I don't think so.</p> <p>14 Q. Okay. Do you describe yourself as a</p> <p>15 demographer and political redistricting expert?</p> <p>16 A. I do.</p> <p>17 Q. And is that the expertise that you claim</p> <p>18 in this case?</p> <p>19 A. It is.</p> <p>20 Q. Are there any other subject areas in which</p> <p>21 you claim expertise?</p>

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<p style="text-align: right;">Page 69</p> <p>1 A. Not at the same level of demography and 2 redistricting. 3 Q. By not at the same level, what are you 4 referring to? 5 A. I have knowledge and experience in other 6 areas such as statistics, but I do not profess to be 7 an expert professional statistician. 8 Q. What's the basis of your knowledge of 9 statistics? 10 A. Training and experience under the tutelage 11 of mostly Dr. David Swanson. 12 Q. Who is he? 13 A. A professor of statistics and demography 14 with whom I've authored books and worked on many 15 cases with. 16 Q. Do you have any degrees in statistics? 17 A. No. 18 Q. Do you have any particular credentials, 19 certificates related to statistics? 20 A. No. 21 Q. Outside of demography and political</p>	<p style="text-align: right;">Page 71</p> <p>1 information management beyond simply map drawing. 2 Q. I understand that. Have you ever been 3 qualified as an expert in court in cartography? 4 A. No. 5 Q. Have you ever been qualified as an expert 6 in court in GIS? 7 A. I have not. 8 Q. Is it fair to say you've been qualified in 9 court in demography and political redistricting? 10 A. I have. 11 Q. And can you point to any specific cases 12 that have qualified you in those categories? 13 A. The Petteway case. 14 Q. Any others that you can recall? 15 A. We've discussed the inventory of the cases 16 that I testified in. So without splitting whichever 17 cases I was given credit in or not given credit in, I 18 was qualified in Alabama, Louisiana, New Mexico, 19 Petteway. 20 Q. New Mexico is referring to San Juan? 21 A. Yes.</p>
<p style="text-align: right;">Page 70</p> <p>1 redistricting are there any other areas of expertise 2 that you claim to bring with you to bear in your 3 reports or your testimony for this case? 4 A. I would say I have expertise in 5 cartography and geographic information systems, which 6 are subordinate to my expertise in redistricting. 7 Q. And also subordinate to your expertise in 8 demography? 9 A. Correct. 10 Q. Can you explain what you mean by 11 cartography? 12 A. Cartography is the art and science of 13 drawing maps to provide information visually. 14 Q. What about GIS? 15 A. A geographic information system is an 16 electronic system that is used to collect and manage 17 and analyze spatial data in a way to generate 18 information visually. 19 Cartography is a component of a geographic 20 information system. A geographic information system 21 is much larger and encompasses many areas including</p>	<p style="text-align: right;">Page 72</p> <p>1 Q. Okay. Do you agree that demography is the 2 statistical study of human populations? 3 A. It is. 4 Q. Does demography relate to or focus on 5 issues of size, density, and distribution of 6 statistical characteristics? 7 A. It does. 8 Q. Is anything else encompassed in demography 9 from the standpoint of your claimed expertise? 10 MS. BROYLES: Object to the form. 11 A. Over the years demography has become an 12 increasingly broad field that has begun to be brought 13 to bear on larger areas of our sphere of life. 14 As an example, it is being used in areas 15 such as emergency management and preparedness in 16 coastal areas in assessing rising waters and areas 17 that are under threat from them. 18 So demography includes the areas that you 19 mentioned but is also increasingly being brought to 20 bear in other scientific areas, including that. 21 BY MS. ADEN:</p>

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<p style="text-align: right;">Page 73</p> <p>1 Q. And for purposes of this case, those other 2 areas that you just described, are you bringing that 3 perspective to bear in this case? 4 A. Yes, I am. 5 Q. What do you consider to be an expertise in 6 political redistricting? 7 A. So expertise in political redistricting is 8 based in a knowledge -- an expert level knowledge of 9 census data and being able to use that data and 10 represent it spatially to show where concentrations 11 of population are for the purpose of apportionment 12 and line drawing for political representation. 13 Q. Does the expertise in political 14 redistricting stem from your training and experience 15 as a demographer or from other educational experience 16 that you have? 17 A. Mostly from my training and experience as 18 a demographer. 19 Q. Okay. Do you have any -- what education 20 do you have that informs your expertise in political 21 redistricting?</p>	<p style="text-align: right;">Page 75</p> <p>1 Q. So besides those two degrees, any other 2 experience? 3 A. I have lots of experience not related to 4 those two degrees. 5 Q. Related to political redistricting? 6 A. Yes. 7 Q. And would that involve your expert and 8 consulting work? 9 A. It does, yes. 10 Q. Anything else that you can think of? 11 A. Not that I can think of. 12 Q. Has any court ever qualified you to 13 testify about political redistricting? 14 MS. BROYLES: Object to the form. Are you 15 -- and this is more so because I think that when 16 you're saying "qualified him," they've accepted his 17 testimony and things of that sort in many cases. 18 And so I think you're almost asking a 19 legal question. Most of these, obviously, cases 20 don't go to a jury. They're accepted by the court. 21 And so to the extent that any opinions or something</p>
<p style="text-align: right;">Page 74</p> <p>1 A. So I have two graduate degrees. One is a 2 master's of urban studies, and I earned that at 3 Portland State University. 4 And during my tenure there, I began 5 learning demography and redistricting working at the 6 Oregon State Data Center, and that's where I began to 7 build expertise in census data and information 8 management. 9 My other graduate degree is from George 10 Washington University. That degree was later in 11 2002, and that was in management and information 12 systems technology. And in that degree I built 13 considerably more expertise in large data and large 14 data management and analysis. 15 And the practice of redistricting often 16 involves massive amounts of data, and so those two 17 degree programs helped me build experience in both 18 the data that are used for it as well as the 19 practices using geographic information systems and 20 best information system practices to help manage the 21 information necessary to practice redistricting.</p>	<p style="text-align: right;">Page 76</p> <p>1 to that effect doesn't state it such that he has it 2 memorized, I'm raising that objection. 3 MS. ADEN: Let me ask it another way. 4 BY MS. ADEN: 5 Q. Are you aware, Mr. Bryan, of whether any 6 court has accepted that you are -- are you aware of 7 any court that has accepted that you are an expert 8 in, quote/unquote, redistricting, as you sit here 9 today? 10 A. Besides the cases we've already mentioned? 11 Q. Yes. 12 A. Not outside of the cases we've already 13 discussed. 14 Q. So turning to page 7 of Exhibit 1 that you 15 have, again, your September 16th report, you say that 16 your background and experience with demography and 17 census data began in 1996 with your work with the 18 state of Oregon as an analyst; is that correct? 19 A. That's correct. 20 Q. And that was after you received your first 21 master's degree?</p>



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<p style="text-align: right;">Page 77</p> <p>1 A. That was concurrent with my first master's 2 degree. I worked at the Oregon State Data Center 3 doing analytic work including redistricting work for 4 them while I was earning my master's degree. 5 Q. Understood. And you then worked as a 6 statistician for the Census Bureau, and that is when 7 you also subsequently got your second master's. 8 Is that fair to say? 9 A. That's correct, yes. 10 Q. And is that the completion of your formal 11 education? 12 A. It was, yes. 13 Q. Did you study any history in your formal 14 education? 15 A. I did. That was my undergraduate degree. 16 Q. Okay. Since your undergraduate degree, 17 have you studied any history formally? 18 A. Not to the degree of earning a degree in 19 it. 20 Q. Have you ever studied sociology, 21 anthropology, or political science to any significant</p>	<p style="text-align: right;">Page 79</p> <p>1 and learn about the case, and the -- at a high level 2 what my task was was to try and use my demographic 3 expertise to determine whether the second 4 congressional district, in fact, had been drawn in a 5 way that surgically split the Black population -- the 6 African American population of the southeast corner 7 of Pulaski County or if there were any other possible 8 explanations for where and how those lines had been 9 drawn. 10 Q. Is it fair to say that you were asked to 11 measure the demographic and political performance of 12 the 2021 congressional map? 13 A. That was part of the analysis that I did 14 to make that determination. 15 Q. And is it fair to say that you were asked 16 to compare the demographic political performance of 17 the enacted map with the 2011 enacted congressional 18 map? 19 A. That would not be accurate. I was 20 retained as a professional to make the judgment and 21 determination of making that comparison or any other</p>
<p style="text-align: right;">Page 78</p> <p>1 extent? 2 A. Only as -- let me be precise. Sociology 3 and anthropology as components of my formal degree 4 programs both undergraduate and graduate. I have not 5 had a class in political science. I don't represent 6 myself as a political scientist. 7 Q. Did you ever study the history of the U.S. 8 Census? 9 A. I have studied the history of the U.S. 10 Census. 11 Q. And in a formal capacity? 12 A. No. It's just intellectual curiosity. I 13 don't represent myself as a census historian. 14 Q. Okay. So turning back, again, to your 15 expert report dated September 16th, Exhibit 1, 16 looking at paragraph 16 and maybe even flipping to 19 17 of that report, can you describe to me what you were 18 asked to do in this case? 19 A. So I was given the Amended Complaint and 20 the other information, including the motion to 21 dismiss, the motion opposing the dismissal to read</p>	<p style="text-align: right;">Page 80</p> <p>1 comparisons that needed to be made to help 2 characterize the current plan and the competing 3 plans. 4 They left the specific comparisons and 5 analysis to my discretion. 6 Q. But you did make those comparisons? 7 A. Yes, I did. I just want to differentiate 8 what they told me to do and what I decided with my 9 experience to do. 10 Q. And in paragraph 19 your report identifies 11 that you analyzed the available circumstantial 12 evidence to assess whether the drawing of the 2021 13 enacted congressional plan is best explained by 14 racial motivations or other nonracial motivations. 15 Is that fair to say? 16 A. Yes. That's correct. 17 Q. So you mentioned that there was a 18 distinction between what you were told to do versus 19 what you were given discretion to do. 20 Can you describe that for me? 21 A. So I was -- it's pretty simple. I was</p>

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<p style="text-align: right;">Page 81</p> <p>1 given the task to try and answer this question, and I</p> <p>2 made the decisions about what data and what tools and</p> <p>3 what specific analysis to bring to bear from my</p> <p>4 demographer's toolbox to try and answer the question</p> <p>5 for them.</p> <p>6 Q. In paragraph 16 you identify that you --</p> <p>7 your assignment was to assess key features of the</p> <p>8 plaintiff's complaint.</p> <p>9 Is that accurate?</p> <p>10 A. Yes.</p> <p>11 Q. What are the key features of plaintiff's</p> <p>12 complaint?</p> <p>13 A. The assertion that the drawing of</p> <p>14 congressional district 2 was primary motivated by</p> <p>15 race.</p> <p>16 Q. As compared to what?</p> <p>17 A. Anything else, is there any other</p> <p>18 explanation.</p> <p>19 Q. And are you, as you sit here today,</p> <p>20 representing that you tested every other explanation</p> <p>21 but race to --</p>	<p style="text-align: right;">Page 83</p> <p>1 A. Can you point to an example?</p> <p>2 Q. Can you?</p> <p>3 A. I can start looking.</p> <p>4 Q. Let me ask another question before we</p> <p>5 point to something in particular.</p> <p>6 Did you make an assessment in this report</p> <p>7 about whether racial gerrymandering occurred in</p> <p>8 drawing the 2021 Arkansas congressional enacted map?</p> <p>9 A. I reached a conclusion about that.</p> <p>10 Q. What is the conclusion?</p> <p>11 A. My conclusion was that it did not appear</p> <p>12 that race was the primary motivation for how</p> <p>13 congressional district 2, 1, and 4 were drawn.</p> <p>14 MS. BROYLES: So CD -- everything is about</p> <p>15 congressional districts. So that's the congressional</p> <p>16 districts 1, 2, 3, and 4, just for your edification.</p> <p>17 BY MS. ADEN:</p> <p>18 Q. And, Mr. Bryan, are you associating racial</p> <p>19 motivations with racial gerrymandering?</p> <p>20 MS. BROYLES: Object to the form.</p> <p>21 A. I'm not drawing a distinction between a</p>
<p style="text-align: right;">Page 82</p> <p>1 A. No.</p> <p>2 Q. -- rule it out as an explanation for the</p> <p>3 lines in the enacted map?</p> <p>4 A. No.</p> <p>5 Q. Throughout your report, including in</p> <p>6 paragraph 16 through 18, you cite passages from</p> <p>7 briefing in this case.</p> <p>8 Is that accurate?</p> <p>9 A. That's correct.</p> <p>10 Q. And earlier you described what you</p> <p>11 understood to be the nature of plaintiff's complaint.</p> <p>12 Is that fair to say?</p> <p>13 A. Yes.</p> <p>14 Q. Is it fair to say that in your report you</p> <p>15 referenced terms like racial gerrymandering?</p> <p>16 A. Those words are excerpted, correctly</p> <p>17 quoted, and verbatim from the Amended Complaint.</p> <p>18 Q. So you're not using those words in your --</p> <p>19 separate and apart from how they're quoted in the</p> <p>20 Amended Complaint, you're not separately using the</p> <p>21 term "racial gerrymandering" in this report?</p>	<p style="text-align: right;">Page 84</p> <p>1 racial motivation and racial gerrymandering. Can you</p> <p>2 clarify?</p> <p>3 BY MS. ADEN:</p> <p>4 Q. Are racial motivation and racial</p> <p>5 gerrymandering the same thing to you?</p> <p>6 MS. BROYLES: Object to the form to the</p> <p>7 extent that it calls for a legal conclusion.</p> <p>8 BY MS. ADEN:</p> <p>9 Q. Let me step back. I think you testified</p> <p>10 that you reached a conclusion that it did not appear</p> <p>11 that race was the primary motivation for the 2021</p> <p>12 enacted map.</p> <p>13 Is that fair?</p> <p>14 A. Yes.</p> <p>15 Q. Are you equating primary racial motivation</p> <p>16 with racial gerrymandering?</p> <p>17 A. You know, my -- I would draw a slight</p> <p>18 distinction that there can be many competing</p> <p>19 motivations. There always are many competing</p> <p>20 motivations in the art and science of redistricting.</p> <p>21 Race can be, it has been among many other things.</p>



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<p style="text-align: right;">Page 85</p> <p>1 I differentiate that from racial</p> <p>2 gerrymandering in the sense that, to me, racial</p> <p>3 gerrymandering means the purpose of the draw to the</p> <p>4 exclusion or deprioritization of all other elements</p> <p>5 of redistricting that race has been held above all of</p> <p>6 them and was the most important definitive variable</p> <p>7 that was used to draw the plan.</p> <p>8 So in that regard I distinguish is it a</p> <p>9 factor from -- it is the definitive factor that led,</p> <p>10 excluding everything else, the drawing of the plan.</p> <p>11 Q. And your answer is no?</p> <p>12 A. Yes. That's correct.</p> <p>13 Q. And your testimony also is that you did</p> <p>14 not test all other explanations as compared to race</p> <p>15 before reaching that conclusion?</p> <p>16 MS. BROYLES: Object to the form.</p> <p>17 A. In the process of my work I tested all of</p> <p>18 the conventional, traditional redistricting</p> <p>19 principles, as well as political performance data to</p> <p>20 try and determine whether there were any other</p> <p>21 explanations for or against the conclusion that race</p>	<p style="text-align: right;">Page 87</p> <p>1 analysis the extent of traditional redistricting</p> <p>2 criteria that were tested to arrive at my conclusion</p> <p>3 were compactness, core retention, contiguity.</p> <p>4 And I also examined, even though I did not</p> <p>5 regard it as a traditional redistricting criteria,</p> <p>6 what the political performance of different plans</p> <p>7 were.</p> <p>8 Q. So I was going to ask you that. You</p> <p>9 separated out political performance from traditional</p> <p>10 redistricting principles you do not consider</p> <p>11 political performance -- and we'll talk about how</p> <p>12 that's defined by you -- but as a traditional</p> <p>13 redistricting principle?</p> <p>14 A. Yes. Historically, if you refer to, you</p> <p>15 know, most conventional, you know, resources that</p> <p>16 talk about this, the national conference state</p> <p>17 legislators would say compactness, contiguity, core</p> <p>18 retention.</p> <p>19 But, again, in the most recent Alexander</p> <p>20 decision they said partisan motivations are -- I</p> <p>21 believe they say explicitly they are.</p>
<p style="text-align: right;">Page 86</p> <p>1 was the predominant factor or the factor in drawing</p> <p>2 it, to come to a conclusion whether it was the factor</p> <p>3 or not.</p> <p>4 So I didn't test every conceivable factor</p> <p>5 that can explain it, but I tested the traditional</p> <p>6 redistricting principles that demographers would</p> <p>7 frequently use to say is it because of compactness,</p> <p>8 for example, or because it was motivated by core</p> <p>9 retention or motivated by incumbency.</p> <p>10 Those factors I tested in my analysis.</p> <p>11 BY MS. ADEN:</p> <p>12 Q. So by traditional redistricting principles</p> <p>13 you're defining that as the compactness, core</p> <p>14 retention, and incumbency?</p> <p>15 A. Those are several examples.</p> <p>16 Q. Any others that you yourself looked at</p> <p>17 here?</p> <p>18 A. Contiguity is one that we always test. In</p> <p>19 the recent Alexander decision the definition of a</p> <p>20 traditional redistricting criteria seemed to have</p> <p>21 been broadly opened, but to the extent that in my</p>	<p style="text-align: right;">Page 88</p> <p>1 So I'm going to be careful not to split</p> <p>2 hairs about opining what is or isn't because people</p> <p>3 way more important than me have a position about</p> <p>4 that, and I will defer to them.</p> <p>5 Q. But for purposes of this case, are you</p> <p>6 considering political performance a traditional</p> <p>7 redistricting principle?</p> <p>8 A. I did not consider it as a traditional</p> <p>9 redistricting principle. I just considered it</p> <p>10 another part of my analysis.</p> <p>11 Q. Have you ever made this type of assessment</p> <p>12 about whether race was the motivating factor above</p> <p>13 all other things in any other type of expert work</p> <p>14 you've done?</p> <p>15 A. Let me -- yes. So let me use the state of</p> <p>16 Wisconsin as an example.</p> <p>17 So in the state of Wisconsin race the</p> <p>18 question was are districts being drawn in such a way</p> <p>19 that we can say that race was the reason that the</p> <p>20 population is being moved in order to rebalance?</p> <p>21 So the question was, you know, do we have</p>

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<p style="text-align: right;">Page 89</p> <p>1 a tool in our toolbox that enables us to say was race</p> <p>2 the factor and can we say with some certainty that,</p> <p>3 you know, race was driving the movement of the</p> <p>4 population in a certain way consistently in order to</p> <p>5 rebalance the population to a one-person, you know,</p> <p>6 one-vote rule?</p> <p>7 Q. Did you provide expert testimony in court</p> <p>8 on that analysis?</p> <p>9 A. I did not. My work was credited by the</p> <p>10 Supreme Court of Wisconsin in arriving at that</p> <p>11 conclusion.</p> <p>12 Q. So there was a state court case that you</p> <p>13 provided expert testimony in?</p> <p>14 A. I did not testify. My expert report was</p> <p>15 used by the Supreme Court of Wisconsin in reaching</p> <p>16 their conclusion.</p> <p>17 Q. But you submitted the expert report on</p> <p>18 behalf of party and litigation in state court about</p> <p>19 Wisconsin redistricting --</p> <p>20 A. Yes.</p> <p>21 Q. -- following the 2020 census?</p>	<p style="text-align: right;">Page 91</p> <p>1 debated or offered as an explanation for how the</p> <p>2 plans were drawn.</p> <p>3 BY MS. ADEN:</p> <p>4 Q. Okay. We'll return to that.</p> <p>5 Do you understand that a determination of</p> <p>6 whether racial gerrymandering occurred, whether that</p> <p>7 is a legal question or not?</p> <p>8 A. I understand it to be a legal question.</p> <p>9 I'm not a lawyer.</p> <p>10 Q. Do you understand plaintiffs to have a</p> <p>11 claim related to intentional vote dilution?</p> <p>12 A. I understand that, yes.</p> <p>13 Q. Are you making an assessment of whether</p> <p>14 intentional vote dilution occurred in the drawing of</p> <p>15 Arkansas's 2021 congressional plan?</p> <p>16 MS. BROYLES: Object to the form. Calls</p> <p>17 for a legal conclusion.</p> <p>18 (Whereupon, Madam Reporter asked for</p> <p>19 clarification from the witness.)</p> <p>20 MS. ADEN: I will strike my last question</p> <p>21 and I will rephrase.</p>
<p style="text-align: right;">Page 90</p> <p>1 A. Yes.</p> <p>2 MS. BROYLES: Make sure she finishes</p> <p>3 before you answer.</p> <p>4 BY MS. ADEN:</p> <p>5 Q. So you mentioned that you considered</p> <p>6 traditional redistricting principles and you</p> <p>7 delineated those and then looked at political</p> <p>8 performance.</p> <p>9 Did you consider anything else to make the</p> <p>10 assessment of whether race was the motivating factor</p> <p>11 in drawing the 2021 congressional map?</p> <p>12 MS. BROYLES: Object to the form.</p> <p>13 A. I watched the videotape recordings of the</p> <p>14 legislative and Senate sessions and the debates about</p> <p>15 the alternative plans that were offered to try and</p> <p>16 carefully listen for whether there was any indication</p> <p>17 when plans were offered whether race was a subject or</p> <p>18 a part of the consideration of any of those plans.</p> <p>19 And in the course of watching those</p> <p>20 videotapes of the legislative and Senate sessions I</p> <p>21 did not see or hear any indication that race was</p>	<p style="text-align: right;">Page 92</p> <p>1 BY MS. ADEN:</p> <p>2 Q. Are you making -- are you offering any</p> <p>3 evidence of whether intentional vote dilution</p> <p>4 occurred in the drawing of Arkansas's 2021 enacted</p> <p>5 congressional plan?</p> <p>6 A. I provide evidence in my analysis of the</p> <p>7 voting turnout to demonstrate how many voters are in</p> <p>8 the impacted area, and I provide an analysis to say</p> <p>9 whether those voters -- whether they were the voters</p> <p>10 who turned out or if every person who has a vote</p> <p>11 eligible population were registered and turned out,</p> <p>12 whether having that population in or out of the</p> <p>13 second congressional district would have any impact</p> <p>14 on the political races of 2022.</p> <p>15 And I concluded that they did not, so I'm</p> <p>16 not formulating a specific opinion on vote dilution.</p> <p>17 I create an analysis that provides information on</p> <p>18 whether those individuals impacted by the split would</p> <p>19 have impacted the 2022 election or not, and my</p> <p>20 conclusion was that they did not.</p> <p>21 Q. Any other evidence?</p>

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<p style="text-align: right;">Page 93</p> <p>1 A. Not that I recall.</p> <p>2 Q. And have you ever made that type of</p> <p>3 assessment before in any of your other expert work?</p> <p>4 A. Not that I can recall.</p> <p>5 Q. Are you familiar with the village -- are</p> <p>6 you aware of any other literature, academic</p> <p>7 literature, or analyses in your field that do the</p> <p>8 type of turnout analysis that you did in this case?</p> <p>9 A. I'm only aware of the fundamentals of</p> <p>10 turnout that would say how many -- let me step back.</p> <p>11 In a recent case in Mississippi over their</p> <p>12 Supreme Court districts there was a -- we did an</p> <p>13 analysis of voting turnout, we being experts who</p> <p>14 represented the state. And we did analysis of what</p> <p>15 is called the cooperative election study to determine</p> <p>16 voting turnout rates and numbers of voters and</p> <p>17 numbers of eligible voters.</p> <p>18 And that expert work was accepted by the</p> <p>19 court and is currently -- that case is ongoing. They</p> <p>20 have not reached a conclusion in that yet. So, yeah,</p> <p>21 the answer to your question, have I ever done voting</p>	<p style="text-align: right;">Page 95</p> <p>1 legal question?</p> <p>2 A. It would be.</p> <p>3 Q. So I want to turn to the sources you used</p> <p>4 in your work in this expert report.</p> <p>5 A. Okay.</p> <p>6 Q. In paragraph 19 you say that you have</p> <p>7 analyzed the available circumstantial evidence?</p> <p>8 A. Yes.</p> <p>9 Q. What does circumstantial evidence mean to</p> <p>10 you?</p> <p>11 A. It's any of the information that's</p> <p>12 publicly available to me. That would be demographic</p> <p>13 data, geographic data, spatial data, and the</p> <p>14 Secretary of State's voting data.</p> <p>15 Q. Would there have been any other type of</p> <p>16 evidence that would have been helpful for you to</p> <p>17 perform your assessments in this case?</p> <p>18 MS. BROYLES: Object to the form.</p> <p>19 A. Not within my scope of expertise.</p> <p>20 BY MS. ADEN:</p> <p>21 Q. What about communications among Arkansas</p>
<p style="text-align: right;">Page 94</p> <p>1 turnout analysis like that before, yes, I have. And</p> <p>2 it's been accepted by the court.</p> <p>3 Q. Now, you mentioned the Mississippi Supreme</p> <p>4 Court. That was the body at issue, so the state</p> <p>5 judicial elections?</p> <p>6 A. Yeah. That's correct.</p> <p>7 Q. And you offered expert testimony in a</p> <p>8 judicial elections case?</p> <p>9 A. So my work was in support of the expert,</p> <p>10 Dr. David Swanson, who was the testifying expert. I</p> <p>11 performed the analytics for him that were included in</p> <p>12 his report and testimony.</p> <p>13 Q. But you did not testify in that case?</p> <p>14 A. That's correct. Yes.</p> <p>15 Q. And what's the disposition of that case?</p> <p>16 A. It's still open.</p> <p>17 Q. Are you familiar with the Village of</p> <p>18 Arlington Heights framework?</p> <p>19 A. No.</p> <p>20 Q. Do you understand that a determination of</p> <p>21 whether intentional vote dilution occurred to be a</p>	<p style="text-align: right;">Page 96</p> <p>1 legislators that were nonpublic?</p> <p>2 MS. BROYLES: Object to the form.</p> <p>3 A. I remember seeing some -- a copy of some</p> <p>4 text messages between people who I didn't know who</p> <p>5 they were and that they were heavily redacted.</p> <p>6 I don't remember the names of them, and</p> <p>7 the information in those messages was so limited it</p> <p>8 didn't have any relevance to my work or my findings.</p> <p>9 I gave it about one minute of attention.</p> <p>10 BY MS. ADEN:</p> <p>11 Q. How did you get those text messages?</p> <p>12 A. I was provided them by counsel.</p> <p>13 Q. Had they been not limited in the way that</p> <p>14 you describe, would communications by or among</p> <p>15 Arkansas legislators as they were developing the</p> <p>16 congressional map -- would you have considered that</p> <p>17 useful information to conduct your analysis in this</p> <p>18 case?</p> <p>19 MS. BROYLES: Hold on a second. Object to</p> <p>20 the form. You're asking about information that has</p> <p>21 already been determined as protected by the</p>

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<p style="text-align: right;">Page 97</p> <p>1 three-judge panel. The persons who you are asking</p> <p>2 information about enjoy legislative privilege that</p> <p>3 has been upheld by the panel.</p> <p>4 The persons who represent those</p> <p>5 individuals are not here to raise that privilege.</p> <p>6 And so to the extent that you're calling for that</p> <p>7 information or intending to weaken, challenge, or</p> <p>8 anything of the sort the decision of the three-judge</p> <p>9 panel, we will need to pause this deposition so that</p> <p>10 their counsel can be present.</p> <p>11 MS. ADEN: I did not specify any</p> <p>12 particular legislator or legislator's information</p> <p>13 that I was discussing. I asked in general.</p> <p>14 BY MS. ADEN:</p> <p>15 Q. Would nonpublic communications among</p> <p>16 Arkansas legislators about the congressional</p> <p>17 redistricting process -- would that be information</p> <p>18 that you could have used to make an assessment for</p> <p>19 purposes of the work you performed in this case?</p> <p>20 MS. BROYLES: Object to the form. Same</p> <p>21 objection.</p>	<p style="text-align: right;">Page 99</p> <p>1 A. Again, I don't know.</p> <p>2 BY MS. ADEN:</p> <p>3 Q. Okay. Looking at page 18 and 19 in</p> <p>4 particular, what sources beyond those that you've</p> <p>5 already discussed did you look at in preparing your</p> <p>6 September 16 original report?</p> <p>7 So you've mentioned your Amended</p> <p>8 Complaint, the responses, the response of plaintiffs</p> <p>9 to the -- I'm sorry -- the Amended -- you mentioned</p> <p>10 the Amended Complaint. You've mentioned the motion</p> <p>11 briefing practice in this case and responses in</p> <p>12 relation to the motion to dismiss, I believe.</p> <p>13 A. Yes.</p> <p>14 Q. You mentioned some 2020 census data?</p> <p>15 A. I did.</p> <p>16 Q. Are there other -- and you mentioned some</p> <p>17 election -- elections that you looked at in the</p> <p>18 content of performing your assessments in this case.</p> <p>19 Are there any other sort of categories of</p> <p>20 information of sources that you brought to bear in</p> <p>21 forming your opinions in this case?</p>
<p style="text-align: right;">Page 98</p> <p>1 A. I don't know.</p> <p>2 BY MS. ADEN:</p> <p>3 Q. Would reports or assessments of Arkansas</p> <p>4 legislators or legislative staff about what they</p> <p>5 considered in the development of the 2021</p> <p>6 congressional enacted map have been useful</p> <p>7 information that you would have considered in forming</p> <p>8 your opinions about the 2021 congressional map?</p> <p>9 MS. BROYLES: Object to the form. Same</p> <p>10 objection.</p> <p>11 A. I don't know. Not knowing what those</p> <p>12 documents could or would look like, I can't</p> <p>13 speculate.</p> <p>14 BY MS. ADEN:</p> <p>15 Q. And would communications between Arkansas</p> <p>16 legislators and third parties about what they were</p> <p>17 considering in developing the 2021 congressional map</p> <p>18 have been information that you would have considered</p> <p>19 useful in forming your opinions in this case?</p> <p>20 MS. BROYLES: Same objection as previously</p> <p>21 stated.</p>	<p style="text-align: right;">Page 100</p> <p>1 A. Sure. When we talk about the census data</p> <p>2 that we use there is a distinction that we draw</p> <p>3 between what are known as the decennial census data,</p> <p>4 which are the data that are gathered once every ten</p> <p>5 years, and data that are gathered as part of the</p> <p>6 American Community Survey or something we refer to as</p> <p>7 the ACS.</p> <p>8 And the value of having both of those data</p> <p>9 sets which we procure unedited, raw directly from the</p> <p>10 Census Bureau is that it provides information on the</p> <p>11 total population, the voting age population, which</p> <p>12 it's -- we think of as being kind of the</p> <p>13 vote-eligible.</p> <p>14 You know, that's the total pool of people</p> <p>15 regardless if they are currently eligible or not, and</p> <p>16 then what we call the citizen voting age population</p> <p>17 or CVAP data. And the CVAP data are valuable because</p> <p>18 they provide information on the people who are</p> <p>19 currently eligible to vote.</p> <p>20 It's conventionally used by the Department</p> <p>21 of Justice in Section 2 cases to say, you know, what</p>

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<p style="text-align: right;">Page 101</p> <p>1 is the voting strength of this population. There is 2 an extension of the CVAP data that an expert can 3 pursue which will take out things like, you know, 4 prison populations. 5 I examined the prison population data for 6 Pulaski County. There are two of them, a men's and a 7 women's prison in the southeast corner of Pulaski 8 County in the impacted area, and I determined that 9 the size of the prison population in that -- in those 10 two prisons was not large enough to have an impact on 11 a measurement of the citizen voting age population 12 data. 13 So in the report -- in my reports I seek 14 to be thorough about what the size and the change in 15 characteristics are of each one of those different 16 populations because in demography they have different 17 reasons for being important. 18 Q. So Amended Complaint, plaintiff's Amended 19 Complaint, briefing related to the motion to dismiss? 20 A. Yes. 21 Q. I should have mentioned the order related</p>	<p style="text-align: right;">Page 103</p> <p>1 legislative redistricting process? 2 A. Yeah. I did not view the written 3 transcripts of them. I watched the videos of them. 4 Q. And of certain legislative proceedings or 5 all of them? 6 A. Every one that I could find that they 7 discussed the redistricting process. You know, 8 through late September to the beginning of the 9 October, there was multiple sessions that were held. 10 And there's publicly available videos 11 where those different bills in the case of 12 redistricting was deliberated. 13 Q. Did you watch all of the video recordings 14 to determine which ones were discussing the 15 congressional redistricting? 16 A. The state of Arkansas's website is very 17 generous and we're fortunate that it's got bookmarks 18 where -- that say where during the video certain 19 subjects are being discussed. 20 So I didn't need to watch the entire 21 videos to find the places where redistricting was</p>
<p style="text-align: right;">Page 102</p> <p>1 to the motion to dismiss. 2 A. Yes. I've reviewed that. 3 Q. Electoral results in differing elections 4 that we'll talk about in more detail. 5 A. Yes. 6 Q. And I'm just trying to get a sense of 7 general categories. 8 A. Yes. 9 Q. You mentioned the ten-year decennial 10 census data -- 11 A. Yes. 12 Q. -- as well as the survey data under the 13 American Community Survey data? 14 A. That's correct. 15 Q. And earlier you mentioned legislative 16 transcripts -- is that fair to say? -- from the 2020 17 Arkansas redistricting process? 18 MS. BROYLES: Object to the form. 19 BY MS. ADEN: 20 Q. Earlier I believe you mentioned that you 21 looked at some video recordings of the Arkansas</p>	<p style="text-align: right;">Page 104</p> <p>1 being talked about. 2 Q. Redistricting or congressional 3 redistricting? 4 A. Focused on the congressional 5 redistricting. 6 Q. And then you mentioned the Alexander 7 decision. That was another source for your work in 8 this case? 9 A. Yes. 10 Q. And did you read the entire decision? 11 A. I did. 12 Q. Both on majority decision and any 13 dissenting opinions? 14 A. I skimmed all of it. I did not read 15 verbatim every part of the decision -- 16 Q. Now -- 17 A. -- or the dissenting. I'm sorry I didn't 18 answer your question -- or the dissenting opinions. 19 Q. On page 53 of your September 16th report, 20 you indicated you relied on the documents that you 21 were provided?</p>



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<p style="text-align: right;">Page 105</p> <p>1 A. Yes.</p> <p>2 Q. Provided by whom?</p> <p>3 A. Can you please tell me a paragraph?</p> <p>4 Q. Paragraph 53, which is on page 20 -- 20.</p> <p>5 A. Yes. So the documents that I was provided</p> <p>6 -- I could have been clearer here in saying they're</p> <p>7 from the Attorney General's office.</p> <p>8 And when I say Attorney General, I know</p> <p>9 there's different groups within the state offices.</p> <p>10 I'm using the term AG's office to reference</p> <p>11 holistically the different parts of the office that</p> <p>12 are involved in the case.</p> <p>13 Q. Are there any documents you relied on to</p> <p>14 inform your opinions that are not cited within your</p> <p>15 report?</p> <p>16 MS. BROYLES: Object to the form.</p> <p>17 A. I don't think so.</p> <p>18 BY MS. ADEN:</p> <p>19 Q. Did you consider other documents or</p> <p>20 information not identified in your report in order to</p> <p>21 form your opinions?</p>	<p style="text-align: right;">Page 107</p> <p>1 BY MS. ADEN:</p> <p>2 Q. In coming up with the sources that you</p> <p>3 used in your findings in this case did you identify</p> <p>4 the sources or were -- did you rely on sources that</p> <p>5 were provided to you by counsel?</p> <p>6 A. Both.</p> <p>7 Q. Of the sources that you have identified</p> <p>8 thus far -- well, strike that. I will get to that.</p> <p>9 In paragraph 53, the same paragraph that</p> <p>10 we've been looking at, again, this is where you</p> <p>11 mentioned videos of the Arkansas House and Senate</p> <p>12 committees on state agencies and governmental affairs</p> <p>13 where various, quote, whole county plans were</p> <p>14 presented.</p> <p>15 Do you see that?</p> <p>16 A. Yes. That's correct.</p> <p>17 Q. You here identify that you looked at</p> <p>18 proceedings where whole county maps were considered.</p> <p>19 Is that fair to say?</p> <p>20 A. Yes, I did.</p> <p>21 Q. But your testimony prior to that is that</p>
<p style="text-align: right;">Page 106</p> <p>1 MS. BROYLES: Object to the form.</p> <p>2 A. No.</p> <p>3 BY MS. ADEN:</p> <p>4 Q. Do you understand that discovery has</p> <p>5 occurred in this case?</p> <p>6 A. I believe so.</p> <p>7 Q. And did you understand that in addition to</p> <p>8 the expert reports that plaintiffs provided, some of</p> <p>9 which you have received, that they also produced</p> <p>10 documents through discovery in this case?</p> <p>11 A. I'm sure they did.</p> <p>12 Q. Okay. And are you aware that the Arkansas</p> <p>13 Secretary of State also provided documents to</p> <p>14 plaintiffs through discovery in this case?</p> <p>15 A. I don't know.</p> <p>16 Q. Did you ever ask to review any of the</p> <p>17 documents that the Secretary of State might have</p> <p>18 disclosed in discovery in this case?</p> <p>19 MS. BROYLES: Object to the form.</p> <p>20 A. The only thing I recall asking for were</p> <p>21 the election data from the Secretary of State.</p>	<p style="text-align: right;">Page 108</p> <p>1 you looked at more broadly any of the videos on the</p> <p>2 Arkansas website that had to do with congressional</p> <p>3 redistricting?</p> <p>4 MS. BROYLES: Object to the form.</p> <p>5 A. I watched the videos more broadly because</p> <p>6 the videos are not so specific as to say exactly</p> <p>7 where whole county plans were, but I wanted to listen</p> <p>8 to the discussion about the congressional</p> <p>9 redistricting process.</p> <p>10 BY MS. ADEN:</p> <p>11 Q. Are all of the hearings that you looked at</p> <p>12 about the congressional redistricting process</p> <p>13 identified in your report?</p> <p>14 A. Yes.</p> <p>15 Q. And were those hearings that you</p> <p>16 identified or were those hearings that you were</p> <p>17 directed to review?</p> <p>18 A. So I saw in the -- I believe it was the</p> <p>19 Amended Complaint that there was a reference to those</p> <p>20 videos with links to them. Nobody directed me to the</p> <p>21 videos.</p>

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<p style="text-align: right;">Page 109</p> <p>1 When I saw that there was a link to videos</p> <p>2 discussing redistricting then I followed the trail</p> <p>3 and went and started learning which of those days and</p> <p>4 which of those videos had information about</p> <p>5 redistricting to help me better understand what that</p> <p>6 process looked like and to discover whether there</p> <p>7 were other plans that were presented and how they</p> <p>8 were considered.</p> <p>9 Q. And of the plans that you specifically</p> <p>10 identified in your report that encompassed the full</p> <p>11 videos that you looked at, did you look at those</p> <p>12 sessions in their entirety?</p> <p>13 MS. BROYLES: Object to the form.</p> <p>14 A. Not in their entirety. I tried to make</p> <p>15 efficient use of my time because they were many, many</p> <p>16 hours long.</p> <p>17 BY MS. ADEN:</p> <p>18 Q. But the video recordings and hearings that</p> <p>19 you reference here are the one where you know they</p> <p>20 discussed whole county plans?</p> <p>21 A. They did, yes.</p>	<p style="text-align: right;">Page 111</p> <p>1 A. Of course.</p> <p>2 Q. So turning to paragraph 26, 1 of your</p> <p>3 report, which is on page 12 --</p> <p>4 A. Going back?</p> <p>5 Q. Yes. I'm going to be skipping around.</p> <p>6 Bear with me.</p> <p>7 A. No problem. Okay. The bottom of page 12,</p> <p>8 paragraph 26?</p> <p>9 Q. And focusing on subparagraph 1.</p> <p>10 A. Yes.</p> <p>11 Q. It says that you -- you state that, quote,</p> <p>12 To assess whether Blacks in Arkansas were targeted</p> <p>13 for division with the intent to dilute their voting</p> <p>14 strength and --</p> <p>15 A. Where are you?</p> <p>16 Q. I'm looking at the last sentence on page</p> <p>17 12 that goes into 13. And it reads: "To assess</p> <p>18 whether Blacks in Arkansas were targeted for division</p> <p>19 with the intent to dilute their voting strength and</p> <p>20 representation, I hypothesized that many of the most</p> <p>21 heavily Black counties would have been targeted to be</p>
<p style="text-align: right;">Page 110</p> <p>1 Q. Is it fair to say that you did not do a</p> <p>2 full review of the legislative public discussions</p> <p>3 about the congressional districting development based</p> <p>4 on having reviewed all of the Arkansas legislative</p> <p>5 videos of the 2021 congressional session?</p> <p>6 MS. BROYLES: Object to the form.</p> <p>7 A. That's correct.</p> <p>8 BY MS. ADEN:</p> <p>9 Q. So do you acknowledge, for example, that</p> <p>10 you do not know of all of the discussions that were</p> <p>11 had or not about traditional redistricting principles</p> <p>12 that may or may not have been considered during the</p> <p>13 redistricting process?</p> <p>14 MS. BROYLES: Object to the form.</p> <p>15 A. I relied on the information that I was</p> <p>16 provided. And if there was other documents or public</p> <p>17 discussions or information on traditional</p> <p>18 redistricting criteria or how that was considered, it</p> <p>19 wasn't provided to me.</p> <p>20 BY MS. ADEN:</p> <p>21 Q. By counsel?</p>	<p style="text-align: right;">Page 112</p> <p>1 split."</p> <p>2 A. Yes.</p> <p>3 Q. Did I read that correctly?</p> <p>4 A. Yes.</p> <p>5 Q. What do you mean by voting strength here?</p> <p>6 A. So in the context of the Amended</p> <p>7 Complaint, since the focus of the case is an</p> <p>8 assertion that the voting strength and the ability to</p> <p>9 elect a candidate of their choice is being</p> <p>10 compromised by the drawing of the second</p> <p>11 congressional district, my hypothesis was that if</p> <p>12 that were true I'd look at the different counties,</p> <p>13 places, school districts from the most Black --</p> <p>14 heavily Black and African American to least Black and</p> <p>15 African American to see where and if the areas with</p> <p>16 the highest to lowest Black and African American</p> <p>17 populations were split.</p> <p>18 Q. So why did you start with that hypothesis?</p> <p>19 A. It's a hypothesis that if there's going to</p> <p>20 be an assertion that that line was drawn in the way</p> <p>21 that it was that race was the motivating factor, I</p>



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<p style="text-align: right;">Page 113</p> <p>1 would be looking to see that the line drawer or 2 drawers went out of their way. 3 And let me say I don't know who the line 4 drawer was or drawers were. I don't know who created 5 the plan or what parties created the plan. 6 But in order to test whether race was a 7 driving factor, the leading factor, I started with 8 the hypothesis that the areas that would have the 9 highest concentrations of Black populations would be 10 targeted for being split and the areas that were less 11 -- that had lower concentrations would not be split. 12 And I found that in this paragraph that 13 Pulaski County, which I think is the -- has the 11th 14 highest concentration of Black population in the 15 state, that was split. 16 And the second highest county with the 17 highest concentration of Black population, which is 18 Jefferson County, that county was consolidated as 19 part of the drawing of the 2021 enacted plan. 20 (Whereupon, Madam Reporter asked for 21 clarification from the witness.)</p>	<p style="text-align: right;">Page 115</p> <p>1 basis -- the total population. So I calculate that 2 number in my report as the percent any part Black -- 3 it's the any part Black in the numerator, and then 4 the total is the denominator. 5 VAP, any part Black, total VAP -- 6 Q. For voting age population? 7 A. -- for voting age population is the 8 denominator. And then for citizen voting age 9 population it's what is the number of any-part-Black 10 CVAP divided by the total CVAP. 11 Q. But what makes something heavily Black or 12 least Black in your estimation? 13 A. Sure. It's a -- looking at the ranking of 14 the different pieces of geography, it's unique and 15 interesting that there are parts of Arkansas if you 16 look at individual counties and places and school 17 districts that have nearly 100 percent any-part-Black 18 population. 19 On the other hand, there are different 20 parts of Arkansas that have virtually zero percent 21 any-part-Black population.</p>
<p style="text-align: right;">Page 114</p> <p>1 MS. BROYLES: Can we pause one minute and 2 go off the record? 3 (A break was taken.) 4 BY MS. ADEN: 5 Q. Is that hypothesis that you're describing 6 a hypothesis that you came up with or was it provided 7 to you by counsel? 8 A. That's a hypothesis I came up with. 9 Q. And you mentioned terms like "heavily 10 Black" or "least Black." 11 A. That's correct. 12 Q. How are you defining those terms? 13 A. So the standard today is that the -- 14 any-part-Black definition is the metric for measuring 15 the African American, Black population in any piece 16 of geography. So that could be Black alone or in 17 combination, Black and Hispanic, Black and Asian, 18 Black and anything. 19 And so that measure is taking the number 20 of people who report in the census one or -- alone or 21 in combination and then dividing that number by the</p>	<p style="text-align: right;">Page 116</p> <p>1 So my referral to heavily or more or less 2 Black is along a continuum to say that in some places 3 when I say it's heavily or more so Black it's higher 4 on this range of virtually not -- there are no 5 African American or no Black population at all, all 6 the way up to it's almost an entirely Black or 7 African American part of the state. 8 I don't have any statistical assignment 9 and I did not calculate a distribution of those 10 values, nor did I create a mean or standard deviation 11 to defend that. 12 I use that in -- 13 (Whereupon, Madam Reporter asked for 14 clarification from the witness.) 15 A. I don't have a statistical assignment for 16 more or less. It's a relative assignment to say 17 simply some areas that we looked at were more heavily 18 or higher percent and other areas relatively speaking 19 were lower percent. It's an internal relative scale. 20 BY MS. ADEN: 21 Q. Is that -- is this hypothesis in that</p>

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<p style="text-align: right;">Page 117</p> <p>1 scale that you're using based then on any academic 2 literature? 3 MS. BROYLES: Object to the form. 4 A. It's a simple demographic technique to 5 rank places by pieces of geography that are more to 6 least a certain characteristic of a population. I'm 7 not aware of any academic literature that says that 8 that is the basis for arriving at that conclusion. 9 I'm trying to create information for the 10 court to use to consider whether race was the 11 predominant factor or not. 12 BY MS. ADEN: 13 Q. Is it your opinion that for plaintiffs to 14 succeed on their claim that race was the predominant 15 factor that they need evidence to show that the most 16 heavily Black counties would have been targeted to be 17 split? 18 MS. BROYLES: Object to the form. Calls 19 for a legal conclusion. 20 A. The absence of that is not proof of 21 anything. However, if all of the most heavily Black</p>	<p style="text-align: right;">Page 119</p> <p>1 split or moved that that is not evidence of racial 2 predominance? 3 MS. BROYLES: Object to the form. 4 A. That information on its own, not in the 5 context of all of the other information and the 6 analysis that we have, is sufficient evidence on its 7 own to prove beyond a reasonable doubt that that was 8 the overriding factor. 9 BY MS. ADEN: 10 Q. And is beyond a reasonable doubt the 11 standard that you think plaintiffs have to establish 12 here? 13 A. It's my understanding that it's the 14 plaintiff's burden to prove that race was the 15 predominant factor. 16 Q. Which to you equates with beyond a 17 reasonable doubt? 18 A. I'm not using that in a legal sense. I'm 19 not the lawyer here. You guys are. 20 Q. And you mentioned that you use -- you've 21 been referencing any part Black in this case?</p>
<p style="text-align: right;">Page 118</p> <p>1 counties and all of the most heavily Black places and 2 all of the most heavily Black school districts had 3 been split and then all of the geographies that were 4 most non-Black had not been split, then I would 5 submit that as a consideration that that would be 6 evidence that race was a prevailing factor. 7 I didn't find that. That's not proof that 8 it didn't happen, but it was a journey to find 9 information to help inform with many other metrics 10 whether or not that was the prevailing factor or not. 11 BY MS. ADEN: 12 Q. But it's not your opinion that -- or 13 strike that. 14 Given the relative range between counties 15 or political jurisdictions that have zero 16 any-part-Black populations and those that have 100 17 percent any part Black as you described it, there is 18 a range in the middle of political subdivisions that 19 you would concede have Black populations? 20 A. Absolutely. 21 Q. And is it your opinion that if those are</p>	<p style="text-align: right;">Page 120</p> <p>1 A. Yes. 2 Q. Did you use the any-part-Black category in 3 the Alabama congressional redistricting litigation? 4 A. Yes, we did. 5 Q. And by "we," who are you referring to? 6 A. The entire party on the defendant's side 7 of the Alabama case. 8 Q. And your expert work in that case used the 9 any-part-Black category in this case. You reported 10 that number? 11 A. We reported all of the different metrics 12 for measuring the Black population and African 13 population in Alabama. We did, yeah. 14 MS. ADEN: Let's take a break, please. 15 (Whereupon, at 12:40 p.m., a 16 luncheon recess was taken.) 17 - - - 18 A F T E R N O O N S E S S I O N 19 (1:40 p.m.) 20 Whereupon, 21 THOMAS MARK BRYAN</p>

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<p style="text-align: right;">Page 121</p> <p>1 was called for continued examination, and having been</p> <p>2 previously duly sworn was examined and testified</p> <p>3 further as follows:</p> <p>4 EXAMINATION BY COUNSEL FOR PLAINTIFFS</p> <p>5 CONTINUED</p> <p>6 BY MS. ADEN:</p> <p>7 Q. Mr. Bryan, during the lunch break did you</p> <p>8 speak with your counsel about the substance of this</p> <p>9 deposition?</p> <p>10 A. The substance of the deposition?</p> <p>11 Q. Um-hum.</p> <p>12 A. No.</p> <p>13 Q. Did you speak with your counsel about the</p> <p>14 deposition?</p> <p>15 A. Yes.</p> <p>16 Q. What type of topics?</p> <p>17 MS. BROYLES: You can tell her what we</p> <p>18 talked about.</p> <p>19 A. Yeah. We just talked about how the</p> <p>20 deposition was going and how I was answering the</p> <p>21 questions. We talked about it pretty briefly.</p>	<p style="text-align: right;">Page 123</p> <p>1 MS. BROYLES: Object to the form. Calls</p> <p>2 for a legal conclusion.</p> <p>3 A. It's possible.</p> <p>4 BY MS. ADEN:</p> <p>5 Q. Can you provide any examples?</p> <p>6 A. No. I'm not an attorney. I don't know</p> <p>7 the answer, but I can conceive that is possible.</p> <p>8 Q. In footnote 44 on page 54 of Exhibit 1,</p> <p>9 which is your September 16th report, you mentioned</p> <p>10 political gerrymandering.</p> <p>11 Is that accurate? Footnote 44 on page 54.</p> <p>12 A. Yes.</p> <p>13 Q. How do you define political</p> <p>14 gerrymandering?</p> <p>15 A. I would use the term "political" and</p> <p>16 "partisan" interchangeably that it is the overriding</p> <p>17 purpose of a plan to be drawn for political or</p> <p>18 partisan benefit similar to the -- my</p> <p>19 characterization of racial gerrymandering.</p> <p>20 Q. So partisan equals political, in your</p> <p>21 view?</p>
<p style="text-align: right;">Page 122</p> <p>1 BY MS. ADEN:</p> <p>2 Q. Did you get any guidance about how to</p> <p>3 proceed with deposition questioning after the break?</p> <p>4 A. No, continue what I'm doing.</p> <p>5 Q. So you got guidance?</p> <p>6 MS. BROYLES: Object to the form.</p> <p>7 A. Just keep up the good work.</p> <p>8 BY MS. ADEN:</p> <p>9 Q. Mr. Bryan, are you offering an opinion on</p> <p>10 the intent of Arkansas's General Assembly in the</p> <p>11 design of the 2021 enacted map?</p> <p>12 A. No.</p> <p>13 Q. Are you offering an opinion on the motives</p> <p>14 of the Arkansas General Assembly and the design of</p> <p>15 the enacted map?</p> <p>16 MS. BROYLES: Object to the form.</p> <p>17 A. No, I am not.</p> <p>18 BY MS. ADEN:</p> <p>19 Q. Do you have any opinion about whether</p> <p>20 pursuing a political goal for map drawing could</p> <p>21 violate federal and constitutional law?</p>	<p style="text-align: right;">Page 124</p> <p>1 A. For the purpose of drawing maps.</p> <p>2 Q. And political gerrymandering you're</p> <p>3 equating with racial gerrymandering in the sense that</p> <p>4 that feature needs to be the overriding feature in</p> <p>5 the drawing of a map?</p> <p>6 A. That's how I think about it.</p> <p>7 Q. Okay. Turning to paragraph 37 on page 17,</p> <p>8 in the first sentence in paragraph 37 on page 17 you</p> <p>9 mention VTDs being moved and whether they could have</p> <p>10 -- quote, have benefited Republicans, end quote.</p> <p>11 Do you see that?</p> <p>12 A. Yes. Hang on one second. Could have</p> <p>13 been. Yes, okay. I got that.</p> <p>14 Q. What do you mean by "benefited</p> <p>15 Republicans"?</p> <p>16 A. So as with every geography there's</p> <p>17 different numbers and amounts of Democrats and</p> <p>18 Republicans that are going to be in that geography,</p> <p>19 and it would be extraordinary and rare that those</p> <p>20 populations would be distributed equally across the</p> <p>21 geography like Pulaski.</p>

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<p style="text-align: right;">Page 125</p> <p>1 And so when you examine a piece of</p> <p>2 geography like Pulaski, then what one can do in</p> <p>3 looking for concentrations of populations by any</p> <p>4 characteristic, in this case what we can do is look</p> <p>5 at voting data for what are called VTDs or the</p> <p>6 precincts and say are there concentrations --</p> <p>7 geographic concentrations of Democrats or Republicans</p> <p>8 in different parts of the county.</p> <p>9 And when I examine Pulaski County what I</p> <p>10 have in one of my exhibits is an illustration that</p> <p>11 there is a very high concentration of Democratic</p> <p>12 voters in the southeastern corner of that county.</p> <p>13 So if you were to draw a map that was</p> <p>14 going to be -- if there was a partisan goal, which I</p> <p>15 don't know if there was or not because I didn't draw</p> <p>16 the map. But if that was the goal, the most</p> <p>17 efficient and practical place where they could do</p> <p>18 that would be into the southeastern corner of</p> <p>19 Pulaski.</p> <p>20 There was no other part of Pulaski County</p> <p>21 where there are concentrations of Democratic voters</p>	<p style="text-align: right;">Page 127</p> <p>1 And in my analysis in examining very</p> <p>2 closely the VTDs that were on one edge of the border,</p> <p>3 the other side of the border of where the line was</p> <p>4 drawn, those precincts had very high concentrations</p> <p>5 of Democratic voting behavior in all the races that I</p> <p>6 looked at from 2020 and 2022.</p> <p>7 Q. And what in your training qualifies you to</p> <p>8 examine the political voting patterns of VTDs?</p> <p>9 A. So I'm not a political scientist. And as</p> <p>10 I explained in my report, all I did was tabulated the</p> <p>11 voting data from all the different races that I had</p> <p>12 access to to provide summary statistics that the</p> <p>13 court can examine and consider for whether that was</p> <p>14 valuable information explaining where that line was</p> <p>15 drawn or not.</p> <p>16 Q. And as not a political scientist, are you</p> <p>17 qualified to make the determination about what</p> <p>18 elections are appropriate to look at or how many in</p> <p>19 order to determine the voting patterns along party</p> <p>20 lines?</p> <p>21 A. I'm not qualified to do that. And so the</p>
<p style="text-align: right;">Page 126</p> <p>1 that a map drawer could look at as a place to go get</p> <p>2 those voters and then move them to another district</p> <p>3 for a partisan advantage.</p> <p>4 Q. Are you defining Republicans and Democrats</p> <p>5 -- what are you defining Republicans and Democrats</p> <p>6 based upon?</p> <p>7 A. Their voting behavior, the voting</p> <p>8 statistics that I got from the Secretary of State.</p> <p>9 Q. And is that voting statistics based upon</p> <p>10 one election? multiple elections? What?</p> <p>11 A. Multiple elections.</p> <p>12 Q. And what is your basis for equating a</p> <p>13 political party -- assigning a political party to a</p> <p>14 particular voter?</p> <p>15 A. So we are not able to assign any</p> <p>16 individual to any party. What we are able to do is</p> <p>17 to look at the voting statistics for the VTDs or</p> <p>18 voting precincts across multiple races, across</p> <p>19 multiple years to determine whether that voting</p> <p>20 behavior is consistent and reliable and indicative of</p> <p>21 the political performance of any given VTD.</p>	<p style="text-align: right;">Page 128</p> <p>1 -- my strategy was to take every recent election I</p> <p>2 could get my hands on. And then if I provide all of</p> <p>3 the information that I analyzed race by race for each</p> <p>4 year and the court -- people who are interested in</p> <p>5 the case can make their own judgment.</p> <p>6 If there were certain races that were more</p> <p>7 important than others, they can pick and choose and</p> <p>8 use whichever of the races that I analyzed to help</p> <p>9 them reach whatever conclusion they wanted about the</p> <p>10 outcome.</p> <p>11 Q. Races equals political elections contest?</p> <p>12 A. Yes.</p> <p>13 Q. What -- how are you defining recent?</p> <p>14 A. I analyzed the 2020 election and the 2022</p> <p>15 election. There was the congressional race and the</p> <p>16 presidential race in 2020 and then I analyzed five</p> <p>17 races in 2022.</p> <p>18 Q. And what in your background or experiences</p> <p>19 qualifies you to determine whether recent elections</p> <p>20 are the appropriate elections to look at to analyze</p> <p>21 voting patterns along party lines?</p>

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<p style="text-align: right;">Page 129</p> <p>1 MS. BROYLES: Object to the form.</p> <p>2 A. There is nothing in my professional</p> <p>3 training or background that would say that it is</p> <p>4 better and have more utility to use all of the races</p> <p>5 from all of the most recent elections to inform what</p> <p>6 the political behavior of a geography is.</p> <p>7 I don't think I would have to be a</p> <p>8 political scientist to arrive at that conclusion. I</p> <p>9 arrived at -- this is just a common sense explanation</p> <p>10 of using all of the most recent data, again, from the</p> <p>11 most recent races that are available.</p> <p>12 I also in part of informing that decision</p> <p>13 to use the 2020 and 2022 races was criticism that I</p> <p>14 saw of Dr. Liu's work in the Alexander decision in</p> <p>15 his choice of the 2018 election, the gubernatorial I</p> <p>16 think it was.</p> <p>17 And so in my assessment of the Alexander</p> <p>18 case and all the data that I was provided from the</p> <p>19 Secretary of State in wanting to give the most recent</p> <p>20 data that was available, those are the things that</p> <p>21 went into my decision to provide data on those races.</p>	<p style="text-align: right;">Page 131</p> <p>1 almost, you know, to a tenth of a decimal point</p> <p>2 precision the same answer in every race over and over</p> <p>3 and over again. They were extremely similar in how</p> <p>4 consistent they were.</p> <p>5 Q. So you're saying that -- stepping back</p> <p>6 from this, VTDs are shorthand for precincts.</p> <p>7 Is that fair to say?</p> <p>8 A. There are -- there are some technical</p> <p>9 differences between them, but they're basically -- I</p> <p>10 use them interchangeably here.</p> <p>11 Q. And is it your position based upon your</p> <p>12 experiences that the voters assigned to VTDs remain</p> <p>13 constant in particular VTDs over time?</p> <p>14 A. There's always in-migration and</p> <p>15 out-migration from different small areas of</p> <p>16 geography. But, again, that's when we look at all</p> <p>17 the most recent data we had, which is why using</p> <p>18 recent data is important is to make sure that</p> <p>19 whatever is going on right now is what is reflected</p> <p>20 in our analysis.</p> <p>21 The VTDs do change a little bit over time.</p>
<p style="text-align: right;">Page 130</p> <p>1 BY MS. ADEN:</p> <p>2 Q. And did you include in your written report</p> <p>3 that that was the basis for which you chose the</p> <p>4 elections that you identified in this report?</p> <p>5 A. I don't think I did. I think I just</p> <p>6 provided all the data that I was given from the</p> <p>7 Secretary of State.</p> <p>8 Q. Did you -- just to be clear did you based</p> <p>9 upon your experiences decide to use particular</p> <p>10 elections or were you told to look at particular</p> <p>11 elections by counsel in this case?</p> <p>12 A. I wasn't told to use any particular</p> <p>13 elections. I used all of them that we have the data</p> <p>14 for. I cast a broad net.</p> <p>15 Q. Did you have data for other elections that</p> <p>16 you did not look at?</p> <p>17 A. No. You know, I'd like to say that, you</p> <p>18 know, the data that we had from the 2020 -- the two</p> <p>19 races in 2020 and all the races in 2022 for the</p> <p>20 purposes of characterizing the VTDs that were on or</p> <p>21 around the order of -- congressional district 2 gave</p>	<p style="text-align: right;">Page 132</p> <p>1 For example, at the time that the case was brought</p> <p>2 there were 14 VTDs or precincts that were moved out</p> <p>3 into districts 1 and 4. Two of those -- I think they</p> <p>4 were precinct 126 and 127 -- were merged before -- as</p> <p>5 always happens after a census.</p> <p>6 They merge some of them and they split</p> <p>7 some of them. So they turned 14 into 13. So you'll</p> <p>8 see in my report there's kind of references both the</p> <p>9 13 and 14 different precincts, but they refer to</p> <p>10 exactly the same geography.</p> <p>11 Q. And so you're saying that despite the fact</p> <p>12 that there might be changes in the assignment of</p> <p>13 voters to VTDs over time, the results of the</p> <p>14 elections were consistent across specific VTDs over</p> <p>15 time?</p> <p>16 A. That's correct. I did not measure -- I'm</p> <p>17 not able to measure VTD level migration, but the</p> <p>18 demographic characteristics and the political</p> <p>19 performance characteristics of the VTDs for the 2020</p> <p>20 races and the 2022 races were all very consistently</p> <p>21 Democrat in measuring the number of Democratic voters</p>



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<p style="text-align: right;">Page 133</p> <p>1 versus Republican voters in those VTDs.</p> <p>2 You know, whether they were what you would</p> <p>3 call de facto population, which means the actual</p> <p>4 people that are there or people -- you know, they may</p> <p>5 have moved and been replaced by other populations.</p> <p>6 Whether it's the exact same people or</p> <p>7 other people who vote and behave similarly to them, I</p> <p>8 observed the same behavior in voting performance</p> <p>9 across both years in all of the races. And there</p> <p>10 were various amounts of very high levels of</p> <p>11 Democratic performance in those precincts.</p> <p>12 Q. And you mention you're not able to analyze</p> <p>13 the migratory patterns?</p> <p>14 A. That's correct.</p> <p>15 Q. Why not?</p> <p>16 A. There's no survey in the world that's good</p> <p>17 enough to get to, you know -- we're barely able to do</p> <p>18 a county level migration analysis using statistics we</p> <p>19 have from the Internal Revenue Service and from the</p> <p>20 U.S. Postal Service.</p> <p>21 That can get us county level migration</p>	<p style="text-align: right;">Page 135</p> <p>1 over time you have disclosed in the written reports</p> <p>2 that you provided to plaintiffs?</p> <p>3 A. Everything I have to say about those shows</p> <p>4 the same information for those precincts for both of</p> <p>5 the races -- for both of the years and all the races</p> <p>6 that I analyzed.</p> <p>7 Q. Okay. Looking at paragraph 38 on page 17</p> <p>8 --</p> <p>9 A. I got it right here.</p> <p>10 Q. -- you say that, quote, If the 2022</p> <p>11 enacted plan's objective had been to infringe Black</p> <p>12 voting strength in D2, there were numerous ways the</p> <p>13 plan could have accomplished this, but did not, end</p> <p>14 quote?</p> <p>15 A. That's correct.</p> <p>16 Q. What are the numerous ways the plans could</p> <p>17 have accomplished this?</p> <p>18 A. So I think I'd like to point to two</p> <p>19 different examples here. When I say "numerous ways,"</p> <p>20 I'm referring to individual draws of the boundary.</p> <p>21 The way that that line is drawn -- and I'm</p>
<p style="text-align: right;">Page 134</p> <p>1 data pretty well. But to push that down to subcounty</p> <p>2 data unless you have what are called administrative</p> <p>3 records, you like literally know from -- if you had,</p> <p>4 which I don't have, the voter registration data and</p> <p>5 say this voter moved, right, which, you know, that</p> <p>6 data -- you know, it exists.</p> <p>7 We know that there is an inventory of</p> <p>8 voters out there -- I don't have it. But unless I</p> <p>9 had a statistic that said this voter who is a</p> <p>10 Democrat moved out of this precinct and this other</p> <p>11 person who is a Democrat or a Republican moved in,</p> <p>12 there wouldn't be any way that I could make that kind</p> <p>13 of analysis.</p> <p>14 Q. And the discussion you just had here about</p> <p>15 the consistency in partisan makeup of VTDs over time,</p> <p>16 did you present those findings in any of the written</p> <p>17 reports that you disclosed to plaintiffs?</p> <p>18 A. All of the analysis I did for all the 2020</p> <p>19 races and 2022 races are in my report.</p> <p>20 Q. And all of your opinions about the</p> <p>21 consistency and the political makeup of precincts</p>	<p style="text-align: right;">Page 136</p> <p>1 sure you're familiar -- I analyzed each one of the</p> <p>2 VTDs in, on, or around where that line was drawn.</p> <p>3 And what I found was really interesting,</p> <p>4 that there were two out of those 13 precincts -- 14</p> <p>5 precincts that were drawn out that were I believe 9</p> <p>6 percent African American and 15 percent African</p> <p>7 American, a very high percent of white population.</p> <p>8 And there were numerous other -- very</p> <p>9 heavily Black precincts that were just on the other</p> <p>10 side of the border of where the line was drawn that</p> <p>11 if the map drawer's intent was to say, okay, let's</p> <p>12 infringe on the rights of Black voters; let's get as</p> <p>13 many of them out of district 2 as we can to dilute</p> <p>14 them as much as possible, I found that there were two</p> <p>15 precincts that you could have replaced the two white</p> <p>16 precincts with that had that map drawer chosen those</p> <p>17 two other immediately adjacent precincts and chose to</p> <p>18 draw the line around them and push them into another</p> <p>19 congressional district, amazingly just because of how</p> <p>20 many people are in each one of those they would have</p> <p>21 achieved a population deviation of only five people.</p>

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<p style="text-align: right;">Page 137</p> <p>1 So a map drawer could have taken many more</p> <p>2 Black voters out of congressional district 2 and not</p> <p>3 taken all the white voters that were in these two</p> <p>4 other precincts and then stood behind the veil of,</p> <p>5 wow, that would give me nearly perfect population</p> <p>6 deviation, but they didn't.</p> <p>7 So I don't know why the map drawer chose</p> <p>8 not to go draw out other immediately adjacent heavily</p> <p>9 Black precincts when they could have achieved perfect</p> <p>10 population deviation with that and they chose to draw</p> <p>11 out white precincts instead.</p> <p>12 I didn't draw the map and I don't know,</p> <p>13 but that's an example.</p> <p>14 Q. So that example that you just defined, did</p> <p>15 you report this in any of the written reports that</p> <p>16 you disclosed in this case?</p> <p>17 A. That is in my report, yes.</p> <p>18 Q. Where?</p> <p>19 A. I'm going to have to look for it for a</p> <p>20 minute, but I do -- I'm 100 percent sure that it is</p> <p>21 in here. Do you want to take a minute and let me</p>	<p style="text-align: right;">Page 139</p> <p>1 and 128 -- that were adjacent that they could have</p> <p>2 gone out.</p> <p>3 147 does the map and then 148 does the</p> <p>4 conclusion of what they could have arrived at, which</p> <p>5 is a deviation of five people, but they didn't.</p> <p>6 Q. This is not the ultimate result in the</p> <p>7 2021 enacted plan is your position?</p> <p>8 A. Yeah, that's correct. And, obviously, if</p> <p>9 you look at the illustration on page 63, I mean, the</p> <p>10 precincts are literally right there and they could</p> <p>11 have just as easily drawn the line up and left and</p> <p>12 grabbed those two and then not gotten 126 and 127 if</p> <p>13 that was their intent and could have divided -- if</p> <p>14 that was their intent, they could have taken many</p> <p>15 more African voters out of there than were moved by</p> <p>16 the existing plan.</p> <p>17 Q. Is it your position that in order to</p> <p>18 racially discriminate the legislature had to take all</p> <p>19 or the most heavily Black CDs and have moved them out</p> <p>20 of Southeast Pulaski or is it possible from your</p> <p>21 experience that they could have taken a significant</p>
<p style="text-align: right;">Page 138</p> <p>1 find it?</p> <p>2 Q. Yes, please.</p> <p>3 MS. BROYLES: It's probably best going</p> <p>4 forward as she asks you questions just go ahead and</p> <p>5 go to the page if necessary so that everyone can move</p> <p>6 with you.</p> <p>7 THE WITNESS: Okay. I'm looking for it.</p> <p>8 A. So the paragraphs 147, figure VII.A.9 and</p> <p>9 paragraph 148.</p> <p>10 BY MS. ADEN:</p> <p>11 Q. Now, I think you mentioned a deviation of</p> <p>12 .5 percent when you were just explaining that</p> <p>13 example?</p> <p>14 A. No, five people, which is like zero -- on</p> <p>15 this basis of three-quarters of a million people, it</p> <p>16 would be like .0000001 percent.</p> <p>17 Q. And you said 147 and 148?</p> <p>18 A. Yes. 147 does -- or 146 does the</p> <p>19 accounting of the two precincts that were</p> <p>20 predominantly white that they could have left in, and</p> <p>21 then 146.2 cites the two VTDs -- that would be 122</p>	<p style="text-align: right;">Page 140</p> <p>1 number of heavily Black precincts out of Pulaski and</p> <p>2 moved them into different districts in order to</p> <p>3 constitute racial -- evidence of racial</p> <p>4 discrimination?</p> <p>5 A. So the way I think about this is if the</p> <p>6 racial division is the goal and the objective, then</p> <p>7 if that's the objective and that's the priority, then</p> <p>8 forget everything else. That's what we're going to</p> <p>9 do. We're going to get as many Black voters out of</p> <p>10 district 2 as we can.</p> <p>11 If that is not the priority and there's</p> <p>12 other explanations for the way they're drawing the</p> <p>13 map, then they're not going to do things like go grab</p> <p>14 VTD 126 and 127, which are overwhelmingly white</p> <p>15 precincts, and then ignore these other precincts that</p> <p>16 are immediately adjacent that are 80 to 90 percent.</p> <p>17 Q. So it's your position that a legislature</p> <p>18 needs to discriminate against all Black voters in</p> <p>19 order to accomplish discrimination, it cannot</p> <p>20 discriminate against some Black voters in order to</p> <p>21 accomplish discrimination?</p>



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<p style="text-align: right;">Page 141</p> <p>1 MS. BROYLES: Object to the form.</p> <p>2 A. So let me be clear. I don't agree with</p> <p>3 that. What I am trying to do is present evidence</p> <p>4 that would help inform a court to decide is this map</p> <p>5 driven by race or not?</p> <p>6 And if it's -- if the answer is, well, it</p> <p>7 was driven by some, then that opens the door to like,</p> <p>8 well, what are all the other explanations for why the</p> <p>9 map was drawn how it was.</p> <p>10 If race is the overriding prevailing</p> <p>11 factor that led to the drawing of this map, then what</p> <p>12 I am looking for is the map drawer if -- it's not my</p> <p>13 burden to prove.</p> <p>14 But the map drawer would go in here and</p> <p>15 they would divide as many Black voters out of</p> <p>16 district 2 as they could and they would not miss the</p> <p>17 opportunity to have kept these other white precincts</p> <p>18 in.</p> <p>19 So that evidence to me suggested that race</p> <p>20 could not have been the overriding prevailing factor</p> <p>21 that led to the drawing of the map.</p>	<p style="text-align: right;">Page 143</p> <p>1 data?</p> <p>2 A. All of the demographic data here came</p> <p>3 either from the 2020 decennial census or it came from</p> <p>4 the 2018 to 2022 American Community Survey.</p> <p>5 Q. Which is produced by the census?</p> <p>6 A. Which is a product of the U.S. Census</p> <p>7 Bureau.</p> <p>8 Q. Looking at paragraph 24, you say that the,</p> <p>9 quote, remaining any part Black total -- excuse me.</p> <p>10 A. Just give me a minute here.</p> <p>11 Q. Sure. And this is the second to last line</p> <p>12 on paragraph 24 on page 12.</p> <p>13 A. Is it one of the bullets or just --</p> <p>14 Q. No, just above the bullets. You say that,</p> <p>15 "The remaining any part Black in the state of</p> <p>16 Arkansas are dispersed across the state in such a way</p> <p>17 that it is not possible to change their percentage in</p> <p>18 any significant way from the 2011 enacted map unless</p> <p>19 the state was entirely redrawn."</p> <p>20 Is that accurate?</p> <p>21 A. Yes. That is accurate, yep.</p>
<p style="text-align: right;">Page 142</p> <p>1 BY MS. ADEN:</p> <p>2 Q. Okay. Well, continue with that, turning</p> <p>3 to data again -- and we talked about this a little</p> <p>4 bit -- do you know what actual data the Arkansas</p> <p>5 General Assembly used to develop the 2021</p> <p>6 congressional map?</p> <p>7 A. They're required by law to use the U.S.</p> <p>8 Census Bureau Public Law 94-171 redistricting data</p> <p>9 file, which was made available in October of 2021.</p> <p>10 Q. Outside of the census data, do you know</p> <p>11 what other data the Arkansas General Assembly used to</p> <p>12 develop the congressional map, if any?</p> <p>13 A. I do not know who drew the map and I do</p> <p>14 not know what other data besides data required by law</p> <p>15 were used to draw the map.</p> <p>16 Q. In looking at paragraph 22 on pages 68</p> <p>17 through 69, you used particular data to assess</p> <p>18 demographics in your report.</p> <p>19 Is that fair to say?</p> <p>20 A. Yes, I do.</p> <p>21 Q. And is that fair to say that's census</p>	<p style="text-align: right;">Page 144</p> <p>1 Q. And what is your definition of</p> <p>2 "significant percentage" here?</p> <p>3 A. So I do not use the word "significant" in</p> <p>4 the sense of statistical significance, which is an</p> <p>5 important distinction.</p> <p>6 So what I would define significant as in</p> <p>7 this context is enough of the voters would be moved</p> <p>8 as to significantly change the landscape and impact</p> <p>9 their ability to elect a candidate of their choice.</p> <p>10 Q. Landscape means what?</p> <p>11 A. The entire -- the canvas of the entire</p> <p>12 state. So if you're going to change the percent of</p> <p>13 African Americans in -- APBs in any given district</p> <p>14 different from what they are right now, which are</p> <p>15 percentages of -- and I'm going off the top of my</p> <p>16 head.</p> <p>17 So say 22 percent in district 2 and, you</p> <p>18 know, 17 or 18 or 19 percent I think in districts 1</p> <p>19 and 4, and I think it's single digits in district 3.</p> <p>20 So if you were going to redraw a map that was going</p> <p>21 to change a district from 22 percent to whatever is</p>

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<p style="text-align: right;">Page 145</p> <p>1 conceivably possible, you know, 35 percent or 38</p> <p>2 percent, there's no way that you can accomplish that</p> <p>3 by nibbling around the edges of the existing plan.</p> <p>4       You would have to go basically do</p> <p>5 significant changes to the plan in order to</p> <p>6 accomplish that.</p> <p>7       Q.   So it's your position that -- well, let me</p> <p>8 ask you this: Is it -- your definition of</p> <p>9 significant the Arkansas General Assembly's</p> <p>10 definition of significant?</p> <p>11       A.   I don't know what their --</p> <p>12       MS. BROYLES: Object to the form.</p> <p>13       A.   I don't know what their definition of</p> <p>14 significant is. My definition of significant is</p> <p>15 demographic. You're going to move the needle more</p> <p>16 than 1 or 2 percentage points in either direction.</p> <p>17 You're going to move it 10 percentage points or 15</p> <p>18 percentage points.</p> <p>19       I tested this and experimented a little</p> <p>20 bit. I didn't draw a conclusion because all -- I</p> <p>21 immediately ran into roadblocks.</p>	<p style="text-align: right;">Page 147</p> <p>1 in your definition the percentage of Black voters</p> <p>2 such that it changes their electoral impact?</p> <p>3       A.   You know, the way in which I'm describing</p> <p>4 significant change is for their benefit to, you know,</p> <p>5 try to create theoretically a district where they</p> <p>6 would have a much higher percentage of the population</p> <p>7 than they do right now.</p> <p>8       And in looking at the plans historically,</p> <p>9 you know, including the -- what I understand was the</p> <p>10 Democratically led drawing of the 2011 plan, there</p> <p>11 has not been any draws historically that have</p> <p>12 attempted to create a complete redraw of the state to</p> <p>13 create a district that would be a predominantly</p> <p>14 prevailing Black district.</p> <p>15       To answer your question directly is that</p> <p>16 -- is the drawing of a district whether they have,</p> <p>17 you know, a certain amount of influence in the</p> <p>18 ability to elect a candidate of their choice; is that</p> <p>19 the only harm or, you know, that can be done by</p> <p>20 dividing them or the only benefit is having them</p> <p>21 together? No.</p>
<p style="text-align: right;">Page 146</p> <p>1       So if you just adjust the existing borders</p> <p>2 is there any way you can do it? And then once I</p> <p>3 realized that there wasn't, that's what led me to the</p> <p>4 conclusion that there's no easy way based on the</p> <p>5 existing plan that you could change that number of</p> <p>6 24, 22 percent to what I would call a significant</p> <p>7 number, say 40 percent or more. I don't know if it's</p> <p>8 possible.</p> <p>9       BY MS. ADEN:</p> <p>10       Q.   In your opinion, can you only harm Black</p> <p>11 voters, for example, by changing their electoral</p> <p>12 impact? Is it your opinion then -- is it your</p> <p>13 opinion that you can only harm Black voters by</p> <p>14 changing their percentage in a significant way that</p> <p>15 impacts their electoral impact?</p> <p>16       MS. BROYLES: Object to the form.</p> <p>17       A.   Can you just say the question one more</p> <p>18 time?</p> <p>19       BY MS. ADEN:</p> <p>20       Q.   Is it your opinion that the only way that</p> <p>21 you can harm Black voters is to change significantly</p>	<p style="text-align: right;">Page 148</p> <p>1       Dividing any community of interest</p> <p>2 anywhere in this state, anywhere that you draw a line</p> <p>3 there's going to be a community that will be impacted</p> <p>4 by drawing the line dividing groups of one kind into</p> <p>5 another.</p> <p>6       Q.   Is it your opinion that due to the</p> <p>7 any-part-Black population being distributed widely</p> <p>8 across the state that making any one of the four U.S.</p> <p>9 House congressional districts a Black majority</p> <p>10 district by any demographic draw is impossible?</p> <p>11       MS. BROYLES: Object to the form.</p> <p>12       A.   I'm so sorry. Just say it one more time</p> <p>13 so I'm clear.</p> <p>14       BY MS. ADEN:</p> <p>15       Q.   Looking at paragraph 23 in your report, is</p> <p>16 it your opinion that due to the any-part-Black</p> <p>17 population being distributed widely across the state</p> <p>18 making any one of the four U.S. House districts a</p> <p>19 majority -- a Black majority by any geographic draw</p> <p>20 is impossible?</p> <p>21       A.   Yes. That's my opinion.</p>

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<p style="text-align: right;">Page 149</p> <p>1 Q. Did you attempt to draw a majority Black 2 congressional district in Arkansas? 3 A. I did. 4 Q. Did you report that in your written 5 reports? 6 A. No, because I gave up because it wasn't 7 going anywhere. 8 Q. And do you understand whether drawing such 9 a district is necessary evidence for plaintiffs to 10 establish their claim in this case? 11 MS. BROYLES: Object to the form. That's 12 the plaintiff's burden and your own expert. We had 13 that deposition yesterday. So he doesn't have to 14 provide every single thing he's ever done in his 15 report. That's the purpose of the deposition. 16 It's impossible for him to put every 17 single thing on paper, and that's the point of the 18 deposition and him being here today. 19 MS. ADEN: So I would love your speaking 20 objections to be limited to the objections and not 21 testifying.</p>	<p style="text-align: right;">Page 151</p> <p>1 Q. Did you report that in your written 2 reports? 3 A. I did. 4 Q. Where? 5 A. So I have what I'll show you as alt 1 and 6 alt 2 plans. 7 Q. For BGD1 and BGD2? 8 A. Yeah, for sure. So let's refer to 9 paragraph 178. 10 Q. Okay. 11 A. So what this plan did is it tried to -- 12 rather than bringing in Cleburne County it reduced 13 the swap so that all I did was take as few precincts 14 out of the existing congressional district 2 as 15 possible. 16 And so in this draft plan because we were 17 not putting all the Republicans from Cleburne in and 18 then taking Democratic voters out, which of 19 Southeastern Pulaski -- we're only taking some of the 20 precincts out of Southeast Pulaski, what happened is 21 -- I'm referring to paragraph 178, Table IX.C.1 -- is</p>
<p style="text-align: right;">Page 150</p> <p>1 BY MS. ADEN: 2 Q. And My question is: Do you understand the 3 evidence that is needed for plaintiffs to prove their 4 claims based upon your review of our complaints and 5 your sense of the type of analyses that are necessary 6 in this case that we need to draw a majority Black 7 district? Yes or no and then please explain. 8 A. I'm so sorry. It sounds like there's more 9 than one question in there. Can you try it one more 10 time? 11 Q. Is it your opinion that plaintiffs need to 12 attempt to draw a majority Black congressional 13 district in Arkansas in order to -- as evidence in 14 order to demonstrate their claims in this case? 15 A. I don't believe that drawing a majority 16 Black district is a burden of the plaintiffs. And 17 even if it is, I don't think that it is possible. 18 Q. Did you attempt to draw a congressional 19 district in which the any-part-Black percentage 20 increased from the 2011 enacted congressional map? 21 A. I did.</p>	<p style="text-align: right;">Page 152</p> <p>1 that the percent APB in that draft draw goes up by 2 about 2 percentage points. 3 It's pretty similar to what the 2011 4 enacted plan statistics were. So, yeah, I tried 5 that. 6 Q. But it's your opinion that this 2 7 percentage increase is insignificant because it does 8 not change electoral impacts for Black voters based 9 upon your earlier testimony? 10 A. It's not that that number is 11 insignificant. It is that that change -- if that 12 change happened, the electoral outcome would not -- 13 the electoral outcome would not be moved by the 14 voters. 15 The electoral outcome is not changed 16 because of the people who are there that voted 17 Democrat, not because of the percent of the 18 population who is any part Black because my 19 assessment is how many people voted, and there's 20 white Democrats and Black Democrats. 21 And so it is -- by moving these precincts</p>

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<p style="text-align: right;">Page 153</p> <p>1 in and out the political outcome was -- would not 2 have been influenced by this. 3 I'm trying not to draw a direct connection 4 between the percent APB and the political performance 5 because I don't know what the difference in white and 6 Black Democrats are in Southeast Pulaski. 7 Q. And do you know what, if anything, 8 required the Arkansas General Assembly to develop a 9 2021 congressional map that was not entirely redrawn? 10 A. I'm so sorry. Say it one more time. 11 Q. Do you know what required the Arkansas 12 General Assembly to develop a 2021 congressional map 13 that was not entirely redrawn? 14 MS. BROYLES: Object to the form. 15 BY MS. ADEN: 16 Q. Did anything require the Arkansas General 17 Assembly to not -- strike that. I will move on and 18 get to it a different way. 19 On paragraph 24, going back there, you 20 mention that -- you mention in the last line before 21 the numbered points in that paragraph that the "2021</p>	<p style="text-align: right;">Page 155</p> <p>1 A. I have not seen a document that says that 2 between the 1 percent one vote legal rule balance of 3 the population. 4 Q. Did you look at any written redistricting 5 criteria or guidelines used by the Arkansas General 6 Assembly to make the 2021 congressional plan? 7 A. I did not. I was not provided any and 8 that's part of why I watched the videos, to try and 9 find out during the debate whether any other 10 competing criteria were discussed, and I didn't hear 11 any. 12 Q. Competing criteria? 13 A. Any criteria. 14 Q. Any criteria? 15 A. Yeah. 16 Q. So you watched some videos of the Arkansas 17 legislative sessions' impact dealing with 18 congressional redistricting, correct, based upon your 19 earlier testimony? 20 A. Yes. 21 Q. And within those videos you looked at</p>
<p style="text-align: right;">Page 154</p> <p>1 enacted plan is an adaptation of the 2011 enacted 2 plan." 3 A. It is. 4 Q. Do you know what, if anything, required 5 the Arkansas General Assembly to develop the 2021 6 congressional map that was an adaptation of the 2011 7 enacted map? 8 A. I don't know the rules or if there was 9 special legal guidance that they were given. It is a 10 traditional redistricting principle to do so. And I 11 read most recently in the Alexander decision that 12 that's a factor that, you know, the Supreme Court 13 considers as a redistricting principle to try to 14 maintain high court retention, start with the plan 15 that you have beforehand, and work from there. 16 Q. Do you know if it's Arkansas's requirement 17 to have high core retention? 18 A. I don't. 19 Q. Okay. Do you know what criteria, in fact, 20 the Arkansas General Assembly used to develop the 21 congressional plans in 2021?</p>	<p style="text-align: right;">Page 156</p> <p>1 snippets of hearings on congressional redistricting; 2 is that correct? 3 A. That's correct, yeah. 4 Q. And of what you've looked at you did not 5 hear discussions about traditional redistricting 6 principles that the legislature was required to use 7 or had the flexibility to use in drawing the 8 congressional map? 9 A. I don't remember. 10 MS. BROYLES: Object to the form. 11 Go ahead. 12 A. I don't remember hearing any criteria or a 13 prioritization of criteria in the conversations that 14 I heard. 15 BY MS. ADEN: 16 Q. And so any criteria that you would have 17 used to assess the 2021 plan or any plans for 18 purposes of this case are based on things that you 19 did not hear the Arkansas General Assembly say they 20 were using in consideration of the 2021 congressional 21 plan?</p>

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<p style="text-align: right;">Page 157</p> <p>1 MS. BROYLES: Object to the form.</p> <p>2 A. So I'd like to say that the one thing I</p> <p>3 did hear is that -- minimizing county splits, that</p> <p>4 was a priority. I did hear that several times and,</p> <p>5 obviously, I saw at least three different plans that</p> <p>6 were proposed that did not have any county splits.</p> <p>7 BY MS. ADEN:</p> <p>8 Q. Anything else besides minimizing county</p> <p>9 splits?</p> <p>10 A. Not that I can recall.</p> <p>11 Q. And if you had heard of criteria that was</p> <p>12 required by Arkansas's General Assembly for the 2021</p> <p>13 congressional plan, would you have reported that in</p> <p>14 your written testimony?</p> <p>15 A. Yes.</p> <p>16 Q. Do you know whether the Arkansas</p> <p>17 legislature made trade-offs on traditional</p> <p>18 redistricting principles when they may have</p> <p>19 conflicted in developing the 2021 enacted plan?</p> <p>20 A. By definition, redistricting is a series</p> <p>21 of trade-offs they had to have. No one told me that</p>	<p style="text-align: right;">Page 159</p> <p>1 MS. BROYLES: Object to the form.</p> <p>2 BY MS. ADEN:</p> <p>3 Q. And having not heard that there was any</p> <p>4 requirements -- traditional redistricting principle</p> <p>5 requirements for the 2021 congressional plan, is it</p> <p>6 fair to say that you did not hear whether there was</p> <p>7 any ranking amongst any criteria for the Arkansas</p> <p>8 General Assembly in developing the 2021 congressional</p> <p>9 map?</p> <p>10 MS. BROYLES: Object to the form.</p> <p>11 BY MS. ADEN:</p> <p>12 Q. Did you -- are you aware of whether the</p> <p>13 Arkansas General Assembly ranked criteria in</p> <p>14 developing the 2021 congressional map?</p> <p>15 A. I'm not.</p> <p>16 Q. Based upon paragraphs 18 or 57 in your</p> <p>17 expert report from September 16th, is it fair to say</p> <p>18 that you're relying on what briefing by counsel for</p> <p>19 the defense provided you in this case, as well as the</p> <p>20 snippets of videos that you reviewed in order to</p> <p>21 identify criteria by which you evaluated the 2021</p>
<p style="text-align: right;">Page 158</p> <p>1 explicitly, but that's what redistricting is.</p> <p>2 Redistricting is trade-offs.</p> <p>3 Q. But you don't know, one way or the other,</p> <p>4 what trade-offs, if any, existed in developing the</p> <p>5 2021 plan or how they were resolved?</p> <p>6 A. The only knowledge that I have of what</p> <p>7 trade-offs were being made is that throughout the</p> <p>8 process of developing plans and seeing different</p> <p>9 plans being presented by legislators is that some</p> <p>10 were advocating for the inclusion or exclusion of</p> <p>11 certain counties because they had talked to their</p> <p>12 constituents or talked to their colleagues and had</p> <p>13 arrived at a conclusion that they wanted to have</p> <p>14 certain geographies in or out of certain districts.</p> <p>15 But I don't recall those conversations</p> <p>16 being hedged in a, hey, our most important priority</p> <p>17 is this and our second most important priority is</p> <p>18 that.</p> <p>19 Q. And your having heard that is based upon</p> <p>20 the snippets of testimony that you reviewed?</p> <p>21 A. Yep.</p>	<p style="text-align: right;">Page 160</p> <p>1 congressional map and other maps in your written</p> <p>2 reports?</p> <p>3 MS. BROYLES: Object to the form.</p> <p>4 A. So I would disagree with that. My</p> <p>5 assessment of the different plans and the methods and</p> <p>6 metrics that I used were not guided by the</p> <p>7 information that was provided to me.</p> <p>8 That analysis and the assessments were</p> <p>9 based on, you know, a standard template of tools that</p> <p>10 we use to assess every plan and what their various</p> <p>11 qualities and strengths or weaknesses are based on</p> <p>12 those metrics independently.</p> <p>13 We do not and I did not seek to prioritize</p> <p>14 one particular traditional redistricting criteria</p> <p>15 over the other. We looked at each one of them</p> <p>16 individually, and that was completely agnostic to any</p> <p>17 information that was provided to me by the Attorney</p> <p>18 General's office.</p> <p>19 BY MS. ADEN:</p> <p>20 Q. Is it your position that there's standard</p> <p>21 redistricting criteria that is used nationwide?</p>



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<p style="text-align: right;">Page 161</p> <p>1 A. There are -- yes. There is a small number 2 of criteria that most states use. Many states add or 3 subtract different criteria based on their specific 4 needs. 5 Q. And is it your position that you do not 6 know which criteria the Arkansas General Assembly may 7 have added or subtracted to the general criteria in 8 developing the 2021 congressional map? 9 MS. BROYLES: Object to the form. 10 A. I do not know what the ranking of the 11 criteria were or what they may have added to or 12 subtracted from the traditional criteria, which is 13 why we used all the most common -- we measured all 14 the most common criteria. 15 BY MS. ADEN: 16 Q. And by "we," who are you referring to? 17 A. Just my company. 18 Q. You and Eric? 19 A. Yeah, but it was my -- I want to be very 20 clear, it's my work. You know, Eric will do analysis 21 for me as I ask him to do so, but he has no</p>	<p style="text-align: right;">Page 163</p> <p>1 reflected improvements in every one of those areas. 2 So I didn't have a list of what those 3 criteria were, but all the ones that are always used 4 by all states were better in every regard compared to 5 the 2011 plan. 6 Q. Looking at paragraph 58 on page 22, does 7 that paragraph encompass the entire set of 8 considerations you used to assess plaintiff's claims, 9 including analyzing demographic characteristics, 10 measuring compactness, measuring core retention, 11 assessing political performance, and assessing two 12 alternative plans? 13 MS. BROYLES: Object to the form. 14 A. When I did -- you know, provided 15 information on voter turnout, I would say I was 16 subordinate to -- 17 (Whereupon, Madam Reporter asked for 18 clarification from the witness.) 19 A. -- that the voter turnout was subordinate 20 to the political performance. I didn't break that 21 out in this sentence, but there is no other analysis</p>
<p style="text-align: right;">Page 162</p> <p>1 decision-making authority and no influence on my 2 report or opinions. 3 Q. But he is running parallel analysis 4 alongside you to prepare written reports? 5 A. For quality control purposes, yes. 6 Q. Looking at paragraph 20 of your report -- 7 and I am jumping around. Thank you for being 8 flexible. 9 A. No problem. 10 Q. -- you say that the goal of the Arkansas 11 General Assembly was to improve each traditional 12 redistricting principle. 13 Is that fair? 14 A. That's what it looks like from my 15 analysis. 16 Q. What is that based on that you knew the 17 goal of the Arkansas General Assembly? 18 A. So my conclusion for measuring each one of 19 the traditional redistricting principles that I know 20 that all states use such as compactness, core 21 retention, the plan that was drawn by the legislature</p>	<p style="text-align: right;">Page 164</p> <p>1 besides these that I performed. 2 BY MS. ADEN: 3 Q. You mentioned earlier, though, contiguity 4 and incumbency as measures that you considered in 5 developing these plans? 6 A. So I just checked to make sure that there 7 were no disjointed blocks. It's nothing you can 8 really analyze except to look and say, like, yep, 9 it's contiguous. There's no in-depth analysis that's 10 required from that other than to check to make sure 11 that it's there. 12 And I also took it -- since the plan was 13 adopted, it's my assumption that the incumbency rules 14 were respected. If they had not been, they would not 15 have adopted the plan. 16 Q. But you don't know one way or the other 17 based upon the information available to you in 18 writing these reports? 19 A. No. I didn't do an incumbency analysis. 20 That's right. 21 Q. You report in paragraphs like paragraph 83</p>



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<p style="text-align: right;">Page 165</p> <p>1 on page 36 --</p> <p>2 A. Analysis of Population Changes?</p> <p>3 Q. Yes. That's the heading. And on</p> <p>4 paragraph 83 underneath it it states: "While large</p> <p>5 changes were necessary to bring the 2011 enacted plan</p> <p>6 into compliance with the one-person, one-voter</p> <p>7 requirement, minimizing those changes is not a</p> <p>8 codified redistricting requirement for the Arkansas</p> <p>9 General Assembly."</p> <p>10 Did I read that correctly?</p> <p>11 A. Yes. That's correct.</p> <p>12 Q. Did you speak with members of the Arkansas</p> <p>13 General Assembly to make this finding?</p> <p>14 A. No.</p> <p>15 MS. BROYLES: Object to the form.</p> <p>16 BY MS. ADEN:</p> <p>17 Q. Did you review any documents that you</p> <p>18 understood were before the Arkansas General Assembly</p> <p>19 during the map drawing process to make this finding?</p> <p>20 A. No.</p> <p>21 Q. What is the basis for your opinion that,</p>	<p style="text-align: right;">Page 167</p> <p>1 district, roughly?</p> <p>2 A. Yeah, so the number -- we don't use</p> <p>3 voters. We use the total population for balancing.</p> <p>4 So there's a -- the total population in Arkansas from</p> <p>5 the 2020 census, it was reported incorrectly in Mr.</p> <p>6 Cooper's report as 3,013,000. It's 3,011,524, and</p> <p>7 exactly one-fourth of that is 752,881 total</p> <p>8 population on average.</p> <p>9 And Arkansas is unique, but they do not</p> <p>10 require a two (sic) to last person balancing of the</p> <p>11 population. They have some range that they are</p> <p>12 comfortable with.</p> <p>13 Q. And so how much approximately would each</p> <p>14 district -- each of the four districts have of the 3</p> <p>15 million plus?</p> <p>16 A. 752,881.</p> <p>17 Q. And how much -- is it your position that</p> <p>18 the 16,000 overpopulation in CD2 of the 700,000, that</p> <p>19 that warranted large changes in the map?</p> <p>20 A. Yeah. When I refer to large changes, I'm</p> <p>21 talking about the state holistically, not</p>
<p style="text-align: right;">Page 166</p> <p>1 quote, large changes were necessary, end quote, to</p> <p>2 meet one person/one vote?</p> <p>3 A. If you do an analysis of the demography of</p> <p>4 the plan when using the 2011 boundaries with the 2020</p> <p>5 population, mathematically in order to bring the plan</p> <p>6 into compliance with one person/one vote there were</p> <p>7 significant deviations in the population under the</p> <p>8 2011 plan.</p> <p>9 So it's not a state rule. It's the law</p> <p>10 that you have to rebalance the population. And</p> <p>11 because of, for example, significant amounts of</p> <p>12 growth in district 3 in Benton County in the</p> <p>13 Northwest corner of the state that they needed to</p> <p>14 disgorge significant amounts of population in order</p> <p>15 to get them to an inequitable share of the total</p> <p>16 population of Arkansas.</p> <p>17 Q. About how many voters were necessary, give</p> <p>18 or take a rough estimation, in each district</p> <p>19 following the census?</p> <p>20 A. How many needed to be moved?</p> <p>21 Q. No. How many needed to be in each</p>	<p style="text-align: right;">Page 168</p> <p>1 specifically about congressional district 2. The</p> <p>2 changes that were required that I characterize as</p> <p>3 large were legally required to bring the entire state</p> <p>4 into balance.</p> <p>5 Q. What was the over- -- or underpopulation,</p> <p>6 the largest over-, underpopulation in any district</p> <p>7 after the 2020 census?</p> <p>8 A. I can look it up. Just give me a moment.</p> <p>9 Okay. So our target was 752,881. And in -- using</p> <p>10 the 2011 boundaries district 1 was -- and I'm going</p> <p>11 to round here for simplicity -- 716,000. So 35,000</p> <p>12 under.</p> <p>13 District 2, as you mentioned, 16,000 over,</p> <p>14 roughly. District 3, which I mentioned earlier, is</p> <p>15 the big one, 839,000. So 80-, 90,000, a lot of</p> <p>16 people. And then comparatively district 4 was</p> <p>17 significantly underpopulated with 687,000. So the</p> <p>18 deviations were quite large.</p> <p>19 Q. In your estimation?</p> <p>20 A. It's not an estimation. It's looking at</p> <p>21 how many people had to be moved in order to balance</p>

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<p style="text-align: right;">Page 169</p> <p>1 the state. Moving -- you know, if you have to move</p> <p>2 50- to 100,000 people around, it's still a lot of</p> <p>3 people. Every state is its own universe.</p> <p>4 So you can't say, you know, what one state</p> <p>5 has to move is compared to another. But for sure</p> <p>6 taking district 3 down from 840,000 to 752,000 is</p> <p>7 moving a lot of people.</p> <p>8 Q. Not based upon something that you heard or</p> <p>9 saw the general assembly say required large changes.</p> <p>10 Is that fair to say?</p> <p>11 MS. BROYLES: Object to the form.</p> <p>12 A. Yes. I mean, I look at 90,000 -- whatever</p> <p>13 it is, 90,000 people over 839,000 people and you say</p> <p>14 whatever that is, some 15 percent of the population</p> <p>15 and say that's a large -- as a demographer without</p> <p>16 input from the legislature, I can say that requires a</p> <p>17 move of a lot of people.</p> <p>18 BY MS. ADEN:</p> <p>19 Q. But you did not hear or have written</p> <p>20 documentation that the general assembly believed it</p> <p>21 needed to make large changes between the 2011 and</p>	<p style="text-align: right;">Page 171</p> <p>1 did not?</p> <p>2 A. I do not know.</p> <p>3 Q. So on this question of one person/one</p> <p>4 vote, in paragraph 83 that we've been looking at, you</p> <p>5 state: "In order to meet other redistricting</p> <p>6 objectives (such as improving compactness and</p> <p>7 reducing geographic splits) more moves of the</p> <p>8 population beyond the bare minimum are required."</p> <p>9 Did I read that correctly?</p> <p>10 A. That's correct.</p> <p>11 Q. First are core retention and minimizing</p> <p>12 change similar concepts in your mind?</p> <p>13 A. Referring to the Wisconsin case, there was</p> <p>14 party debate about the distinction between what is</p> <p>15 least change and whether core retention is the tool</p> <p>16 to measure least change or not.</p> <p>17 And in the end the Supreme Court of</p> <p>18 Wisconsin's opinion used the concept of core</p> <p>19 retention as the definitive metric for minimizing</p> <p>20 change.</p> <p>21 And, in fact, they used my use of core</p>
<p style="text-align: right;">Page 170</p> <p>1 2020 map?</p> <p>2 MS. BROYLES: Object to the form.</p> <p>3 A. I didn't hear the legislature say</p> <p>4 anything, let alone characterizing what they thought</p> <p>5 was a large change or not a large change. It is what</p> <p>6 it is. I didn't hear anything from anyone what they</p> <p>7 thought and whether they thought through their</p> <p>8 legislative experience that moving 90,000 people out</p> <p>9 of district 3 was a lot or not.</p> <p>10 BY MS. ADEN:</p> <p>11 Q. Or 16,000 people out of district 2?</p> <p>12 A. Yeah. That's correct.</p> <p>13 Q. Did you consider non-dilution of minority</p> <p>14 voting strength as a traditional redistricting</p> <p>15 principle in your assessments?</p> <p>16 A. That was a lot of words.</p> <p>17 Q. Did you consider non-dilution of minority</p> <p>18 voting strength as a traditional redistricting</p> <p>19 principle in your analysis?</p> <p>20 A. No, I did not.</p> <p>21 Q. Do you know if the general assembly did or</p>	<p style="text-align: right;">Page 172</p> <p>1 retention, which is called differential core</p> <p>2 retention that measures change by race.</p> <p>3 Q. Besides the differential -- besides the</p> <p>4 Wisconsin State Supreme Court, has any other court</p> <p>5 used the differential core retention rate that you're</p> <p>6 aware of?</p> <p>7 A. I don't know if they used it in their</p> <p>8 opinion, but we have included that as a metric in all</p> <p>9 of the cases that we've submitted --</p> <p>10 Q. So --</p> <p>11 A. -- since started -- since 2020.</p> <p>12 Q. So to be clear, the Wisconsin State</p> <p>13 Supreme Court specifically referenced differential</p> <p>14 core retention in its decision?</p> <p>15 A. I don't know if they used the word</p> <p>16 "differential," but they cite my expert report and</p> <p>17 say, Thomas Bryan says this about core retention and</p> <p>18 movement and see part blah, blah, blah, of his expert</p> <p>19 report. And that's in my report where they're</p> <p>20 referring to is where we have all the differential</p> <p>21 core retention statistics.</p>

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<p style="text-align: right;">Page 173</p> <p>1 Q. And are you aware of any other court that</p> <p>2 has specifically cited your differential core</p> <p>3 retention findings in any decisions?</p> <p>4 A. Not sure.</p> <p>5 Q. So is that a no, as you sit here today?</p> <p>6 MS. BROYLES: Object to the form.</p> <p>7 A. I just don't know.</p> <p>8 THE WITNESS: Do you mind if we take a</p> <p>9 quick break?</p> <p>10 MS. ADEN: Perfect.</p> <p>11 (A break was taken.)</p> <p>12 BY MS. ADEN:</p> <p>13 Q. Mr. Bryan, we've been talking about the</p> <p>14 one person/one vote principle a little bit.</p> <p>15 Do you know what Arkansas's standard for</p> <p>16 one person/one vote for congressional map drawing was</p> <p>17 in 2021?</p> <p>18 MS. BROYLES: Object to the form.</p> <p>19 A. I heard in -- from counsel that the</p> <p>20 court's -- I'm choosing my words carefully.</p> <p>21 The court's tolerated up to seven-tenths</p>	<p style="text-align: right;">Page 175</p> <p>1 from like basic per person equity between the</p> <p>2 congressional districts could go above the .7 percent</p> <p>3 or below the .7 percent?</p> <p>4 A. I don't know. All I know is that I was</p> <p>5 told that there was a -- I think the word was a</p> <p>6 tolerance for up to .7 percent.</p> <p>7 Q. Looking at paragraph 28 of your report on</p> <p>8 page 14, did you find, quote, evidence that Black</p> <p>9 people -- and I think I used the word "people"</p> <p>10 inserted in there -- were disproportionately moved in</p> <p>11 order to rebalance the population in between</p> <p>12 districts?</p> <p>13 A. In all of the districts that was true.</p> <p>14 Q. All of the districts that you observed</p> <p>15 that Black people were disproportionately moved in</p> <p>16 the rebalancing of populations in the 2021 enacted</p> <p>17 map?</p> <p>18 A. Can we refer to an appendix?</p> <p>19 Q. Sure, please.</p> <p>20 MS. BROYLES: If you need to refer</p> <p>21 wherever you need to --</p>
<p style="text-align: right;">Page 174</p> <p>1 of a percent deviation. So I don't -- I didn't look</p> <p>2 up the statute. You know, I don't know where that's</p> <p>3 documented, but that's what I was told.</p> <p>4 BY MS. ADEN:</p> <p>5 Q. Do you know if the Arkansas General</p> <p>6 Assembly embraced that particular judicial tolerance</p> <p>7 for population rebalancing?</p> <p>8 A. The deviation of the 2021 enacted plan was</p> <p>9 significantly within the .7 percent guardrail that I</p> <p>10 was told.</p> <p>11 Q. But do you know, one way or the other,</p> <p>12 whether or not the general assembly felt it had the</p> <p>13 discretion to go above or beyond the .7 percent?</p> <p>14 A. I don't know.</p> <p>15 Q. Okay. And you have not seen or heard</p> <p>16 anything, one way or the other?</p> <p>17 A. I only have the evidence of the numbers</p> <p>18 that are an outcome of the plan.</p> <p>19 Q. Okay. Do you know what tolerance for --</p> <p>20 and so to be clear, you don't know whether or not the</p> <p>21 Arkansas General Assembly's tolerance for deviation</p>	<p style="text-align: right;">Page 176</p> <p>1 BY MS. ADEN:</p> <p>2 Q. To answer your questions, please direct</p> <p>3 me.</p> <p>4 A. Okay. So let's go to page 101, please.</p> <p>5 And on page 101 what we're looking at is two tables</p> <p>6 that are a differential core retention analysis. And</p> <p>7 the top table shows the movement from the original</p> <p>8 district of population and total by race and</p> <p>9 ethnicity to other individual districts.</p> <p>10 The table below that, which is color-coded</p> <p>11 red to green, that shows in total whether there was</p> <p>12 movement to one or more districts how many people</p> <p>13 were kept and how many people were moved in these</p> <p>14 different districts.</p> <p>15 So what I want to refer to here is that as</p> <p>16 you look across each one of these districts you can</p> <p>17 see that there are cases where -- there are some</p> <p>18 cases where whites, any part Black, or Hispanics,</p> <p>19 some were moved more and some were moved less in</p> <p>20 different districts of the plan.</p> <p>21 In total across all of the different</p>

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<p style="text-align: right;">Page 177</p> <p>1 districts, all of the moves, all of the core</p> <p>2 retention for all races and ethnicity and in total</p> <p>3 were solidly in the 90 percent range.</p> <p>4 Q. But focusing on Black voters --</p> <p>5 A. Yes.</p> <p>6 Q. -- is it your acknowledgment that Black</p> <p>7 voters were disproportionately moved in the redrawing</p> <p>8 of the 2021 congressional enacted map?</p> <p>9 A. In -- let me make sure I'm on base here.</p> <p>10 In one out of the four districts, they were</p> <p>11 disproportionately moved out.</p> <p>12 Q. And which district is that?</p> <p>13 A. That's district 2.</p> <p>14 Q. And you mentioned more or less earlier</p> <p>15 when you were talking about districts that there were</p> <p>16 some districts where more people of color than others</p> <p>17 were drawn out of districts. But in speaking of</p> <p>18 proportionality you agree that Black voters were</p> <p>19 disproportionately moved out of district 2 in the</p> <p>20 redraw from the 2011 map to the 2021 map?</p> <p>21 A. Only in that one district out of the four</p>	<p style="text-align: right;">Page 179</p> <p>1 a certain way in order to achieve that balance.</p> <p>2 So, as an example of that in district 3</p> <p>3 where there was significantly more white population</p> <p>4 that was moved out of the district, it so happened</p> <p>5 that in order to achieve, in this case, compactness</p> <p>6 the populations in the upside down horseshoe were</p> <p>7 predominantly white and those were the ones that got</p> <p>8 moved out.</p> <p>9 And that is what is indicated in district</p> <p>10 3. That doesn't mean there's harm. It just means</p> <p>11 that there are other redistricting criteria that have</p> <p>12 come into play that leads to one group being where</p> <p>13 they are being disproportionately impacted more than</p> <p>14 another.</p> <p>15 Q. So I'm not asking you why a group of</p> <p>16 people may or may not have been disproportionately</p> <p>17 moved. I'm just asking you that you concede that in</p> <p>18 one district at issue, district 2, your own evidence</p> <p>19 demonstrates that Black voters were</p> <p>20 disproportionately moved. Yes or no.</p> <p>21 MS. BROYLES: I'm objecting to the form</p>
<p style="text-align: right;">Page 178</p> <p>1 districts.</p> <p>2 Q. Okay.</p> <p>3 A. In the other three districts they were</p> <p>4 disproportionately retained and other race and</p> <p>5 ethnicities were disproportionately moved instead.</p> <p>6 Q. Okay. Now, looking at that same paragraph</p> <p>7 28, though, despite the admission that there was a</p> <p>8 disproportionate movement of Black voters out of</p> <p>9 district 2, is it your finding that that, quote, does</p> <p>10 not demonstrate invidious harm of Blacks statewide,</p> <p>11 end quote?</p> <p>12 A. The movement of more or less of one</p> <p>13 particular group especially when the core retention</p> <p>14 rates are extremely high does not represent statewide</p> <p>15 harm to a population.</p> <p>16 Q. Could it be evidence of district-specific</p> <p>17 harm to a population?</p> <p>18 A. You cannot say that the movement of a</p> <p>19 population in a district is indicative of harm</p> <p>20 because one needs to consider the totality of all of</p> <p>21 the reasons that a district might need to be drawn in</p>	<p style="text-align: right;">Page 180</p> <p>1 because yesterday I got interrupted multiple times</p> <p>2 for limiting it to a yes or no.</p> <p>3 And so you can answer as you need to.</p> <p>4 BY MS. ADEN:</p> <p>5 Q. And then you can explain. I would love</p> <p>6 for you to say yes or no and then explain.</p> <p>7 So my question is: Does your own evidence</p> <p>8 demonstrate both in the table and in paragraph 28</p> <p>9 that I reference you to that you acknowledge that in</p> <p>10 district 2 Black voters were disproportionately moved</p> <p>11 out of the district irrespective of why? That fact</p> <p>12 is documented in your testimony.</p> <p>13 A. Yes. They were moved disproportionately.</p> <p>14 Q. Okay. And you based upon your previous</p> <p>15 testimony cannot, as you sit here today, point to</p> <p>16 anything that you heard or saw that explains</p> <p>17 expressly why Black voters were disproportionately</p> <p>18 moved in or out of district 2 by the general</p> <p>19 assembly?</p> <p>20 MS. BROYLES: Object to the form.</p> <p>21 A. No.</p>

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<p style="text-align: right;">Page 181</p> <p>1 BY MS. ADEN:</p> <p>2 Q. Now looking at paragraph 28 again, you</p> <p>3 write that specifically if minimal change were the</p> <p>4 overriding criteria for redistricting in Arkansas you</p> <p>5 could find some fault with the plan. But overall,</p> <p>6 the core retention statistics in total, 92 percent,</p> <p>7 and by demographic subgroup are high in Arkansas.</p> <p>8 Is that fair?</p> <p>9 A. Yes.</p> <p>10 Q. Do you know, one way or the other, whether</p> <p>11 minimal change was the, quote, overriding criteria</p> <p>12 for redistricting in Arkansas, end quote?</p> <p>13 MS. BROYLES: Object to the form.</p> <p>14 A. I do not know that as a fact that was</p> <p>15 communicated to me or by a document. I come to that</p> <p>16 conclusion based on the evidence that I have of more</p> <p>17 population in every district was moved than was</p> <p>18 minimally necessary.</p> <p>19 BY MS. ADEN:</p> <p>20 Q. And do you -- in addition to not -- that</p> <p>21 not being provided to you by a document, you did not</p>	<p style="text-align: right;">Page 183</p> <p>1 retention of one state to another state.</p> <p>2 However, what I can do is I can look to</p> <p>3 states for which least change is legally required and</p> <p>4 look at the different cases that I participated in</p> <p>5 and say -- you know, as I worked through many of</p> <p>6 these in the last four years that having core</p> <p>7 retention above 90 percent is a rare feat under any</p> <p>8 circumstance.</p> <p>9 So it's a basis of my experience, and</p> <p>10 seeing where least change is actually required that</p> <p>11 leads me to a conclusion that anything over 90</p> <p>12 percent is very high. And when I see numbers such as</p> <p>13 I see here on any part Black in district 1, 99</p> <p>14 percent core retention, 94 1/2 core retention</p> <p>15 overall, those are extremely high numbers.</p> <p>16 Q. But any part Black core retention in D2 is</p> <p>17 not high; is that correct?</p> <p>18 A. Yes. Well, 88 percent I would still</p> <p>19 characterize as being a very high core retention</p> <p>20 number, just not as high as some of the neighboring</p> <p>21 districts.</p>
<p style="text-align: right;">Page 182</p> <p>1 hear the general assembly say that minimal change was</p> <p>2 the overriding criteria for redistricting in</p> <p>3 Arkansas?</p> <p>4 A. No.</p> <p>5 Q. Is there a particular standard that you're</p> <p>6 using for determining when core retention becomes</p> <p>7 high or low?</p> <p>8 A. There is not a standard and this is what</p> <p>9 -- different states through the redistricting process</p> <p>10 -- let's use New York and California as an example of</p> <p>11 losing seats.</p> <p>12 By definition because you've lost a seat</p> <p>13 or sometimes two seats you are forced to make</p> <p>14 significant changes to your plan. You have to. It's</p> <p>15 not by choice. And so in states such as those you</p> <p>16 can have a terrible core retention number.</p> <p>17 Similarly, in Texas, gain two seats. Huge</p> <p>18 amounts of readjusting lines to account for the</p> <p>19 population change in Texas. So it's just to say that</p> <p>20 as -- you cannot compare like the compactness of one</p> <p>21 state to another state. You can't compare the core</p>	<p style="text-align: right;">Page 184</p> <p>1 Q. So even though you can see that a</p> <p>2 disproportionate number of Black voters were moved</p> <p>3 out of D2 and that dropped the core retention to</p> <p>4 about the high 80s, you still say that the core</p> <p>5 retention is high in D2 --</p> <p>6 A. It is, yes.</p> <p>7 Q. -- based upon a high upper 80 percentage?</p> <p>8 A. Yes.</p> <p>9 Q. Okay. But, as you sit here today, you do</p> <p>10 not believe that it is appropriate to compare the</p> <p>11 core retention from one state to another.</p> <p>12 Is that fair?</p> <p>13 MS. BROYLES: Object to the form.</p> <p>14 A. I only used Wisconsin as an illustrative</p> <p>15 example because it's legally required there. So if</p> <p>16 you're saying in a state where it is not legally</p> <p>17 required and it's over 90 percent and there's other</p> <p>18 states where it's legally required and it's the same</p> <p>19 amount, it's a convenient comparison.</p> <p>20 But I concede it's not apples to apples</p> <p>21 because they're two different states. Any number</p>



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<p style="text-align: right;">Page 185</p> <p>1 over 90 percent is very good.</p> <p>2 BY MS. ADEN:</p> <p>3 Q. If 88 percent is good, is 80 percent good</p> <p>4 core retention?</p> <p>5 A. So what we need to be able to determine</p> <p>6 that is something that we're working on. You need a</p> <p>7 core retention that shows the distribution of all</p> <p>8 congressional districts across the country. Nobody</p> <p>9 has that.</p> <p>10 We're building it, but we don't have that</p> <p>11 yet. So all I can say is anecdotally from the cases</p> <p>12 we've worked on that when we have seen districts that</p> <p>13 have over 90 percent or around 90 percent core</p> <p>14 retention, that means you only had to move 10 percent</p> <p>15 of the population.</p> <p>16 In some cases these states have had</p> <p>17 massive changes in their population. So to keep the</p> <p>18 number of people moving congressional districts to 10</p> <p>19 to 12 percent is a remarkable feat.</p> <p>20 Q. But you don't have a basis or -- I'm sorry</p> <p>21 -- you don't have a source to point to to say that 80</p>	<p style="text-align: right;">Page 187</p> <p>1 Is that a fair assessment?</p> <p>2 A. Please say it one more time. I'm sorry.</p> <p>3 Q. I'll strike that and try again.</p> <p>4 Looking at paragraph 29, what did you find</p> <p>5 explains the movement of more people than necessary</p> <p>6 to rebalance the population after the 2021 census?</p> <p>7 MS. BROYLES: Object to the form.</p> <p>8 A. So I'll be clear. I didn't draw the map,</p> <p>9 I don't know what the rules were, and I don't know</p> <p>10 what motivated the map drawer or the map drawers to</p> <p>11 make the draws they did, where they did, and how they</p> <p>12 did.</p> <p>13 I see evidence in different districts</p> <p>14 around the state that there were different objectives</p> <p>15 in different parts of the state. And, again, I use</p> <p>16 district 3's compactness and the need to disgorge</p> <p>17 85,000 people as an example.</p> <p>18 I don't know what the decision-making</p> <p>19 process was and what the priorities were, but the</p> <p>20 evidence suggests that there was not a uniform set of</p> <p>21 rules that were followed from one district to the</p>
<p style="text-align: right;">Page 186</p> <p>1 percent as compared to 70 percent in a particular</p> <p>2 state is good or bad core retention.</p> <p>3 Is that fair to say?</p> <p>4 MS. BROYLES: Object to the form.</p> <p>5 A. There is no source or statistics on that,</p> <p>6 but I think if you look at a plan and you said we</p> <p>7 have to -- or we have chosen to move -- unless you</p> <p>8 had to do it, that we moved a third of the population</p> <p>9 around this state would be highly questionable.</p> <p>10 BY MS. ADEN:</p> <p>11 Q. And you don't know that the standard that</p> <p>12 you're using to judge core retention is the standard</p> <p>13 that the Arkansas General Assembly used to assess</p> <p>14 core retention if it did at all?</p> <p>15 A. I have no idea if they did at all.</p> <p>16 Q. Looking at paragraph 29, is it fair to say</p> <p>17 that despite conceding that there's disproportionate</p> <p>18 movement on the basis of race in the 2021</p> <p>19 congressional plan, including the disproportionate</p> <p>20 movement of Black voters out of CD2 that the movement</p> <p>21 is explained by politics, in your perspective?</p>	<p style="text-align: right;">Page 188</p> <p>1 next.</p> <p>2 BY MS. ADEN:</p> <p>3 Q. Did you conduct a test that uses the</p> <p>4 variables of race and party performance of voting</p> <p>5 tabulation districts to see which variable better</p> <p>6 explains their treatment, all else being equal?</p> <p>7 MS. BROYLES: Object to the form.</p> <p>8 A. I did not.</p> <p>9 BY MS. ADEN:</p> <p>10 Q. Did you conduct any tests to assess</p> <p>11 plaintiff's allegation that is acknowledged in</p> <p>12 paragraph 21 of whether white Democratic voters were</p> <p>13 included in the redrawn second congressional district</p> <p>14 at a notably higher rate than Black Democratic voters</p> <p>15 within the same counties at issue?</p> <p>16 A. Please tell me the paragraph again.</p> <p>17 Q. Paragraph 21.</p> <p>18 A. It's a large paragraph. I apologize.</p> <p>19 Would you please direct me towards the specific part</p> <p>20 of it you would like me to address?</p> <p>21 Q. Yes. I'm sorry. It's page 21. That's</p>



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<p style="text-align: right;">Page 189</p> <p>1 why I got us to the wrong --</p> <p>2 A. I keep getting tripped up. I'm sorry.</p> <p>3 Q. That's my fault. So you acknowledge on</p> <p>4 page 21 the allegation that plaintiff's offer, which</p> <p>5 is that at the very bottom of 189, "White Democratic</p> <p>6 voters were included in the redrawn second</p> <p>7 congressional district at a notably higher rate than</p> <p>8 Black Democratic voters within the same counties at</p> <p>9 issue"?</p> <p>10 A. That's correct.</p> <p>11 Q. So my question is: Did you conduct a</p> <p>12 specific test to assess that allegation?</p> <p>13 A. No.</p> <p>14 Q. And did you conduct any test to assess</p> <p>15 plaintiff's allegation also acknowledged on that page</p> <p>16 that I can't seem to find -- let me ask it another</p> <p>17 way.</p> <p>18 Did you conduct any tests to assess</p> <p>19 plaintiff's allegation in their Amended Complaint</p> <p>20 that white unaffiliated voters were included in the</p> <p>21 second congressional district at a notably higher</p>	<p style="text-align: right;">Page 191</p> <p>1 Q. Do you know based on speaking with members</p> <p>2 of the general assembly that they made changes</p> <p>3 between the 2011 and 2021 congressional maps to,</p> <p>4 quote, improve compactness, end quote?</p> <p>5 A. I know that in district -- in</p> <p>6 conversations with counsel that district 3 in</p> <p>7 particular was redrawn -- at least influenced by a</p> <p>8 desire for it to be redrawn to undo the upside down</p> <p>9 horseshoe.</p> <p>10 Q. Upside down --</p> <p>11 A. The upside down horseshoe. It's kind of</p> <p>12 shaped like an upside down U. The evidence from our</p> <p>13 compactness analysis shows that that was done and</p> <p>14 made a significant difference in the compactness of</p> <p>15 that district.</p> <p>16 Q. But do you know based on speaking with</p> <p>17 members of the general assembly that they made</p> <p>18 changes between the 2011 and 2020 congressional map</p> <p>19 including within district 3 to, quote, improve</p> <p>20 compactness, end quote?</p> <p>21 MS. BROYLES: Object to the form.</p>
<p style="text-align: right;">Page 190</p> <p>1 rate than Black unaffiliated voters within the same</p> <p>2 county?</p> <p>3 A. I did not.</p> <p>4 Q. Okay. I want to talk about compactness</p> <p>5 for a little bit.</p> <p>6 A. Sure.</p> <p>7 Q. You assert in paragraphs 83 and 89, I</p> <p>8 think, a similar assertion that in order to make</p> <p>9 other redistricting objectives such as improving</p> <p>10 compactness and reducing geographic splits more moves</p> <p>11 of the population beyond the bare minimum are</p> <p>12 required in Arkansas.</p> <p>13 Is that fair to say?</p> <p>14 A. Yes.</p> <p>15 Q. Okay. Did you speak with members of the</p> <p>16 Arkansas General Assembly to make that finding?</p> <p>17 A. No.</p> <p>18 Q. Did you review any documents you</p> <p>19 understood were before the Arkansas General Assembly</p> <p>20 during the map drawing process to make this finding?</p> <p>21 A. No.</p>	<p style="text-align: right;">Page 192</p> <p>1 A. No. I only have the -- all the evidence</p> <p>2 of the difference between the plans.</p> <p>3 BY MS. ADEN:</p> <p>4 Q. Okay. And do you know based on speaking</p> <p>5 with members of the general assembly that they made</p> <p>6 changes between the 2011 and 2020 congressional map</p> <p>7 to, quote, reduce geographic splits, end quote?</p> <p>8 MS. BROYLES: Object to the form.</p> <p>9 A. I did not speak with anyone from the</p> <p>10 general assembly. My opinion on the reduction of</p> <p>11 splits is on the evidence of my analysis.</p> <p>12 BY MS. ADEN:</p> <p>13 Q. And do you know based on speaking with</p> <p>14 members of the general assembly that those factors</p> <p>15 improving compactness and reducing geographic splits</p> <p>16 explain why more than the, quote, bare minimum, end</p> <p>17 quote, population was moved for the 2021</p> <p>18 congressional map?</p> <p>19 MS. BROYLES: Object to the form.</p> <p>20 A. The -- not in speaking with members of the</p> <p>21 general assembly, but in hearing deliberations about</p>

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<p style="text-align: right;">Page 193</p> <p>1 plans and the desire to reduce the number of county</p> <p>2 splits that the county -- the desire to reduce the</p> <p>3 number of county splits was a driving factor.</p> <p>4 BY MS. ADEN:</p> <p>5 Q. But even if that's true, you don't know</p> <p>6 how that driving factor or that -- whether that was</p> <p>7 -- how that factor related to other considerations</p> <p>8 that the general assembly may or may not have based</p> <p>9 upon speaking to members of the general assembly?</p> <p>10 A. I do not know that. It's -- I heard that</p> <p>11 information, you know, as part of the reportings we</p> <p>12 discussed earlier just being stated repetitively we</p> <p>13 need to reduce county splits, we need to reduce</p> <p>14 county splits.</p> <p>15 Q. And so you don't know, for example, that</p> <p>16 even if it was a driving factor to not -- to reduce</p> <p>17 county splits whether members of the general assembly</p> <p>18 were -- could have determined that it was a priority</p> <p>19 for them to -- strike that.</p> <p>20 In your view if there can be an</p> <p>21 improvement to compactness, how do you measure that?</p>	<p style="text-align: right;">Page 195</p> <p>1 And by some measures some districts will</p> <p>2 be better and some will be worse. So I don't have a</p> <p>3 better measure than to present all the information</p> <p>4 and summarize it with averages, for example, to say</p> <p>5 this district contributes this much to the overall</p> <p>6 changes in the plan and changes in compactness.</p> <p>7 Q. Do you acknowledge that there are other</p> <p>8 statistical measures of compactness that you do not</p> <p>9 report?</p> <p>10 MS. BROYLES: Object to the form.</p> <p>11 A. There's dozens of them. The ones that I</p> <p>12 report here, Polsby-Popper, Reock, convex hull, these</p> <p>13 are the measures that are most frequently used by the</p> <p>14 redistricting community.</p> <p>15 And in terms of assessing, you know, with</p> <p>16 the purpose of assessing, you know, is a district</p> <p>17 more or less compact, these are universally regarded</p> <p>18 as the statistics to use in making that assessment.</p> <p>19 And I have not seen other less known</p> <p>20 compactness measures or other metrics of compactness</p> <p>21 come into play that provide any information that's</p>
<p style="text-align: right;">Page 194</p> <p>1 A. I'm smiling. There's mathematicians much</p> <p>2 smarter than myself who have created a range of</p> <p>3 metrics and have thought about this from a geometric</p> <p>4 mathematical approach from each way that it could</p> <p>5 possibly be thought of.</p> <p>6 And the professional demographic community</p> <p>7 who work on these cases don't have an agreement that</p> <p>8 there's one prevailing best method. I don't know of</p> <p>9 a way to improve on any of these methods. So our</p> <p>10 standard within BGD is to include information -- all</p> <p>11 of the information.</p> <p>12 And these aren't made-up metrics. These</p> <p>13 are the actual numbers for these four measures:</p> <p>14 Polsby-Popper, P-O-L-S-B-Y, P-O-P-P-E-R, Reock,</p> <p>15 R-E-O-C-K, convex hull, and Schwartzberg, B-E-R-G.</p> <p>16 They each kind of measure compactness a</p> <p>17 different way. And so what we strive to do is to</p> <p>18 provide all of the scores for all of the districts by</p> <p>19 all of these measures to give a thorough and</p> <p>20 comprehensive assessment of what compactness looks</p> <p>21 like.</p>	<p style="text-align: right;">Page 196</p> <p>1 not provided by these measures.</p> <p>2 BY MS. ADEN:</p> <p>3 Q. Do you recall in your Milligan testimony</p> <p>4 at trial that you agreed with the testimony of Dr.</p> <p>5 Moon Duchin that the Polsby-Popper and Reock scores</p> <p>6 are the most common statistical measures of</p> <p>7 compactness?</p> <p>8 A. Yes. Yes, I recall that.</p> <p>9 Q. All the statistical measures, if I'm</p> <p>10 understanding correctly, they measure different</p> <p>11 things?</p> <p>12 A. They do, yes.</p> <p>13 Q. And when you talked about summarizing the</p> <p>14 findings, are you summarizing the totals of each</p> <p>15 score, so all of the Reock scores for a particular</p> <p>16 district, or are you adding up the numbers across</p> <p>17 different measures and then providing some average?</p> <p>18 Which, if any, of those methods are you doing?</p> <p>19 A. Yes, for sure. So can I please refer you</p> <p>20 to page 40 --</p> <p>21 Q. Yes.</p>

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<p style="text-align: right;">Page 197</p> <p>1 A. -- Table V.A.1?</p> <p>2 Q. Yes.</p> <p>3 A. And this table is replicated for other</p> <p>4 plans, but I'm going to use this as a consistent</p> <p>5 example.</p> <p>6 What's interesting about these -- the</p> <p>7 first three measures, Polsby-Popper, Reock, and</p> <p>8 convex hull, is that the range of the values for</p> <p>9 those three metrics go from zero to one. But they're</p> <p>10 still mathematically different from each other.</p> <p>11 So in statistics what we would say is that</p> <p>12 the distribution of values within Polsby-Popper, even</p> <p>13 though theoretically the guardrails are zero and one,</p> <p>14 the values that you would see nationwide would be for</p> <p>15 -- and I'm making this up -- would be, say, .2 to .9</p> <p>16 for Polsby-Popper and it might .3 to .7 for Reock and</p> <p>17 different yet for convex hull.</p> <p>18 Since the statistical distributions of</p> <p>19 those values we know to be different because we've</p> <p>20 run that analysis, it's inappropriate to combine, for</p> <p>21 example, in a summary statistic like the Polsby</p>	<p style="text-align: right;">Page 199</p> <p>1 enables the court to look and say what is the average</p> <p>2 number for the entire plan and then is there any</p> <p>3 district that's really disproportionately driving</p> <p>4 that; that is, is it making an unfair comparison?</p> <p>5 And our analysis and part of the benefit</p> <p>6 of presenting the data this way is that we can see,</p> <p>7 for example, that district 3 with the huge</p> <p>8 improvements that they had in its very high overall</p> <p>9 compactness is driving the overall improvement of the</p> <p>10 plan.</p> <p>11 And you would not know that unless you</p> <p>12 presented the data thoroughly this way and saw how it</p> <p>13 is contributing to the overall quality of the plan.</p> <p>14 Q. But compactness can be impacted by the</p> <p>15 geographic realities of a particular area?</p> <p>16 A. It's an excellent point. One of the</p> <p>17 measures here is the Polsby-Popper measure. It's</p> <p>18 influenced by the length of the boundary.</p> <p>19 So if you look in district 1 in all of</p> <p>20 these, it doesn't matter. It's, you know, 2011,</p> <p>21 2021, any plan where district 1 is on the Mississippi</p>
<p style="text-align: right;">Page 198</p> <p>1 number with the Reock number with the convex hull</p> <p>2 number.</p> <p>3 The Schwartzberg number works differently.</p> <p>4 That works from a scale of infinity down to one. So</p> <p>5 it's always tricky making these tables because people</p> <p>6 look for the bigger numbers being better. In</p> <p>7 Schwartzberg it's the opposite.</p> <p>8 But what we do and I think is a best</p> <p>9 practice is instead of just trying to summarize all</p> <p>10 of the compactness in one number and say well that's</p> <p>11 the number is we provide all the metrics and then we</p> <p>12 provide the data for each one of the individual</p> <p>13 districts.</p> <p>14 And so you can see how they contribute to</p> <p>15 an average of those values within each measure. So</p> <p>16 in a state such as Arkansas you have four districts.</p> <p>17 There could be, you know, one district that would</p> <p>18 have really great compactness and the other three</p> <p>19 might have terrible compactness or maybe they're all</p> <p>20 good.</p> <p>21 So what this type of analysis does is it</p>	<p style="text-align: right;">Page 200</p> <p>1 River, the Polsby-Popper is going to have a terrible</p> <p>2 score because you have all of these wiggles.</p> <p>3 It's not indicative of a poor draw. It's</p> <p>4 just the reality of the geography. But that is</p> <p>5 exactly why we try to put all of this out here so you</p> <p>6 can tease that information out with these different</p> <p>7 measures.</p> <p>8 Q. Do compactness measures -- can they also</p> <p>9 be a function of --</p> <p>10 (Whereupon, Madam Reporter asked for</p> <p>11 clarification from Counsel.)</p> <p>12 BY MS. ADEN:</p> <p>13 Q. Can compactness measures be a function of</p> <p>14 concentrations of populations or are we only talking</p> <p>15 about geography and the shapes of the outer</p> <p>16 boundaries of the district?</p> <p>17 A. Good question. For the purpose of these</p> <p>18 cases all I have seen that has withstood the rigor of</p> <p>19 the courts is the geographic compactness.</p> <p>20 I have heard of people playing around, and</p> <p>21 I don't mean that in a disparaging way. There's very</p>

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<p style="text-align: right;">Page 201</p> <p>1 smart people who are working to develop other</p> <p>2 measures of compactness using -- you know, taking</p> <p>3 things like the Mississippi River out of the</p> <p>4 equation, like to improve those measures and to use</p> <p>5 population, for example.</p> <p>6 And I think that's exciting and great and</p> <p>7 I'm looking forward to seeing where that goes, but I</p> <p>8 don't see that really in place in these cases right</p> <p>9 now.</p> <p>10 Q. Is the Schwartzberg method one that is</p> <p>11 widely used in your view?</p> <p>12 A. It's, you know, closely tied. It's</p> <p>13 basically an inverse of Popper. So they're very</p> <p>14 closely related. In fact, you'll have identical</p> <p>15 rankings from them.</p> <p>16 It's just one more piece of information</p> <p>17 that -- you know, it's somewhat duplicative, but it</p> <p>18 is one extra measure and it was one of the original</p> <p>19 compactness measures that was ever developed.</p> <p>20 So for people who -- you know, a judge or</p> <p>21 the community is interested or knowledgeable about</p>	<p style="text-align: right;">Page 203</p> <p>1 A. Sure.</p> <p>2 Q. And I want to start with the Polsby-Popper</p> <p>3 column on the far left.</p> <p>4 A. Yes.</p> <p>5 Q. Is it fair to say that the lowest --</p> <p>6 getting close to one is a good thing -- if the lowest</p> <p>7 is .12 the highest of the scores among the four</p> <p>8 districts is .43?</p> <p>9 A. Yes.</p> <p>10 Q. Okay. Do you know if a score of .12 is</p> <p>11 common?</p> <p>12 MS. BROYLES: Object to the form.</p> <p>13 A. So I have run a -- I have a statistical</p> <p>14 analysis that documents every one of the 435</p> <p>15 districts by each one of these measures. I have the</p> <p>16 number that says what is the distribution, knowing</p> <p>17 that all states have different reasons and features,</p> <p>18 right?</p> <p>19 So I can tell you exactly where that ranks</p> <p>20 on the list. We have that. I don't think anybody</p> <p>21 else does, but it would be on the very low end of the</p>
<p style="text-align: right;">Page 202</p> <p>1 it, we provide that to make sure they know what it</p> <p>2 is.</p> <p>3 Q. But it's not, according to your testimony,</p> <p>4 even a Milligan; that is, one of the commonly used</p> <p>5 methods now. That would be Polsby-Popper and Reock?</p> <p>6 A. The Polsby-Popper and Reock are the most</p> <p>7 commonly used. But, again, these other measures,</p> <p>8 some have historic significance and some present the</p> <p>9 information --</p> <p>10 (Whereupon, Madam Reporter asked for</p> <p>11 clarification from the witness.)</p> <p>12 A. They have historic significance and</p> <p>13 Schwartzberg was an early one. Convex hull is just a</p> <p>14 different kind of math. So even though it's not the</p> <p>15 prevailing methodology, it's one that is very</p> <p>16 frequently used and provides additional information</p> <p>17 to understand the compactness.</p> <p>18 BY MS. ADEN:</p> <p>19 Q. Can we look at your Table V.B.1 on page 41</p> <p>20 just to understand the differences between the</p> <p>21 compactness measures a little bit more?</p>	<p style="text-align: right;">Page 204</p> <p>1 scale. It has company, but it's quite low.</p> <p>2 BY MS. ADEN:</p> <p>3 Q. Has any court accepted that national</p> <p>4 ranking of compactness scores that you're aware of?</p> <p>5 A. They did after the 2011 redistricting.</p> <p>6 There was one group of academics who published a</p> <p>7 paper on it. We are in the process of publishing our</p> <p>8 findings and results from that.</p> <p>9 Q. But has a court accepted that nationwide</p> <p>10 analysis of nationwide compactness scores?</p> <p>11 A. Previews with the 2011 analysis of that --</p> <p>12 and I cannot give you an example of a case, but I can</p> <p>13 tell you that a group of academics used that</p> <p>14 information and that was used in a redistricting</p> <p>15 environment. Where, when, or how, I can't tell you.</p> <p>16 Q. Okay. Do you know how significant of a</p> <p>17 difference a compactness measure is of .7 to .43?</p> <p>18 A. I would have to refer to my table to be</p> <p>19 able to -- I would want to answer that in a</p> <p>20 statistically meaningfully and significant way.</p> <p>21 Without having the statistical context,</p>

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<p style="text-align: right;">Page 205</p> <p>1 I'm reluctant to answer and just say, well, it's some</p> <p>2 or more or less. But I am able to answer that</p> <p>3 question mathematically with precision.</p> <p>4 Q. And in terms of its some or more or less,</p> <p>5 those are all in relation to other scores.</p> <p>6 Is that fair to say?</p> <p>7 A. Yes. If I was talking about it</p> <p>8 conversationally, it would be. But I would prefer to</p> <p>9 speak to it statistically with -- because that gives</p> <p>10 us precision.</p> <p>11 Q. Let's look at Reock very quickly.</p> <p>12 Similarly, there is -- the lowest Reock score in the</p> <p>13 2021 map in a congressional district is .34 and the</p> <p>14 highest is .49.</p> <p>15 Is that fair to say?</p> <p>16 A. That's correct.</p> <p>17 Q. And so the fact that the Reock in district</p> <p>18 1 in the 2011 map went from .37 to higher compactness</p> <p>19 measure -- that's on page 40 -- that that went from</p> <p>20 .37 to .34, are you providing any opinion, one way or</p> <p>21 the other, whether that differential is significant</p>	<p style="text-align: right;">Page 207</p> <p>1 something -- by a number of factors that are not</p> <p>2 reflected in these numbers.</p> <p>3 Is that fair to say?</p> <p>4 A. Each one of them has features that can</p> <p>5 drive them to being higher or lower for sure.</p> <p>6 Q. Did you draw districts for Congress in</p> <p>7 Illinois and Texas following the 2020 census?</p> <p>8 A. I drew -- I was retained by the</p> <p>9 legislature in the state of Texas to draw their</p> <p>10 legislative districts. I did not draw their senate</p> <p>11 congressional districts.</p> <p>12 I did draft work for someone named Michael</p> <p>13 Kasper, K-A-S-P-E-R, on behalf of the Democratic</p> <p>14 Party in McConchie V. Illinois. I did not draw plans</p> <p>15 that were considered by the legislature and I did not</p> <p>16 present any plans that were litigated.</p> <p>17 Q. In Texas or Illinois?</p> <p>18 A. The plan that I drew in Texas has been</p> <p>19 enthusiastically litigated. The one in Illinois was</p> <p>20 not. That was more informational.</p> <p>21 Q. Well, you referenced the McConchie. That</p>
<p style="text-align: right;">Page 206</p> <p>1 or not in the context of this litigation?</p> <p>2 A. I'm reluctant to say it's significant</p> <p>3 because that ascribes statistical meanings to it.</p> <p>4 What I can tell you tying back to my earlier</p> <p>5 testimony is if you look -- this is the exact same</p> <p>6 plan.</p> <p>7 Look at the Polsby-Popper numbers. It's</p> <p>8 .12 to .43., right? So it's a .31 difference between</p> <p>9 the smallest and largest. Okay? Then if you look at</p> <p>10 Reock the difference is .34 to .49. There's half as</p> <p>11 much difference from top to bottom. It's the exact</p> <p>12 same plan.</p> <p>13 So that's how -- just by looking at one</p> <p>14 different measure to another different measure, you</p> <p>15 -- like by one you can say, well, .15 is a lot, but</p> <p>16 that's only within one of these measures. .15 in</p> <p>17 Polsby-Popper would not be very much because the</p> <p>18 range of values there is twice as much as it is in</p> <p>19 Reock.</p> <p>20 Q. And it also can be the case that the</p> <p>21 difference between the ranges can be explained by</p>	<p style="text-align: right;">Page 208</p> <p>1 is litigation that has happened around the Illinois</p> <p>2 maps, congressional and state legislature?</p> <p>3 A. That's right, yes.</p> <p>4 Q. But you're saying -- did you draw specific</p> <p>5 districts that were not subject to challenge in that</p> <p>6 litigation that you're aware of?</p> <p>7 Is that what you're saying?</p> <p>8 A. Yeah. I didn't draw any of the districts</p> <p>9 that were subject to litigation. I provided analytic</p> <p>10 support and more understanding. Because of the delay</p> <p>11 of the census data, because of COVID and a variety of</p> <p>12 factors, there were some states that were looking at</p> <p>13 the American Community Survey data and the census</p> <p>14 data and looking for ways that they could, you know,</p> <p>15 accelerate their redistricting process by using other</p> <p>16 information.</p> <p>17 So my advice and support to them was more</p> <p>18 data and analytic support than drawing draft plans</p> <p>19 for them.</p> <p>20 Q. Do you have any reason to dispute that at</p> <p>21 least with respect to the Texas districts that were</p>



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<p style="text-align: right;">Page 209</p> <p>1 enacted and that are subject to being challenged that</p> <p>2 they have lower Polsby-Popper and Reock scores than</p> <p>3 in the Arkansas's 2021 enacted plan?</p> <p>4 MS. BROYLES: Object to the form.</p> <p>5 A. There's hundreds of them and I can't</p> <p>6 remember. Honestly, I don't recall.</p> <p>7 BY MS. ADEN:</p> <p>8 Q. Did you provide any analysis of the extent</p> <p>9 to which county or city or VTD boundaries informs the</p> <p>10 compactness of a given district?</p> <p>11 MS. BROYLES: Object to the form. Do you</p> <p>12 mean back in the Arkansas case?</p> <p>13 MS. ADEN: In the Arkansas case here.</p> <p>14 A. So I did, and so let me address that.</p> <p>15 BY MS. ADEN:</p> <p>16 Q. Okay.</p> <p>17 A. Can we refer to one of my BGD plans?</p> <p>18 Q. They start around page 75, if that helps.</p> <p>19 A. 75?</p> <p>20 Q. Um-hum.</p> <p>21 A. Okay. So if we look at page 78 and we</p>	<p style="text-align: right;">Page 211</p> <p>1 what the impact of taking Cleburne County out and</p> <p>2 then just reducing the number of precincts being</p> <p>3 taken out of the southeast corner of Pulaski is.</p> <p>4 So we can see in the second row of Table</p> <p>5 91 that the enacted plan's compactness for</p> <p>6 Polsby-Popper was .27 and the BGD one plan that we</p> <p>7 just discussed had inferior compactness .2 and</p> <p>8 across-the-board.</p> <p>9 And each one of the different metrics, the</p> <p>10 inclusion of more of those precincts in the corner of</p> <p>11 Pulaski and exclusion of Cleburne County resulted in</p> <p>12 a poorer compactness score than the enacted plan did</p> <p>13 for D2.</p> <p>14 Q. So you're saying that you in this report</p> <p>15 did a systematic analysis of how each county change</p> <p>16 or VTD change or city change impacted the compactness</p> <p>17 scores in the 2021 enacted plan?</p> <p>18 A. We did a very careful examination of the</p> <p>19 2021 plan as it was enacted and then we did a very</p> <p>20 careful examination of the BGD1 and 2 plans and what</p> <p>21 the impact of those two changes were.</p>
<p style="text-align: right;">Page 210</p> <p>1 compare that with page 77, what I've done is created</p> <p>2 a shading to show the geographies that were changed</p> <p>3 as part of that draft plan, including the movement of</p> <p>4 those specific precincts. You can see them labeled</p> <p>5 kind of in the lower central part of each one of</p> <p>6 those maps.</p> <p>7 And so after we drew this draft plan,</p> <p>8 which is, you know -- it's one of the options, the</p> <p>9 first analysis that we do is we go and create a</p> <p>10 calculation of like what was the compactness of the</p> <p>11 district compared to the enacted plan.</p> <p>12 And so what we found is in this particular</p> <p>13 draft plan is that because you exclude Cleburne</p> <p>14 County to the north it creates -- I'm drawing a</p> <p>15 picture of my hand -- it creates basically a</p> <p>16 geographic dip in the top of the district instead of</p> <p>17 it being flat.</p> <p>18 And then the compactness score reflects</p> <p>19 the excision or export of seven or eight precincts to</p> <p>20 the southeast corner of the county.</p> <p>21 If we look at page 82, then we can see</p>	<p style="text-align: right;">Page 212</p> <p>1 We didn't do an exhaustive analysis of,</p> <p>2 you know, the inclusion or exclusion of every piece</p> <p>3 of geography. But this generally tells you what the</p> <p>4 difference between 2021 enacted and the BGD1 plan --</p> <p>5 that's -- you know, what are the gains or losses of</p> <p>6 compactness by including or excluding Cleburne</p> <p>7 County.</p> <p>8 Q. So you did a general analysis but not a</p> <p>9 specific analysis of how each change impacted</p> <p>10 compactness?</p> <p>11 A. Yeah. We did -- just to be clear, we did</p> <p>12 a very specific analysis for these two plans. But we</p> <p>13 did not run an analysis of, for example, of like,</p> <p>14 well, if you add this precinct or you take this</p> <p>15 precinct out -- we didn't do an analysis of all the</p> <p>16 permutations of including/excluding.</p> <p>17 You know, when you move an entire county,</p> <p>18 those are the types of things that move the needle.</p> <p>19 And in this case, you know, the inclusion of Cleburne</p> <p>20 County or the exclusion makes a big difference in the</p> <p>21 compactness of D2.</p>



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<p style="text-align: right;">Page 213</p> <p>1 Q. So turning to political subdivisions in 2 more detail, did you make an assessment of whether 3 there is an improvement to split the political 4 subdivisions in the 2021 enacted map? Is that -- 5 strike that.</p> <p>6 What is an improvement of splits to 7 political subdivisions from your perspective?</p> <p>8 A. Can you direct me to a page?</p> <p>9 Q. So you talk about this a little bit around 10 paragraph 96, paragraph 91.</p> <p>11 A. Okay. Under geographic splits?</p> <p>12 Q. Um-hum.</p> <p>13 A. Okay. Can you please restate the 14 question?</p> <p>15 Q. What is an improvement to splits of 16 political subdivisions, from your perspective?</p> <p>17 A. Okay. So every state has multiple layers 18 of geography. Some are what we call political 19 geography. Some are statistical geography. 20 Statistical geography is census geography like blocks 21 and block group. Political geography are units of</p>	<p style="text-align: right;">Page 215</p> <p>1 improvement to splits of political subdivisions is 2 how the Arkansas General Assembly measures splits?</p> <p>3 A. I'm only aware of two ways of measuring 4 splits. So my assumption is that they look at a 5 number -- one or both of the same metrics that I'm 6 looking at. It's simple.</p> <p>7 Q. The split of the entire unit or a piece 8 within the unit? Is that the two ways?</p> <p>9 A. Yeah, that's right. So how many pieces of 10 geography are split and then into how many pieces are 11 those geographies split into. I don't know if or how 12 much they care about the pieces as opposed to whether 13 a unit was split or not.</p> <p>14 Q. So an example could be that Pulaski County 15 -- that one county was split but there were three 16 areas of the county that went into different 17 districts? Is that the distinction you're drawing?</p> <p>18 A. Yes. Absolutely, yep.</p> <p>19 Q. And did you find that the repair of county 20 splits generally improved in the 2021 congressional 21 map as compared to the 2011 congressional map?</p>
<p style="text-align: right;">Page 214</p> <p>1 geography for which there are -- 2 (Whereupon, Madam Reporter asked for 3 clarification from the witness.)</p> <p>4 A. Political geography has a form of 5 administration or government. And so this is where 6 in redistricting there are trade-offs because you can 7 consolidate or unsplit a piece of geography or you 8 can split a piece of geography and it's going to have 9 impacts in many other places.</p> <p>10 So our assessment of the geographic splits 11 begins with and focuses on the county splits because 12 that's what we heard about most, but we also heard 13 about place splits and school district splits and 14 court district splits as well in the complaint.</p> <p>15 So we tried to analyze all of those to say 16 what was the overall impact. A benefit is, you know, 17 measured in -- the simplest form of a benefit that is 18 measured is, you know, how many units of geography 19 are split and then secondary to that is into how many 20 pieces were those geographies split into.</p> <p>21 Q. Do you know if your assessment of an</p>	<p style="text-align: right;">Page 216</p> <p>1 A. Yes. So in terms of just the simple 2 number of counties that were split, the -- you know, 3 they had five split counties before. And they 4 brought that down to two. One of those splitting a 5 county into two pieces --</p> <p>6 Q. Is that Sebastian?</p> <p>7 A. That's Sebastian, yes, and then there's 8 Pulaski that got split into three.</p> <p>9 Q. And did you find that the repair of splits 10 of places which I believe you are referencing to be 11 cities and towns --</p> <p>12 A. Yes.</p> <p>13 Q. -- that they improved in the 2021 14 congressional plan as compared to the 2011 15 congressional plan?</p> <p>16 A. At the place, level of geography, they did 17 not. There was one more split -- numerically one 18 more split. There wasn't a split of multiple pieces 19 of geography, but there was one more place that got 20 split than was split under the 2011 plan.</p> <p>21 Q. Okay. And did you find that the repair of</p>

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<p style="text-align: right;">Page 217</p> <p>1 splits of school districts improved in the 2021</p> <p>2 congressional map as compared to the 2011</p> <p>3 congressional map?</p> <p>4 A. It did significantly. The reduction I</p> <p>5 think was from 49 to 41. So there were eight</p> <p>6 districts that were -- let me be careful with my</p> <p>7 words.</p> <p>8 There were some districts that were newly</p> <p>9 split, there were some districts that remained split,</p> <p>10 and then there were some that were unsplit.</p> <p>11 So the 49 to 41 doesn't mean they just</p> <p>12 consolidated eight districts. That doesn't mean they</p> <p>13 just fixed eight. They fixed more than eight and</p> <p>14 then they split some other ones in there.</p> <p>15 Q. And did you find that the repair of splits</p> <p>16 of judicial circuits improved in the 2021</p> <p>17 congressional map as compared to the 2011</p> <p>18 congressional map?</p> <p>19 A. The analysis of the circuits was very late</p> <p>20 in my report. I did not do a numeric inventory of</p> <p>21 how many judicial circuits or subjudicial circuits</p>	<p style="text-align: right;">Page 219</p> <p>1 geography.</p> <p>2 So if you use one, you're going to split</p> <p>3 another. If you use one, you're going to split the</p> <p>4 other one.</p> <p>5 Q. But this is a statewide analysis on this</p> <p>6 page; is that correct?</p> <p>7 A. It is, but it's indicative. You know, for</p> <p>8 example, if you look at an intersection of school</p> <p>9 districts and counties, you know, in the complaint</p> <p>10 they say, well, there's four school districts that</p> <p>11 are split by the 2021 -- that's absolutely true.</p> <p>12 Two of those districts, one is North</p> <p>13 Little Rock -- I can't remember the name of the</p> <p>14 other, but there's two of those for --</p> <p>15 MS. BROYLES: Jacksonville.</p> <p>16 A. Jacksonville. We're already split by the</p> <p>17 2011 plan. And those -- for whatever reason those</p> <p>18 two school districts nudge out of Pulaski County.</p> <p>19 Like they just don't conform to the county.</p> <p>20 So by conforming to a county boundary, by</p> <p>21 definition you're going to split a school district.</p>
<p style="text-align: right;">Page 218</p> <p>1 were split.</p> <p>2 My analysis was limited to an observation</p> <p>3 back -- the existing 2011 plan split circuit --</p> <p>4 judicial circuits all over the state and they</p> <p>5 remained split all over the state in the current</p> <p>6 plan.</p> <p>7 Q. Even though you acknowledge that there</p> <p>8 were some newly split judicial circuits in the 2021</p> <p>9 plan?</p> <p>10 A. Absolutely, for sure.</p> <p>11 MS. BROYLES: You're talking about state</p> <p>12 judicial circuits?</p> <p>13 MS. ADEN: Yes.</p> <p>14 A. So if you refer to page 49.</p> <p>15 BY MS. ADEN:</p> <p>16 Q. Yes.</p> <p>17 A. This is why we do an analysis called</p> <p>18 coincident geography. And this shows that there is</p> <p>19 very little overlap of places, school districts. You</p> <p>20 know, VTDs conform to county boundaries, but there is</p> <p>21 no alignment between all these different layers of</p>	<p style="text-align: right;">Page 220</p> <p>1 If you align the plan with a school district, by</p> <p>2 definition you're going to split a county. So it's</p> <p>3 very hard to avoid some of these splits. One of them</p> <p>4 has to go.</p> <p>5 BY MS. ADEN:</p> <p>6 Q. But do you -- is it your position that you</p> <p>7 need evidence of coincident geographic splits in</p> <p>8 order to show some harm?</p> <p>9 MS. BROYLES: Object to the form.</p> <p>10 A. The coincident geography analysis is not</p> <p>11 to illustrate or purport or defend that harm was</p> <p>12 done.</p> <p>13 It's simply to illustrate that if you're</p> <p>14 doing a thorough job analyzing the splits of</p> <p>15 different levels of geography to help the reader</p> <p>16 understand that by definition if you conform to place</p> <p>17 boundaries you're going to crack school districts.</p> <p>18 If you conform to school districts, you're</p> <p>19 going to split VTDs. There's no way of aligning to</p> <p>20 any one layer of political geography without, by</p> <p>21 definition, splitting a bunch of other kinds of</p>

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<p style="text-align: right;">Page 221</p> <p>1 geography.</p> <p>2 BY MS. ADEN:</p> <p>3 Q. So the decision to split Pulaski County</p> <p>4 is, in your view, inevitably going to lead to a split</p> <p>5 of subpolitical boundaries within that county? Is</p> <p>6 that the point of that?</p> <p>7 A. It is absolutely because they're using</p> <p>8 VTDs, and as you can see, VTDs don't align to school</p> <p>9 districts and they don't align to places. So you</p> <p>10 have to choose which one you're going to draw to.</p> <p>11 And if you split a county and you're using</p> <p>12 VTDs, by definition you're going to start cracking --</p> <p>13 by definition you will start cracking places or</p> <p>14 school districts.</p> <p>15 Q. And is cracking, splitting -- and you're</p> <p>16 equating the two as the same in that explanation?</p> <p>17 A. Yeah. I'm not using it in the</p> <p>18 redistricting sense of cracking. I'm only using it</p> <p>19 to refer to the division of one piece of geography</p> <p>20 from another one.</p> <p>21 Q. In terms of political subdivisions, you</p>	<p style="text-align: right;">Page 223</p> <p>1 proposed by Nelda Speaks.</p> <p>2 Q. But you do not know based upon the</p> <p>3 evidence that you have available, do you know one</p> <p>4 reason or another why the plan proposed by</p> <p>5 Representative Speaks that you modeled BGD2 after,</p> <p>6 why that did not pass, one way or the other?</p> <p>7 A. No idea.</p> <p>8 Q. Okay. We've talked about core retention</p> <p>9 throughout the day. Do you know if Arkansas's</p> <p>10 General Assembly considers core retention to be a</p> <p>11 traditional redistricting principle?</p> <p>12 A. I don't know.</p> <p>13 Q. And you mentioned the differential core</p> <p>14 retention analysis that you report around paragraph</p> <p>15 118 in your report?</p> <p>16 A. Yes.</p> <p>17 Q. It's not your position that the</p> <p>18 differential core retention method that you use is</p> <p>19 the only way to measure core retention?</p> <p>20 A. The traditional measure of core retention</p> <p>21 is measuring the total population. We extend that</p>
<p style="text-align: right;">Page 222</p> <p>1 report in paragraph 96 that it's a principle to keep</p> <p>2 them whole but that splits are unavoidable.</p> <p>3 A. Yes.</p> <p>4 Q. Do you know based on speaking with members</p> <p>5 of the general assembly that splitting political</p> <p>6 subdivisions were, quote, avoidable, end quote, in</p> <p>7 making the 2021 congressional map?</p> <p>8 A. No.</p> <p>9 MS. BROYLES: Object to the form.</p> <p>10 BY MS. ADEN:</p> <p>11 Q. Did you attempt to draw your own</p> <p>12 congressional map that avoided splitting political</p> <p>13 subdivisions?</p> <p>14 A. I did.</p> <p>15 Q. Did you report that map in your written</p> <p>16 testimony?</p> <p>17 A. I do.</p> <p>18 Q. Which map is that?</p> <p>19 A. This is the BGD2 plan on page 79. So the</p> <p>20 map on page 79 is a whole county plan. It happens to</p> <p>21 be the same plan as one of the plans that was</p>	<p style="text-align: right;">Page 224</p> <p>1 with standard demographic techniques to measure other</p> <p>2 subpopulations.</p> <p>3 There's an infinite number of other ways</p> <p>4 that you could measure other populations using the</p> <p>5 same demographic technique.</p> <p>6 Q. So it's your position that there's one</p> <p>7 global way to measure core retention with respect to</p> <p>8 total population?</p> <p>9 A. Yes.</p> <p>10 Q. But that they are different ways of</p> <p>11 measuring whether, for example, a particular racial</p> <p>12 group is retained or not -- the core of a particular</p> <p>13 racial group is retained or not?</p> <p>14 A. The mathematics is the same. It's how</p> <p>15 many were there before and how many are in whatever</p> <p>16 pieces of geography are there now.</p> <p>17 And the same analysis can be done, for</p> <p>18 example, for measuring movements of votes: How many</p> <p>19 Democratic voters were there before? How many</p> <p>20 Democratic voters are in each district?</p> <p>21 So core retention is not limited to just</p>

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<p style="text-align: right;">Page 225</p> <p>1 analyzing populations or subpopulations.</p> <p>2 Q. Core retention could refer to geography as</p> <p>3 well, could it not?</p> <p>4 MS. BROYLES: Object to the form.</p> <p>5 A. Conceptually. That was also tried in</p> <p>6 Wisconsin and denied.</p> <p>7 BY MS. ADEN:</p> <p>8 Q. But you don't know whether any other court</p> <p>9 has accepted a different definition of core retention</p> <p>10 than what you have described?</p> <p>11 A. I know Wisconsin did not accept the</p> <p>12 geographic definition.</p> <p>13 Q. And you don't know -- well, let me ask</p> <p>14 this to make sure I'm clear.</p> <p>15 You cite throughout your report, in</p> <p>16 particular paragraph 28, that minimizing change is</p> <p>17 not a redistricting requirement in Arkansas.</p> <p>18 Is that an accurate representation of what</p> <p>19 you report?</p> <p>20 MS. BROYLES: Can you say that one more</p> <p>21 time? I'm sorry.</p>	<p style="text-align: right;">Page 227</p> <p>1 is not a least change district from the way that CD2</p> <p>2 was composed in the 2011 map.</p> <p>3 Is that fair to say?</p> <p>4 A. I agree, yes.</p> <p>5 MS. BROYLES: Object to the form.</p> <p>6 BY MS. ADEN:</p> <p>7 Q. So earlier today you talked about</p> <p>8 political performance, and I believe you conceded</p> <p>9 that it was not a traditional redistricting</p> <p>10 principle.</p> <p>11 Is that fair to say?</p> <p>12 A. I've not thought about political</p> <p>13 performance in the context of -- and I did not in</p> <p>14 this report as being a traditional redistricting</p> <p>15 principle.</p> <p>16 With the Alexander decision, saying that</p> <p>17 it is, we're in the middle of this case so I need to</p> <p>18 step back and reframe my thinking based on that</p> <p>19 decision. And I haven't had time to do that.</p> <p>20 Q. The Alexander decision, as far as you</p> <p>21 know, did that occur after Arkansas drew its 2021</p>
<p style="text-align: right;">Page 226</p> <p>1 BY MS. ADEN:</p> <p>2 Q. Paragraph 28 in your report is one of</p> <p>3 several places where you say that minimizing change</p> <p>4 is not a redistricting requirement in Arkansas?</p> <p>5 A. It cannot be.</p> <p>6 Q. And is that the same way of saying</p> <p>7 essentially that core retention is not a</p> <p>8 redistricting requirement in Arkansas?</p> <p>9 MS. BROYLES: Object to the form.</p> <p>10 A. It's -- yeah. It's the same thing, except</p> <p>11 it's the action. Like minimizing change is the verb</p> <p>12 and the core retention is the measurement of the</p> <p>13 action.</p> <p>14 BY MS. ADEN:</p> <p>15 Q. And you agree, for example, in paragraph</p> <p>16 38 of your report that the 2021 congressional map is</p> <p>17 not a least change map overall.</p> <p>18 Is that fair to say?</p> <p>19 A. It is not a least change map. It's very</p> <p>20 close, but not.</p> <p>21 Q. And you concede that CD2 in the 2021 map</p>	<p style="text-align: right;">Page 228</p> <p>1 congressional map?</p> <p>2 A. Yes.</p> <p>3 Q. So do you know whether at the time</p> <p>4 Arkansas drew its 2021 congressional map it</p> <p>5 considered political performance, however that is</p> <p>6 defined, as a traditional redistricting principle?</p> <p>7 MS. BROYLES: Object to the form.</p> <p>8 A. I don't know.</p> <p>9 BY MS. ADEN:</p> <p>10 Q. An do you know whether any staff member of</p> <p>11 the general assembly considered political performance</p> <p>12 in making the 2021 congressional map?</p> <p>13 MS. BROYLES: Object to the form.</p> <p>14 A. I do not know.</p> <p>15 BY MS. ADEN:</p> <p>16 Q. And do you know, one way or the other,</p> <p>17 what, if any, election results any member of the</p> <p>18 general assembly or their staff may or may not have</p> <p>19 used in drawing the 2021 congressional map?</p> <p>20 MS. BROYLES: Object to the form.</p> <p>21 A. I don't know.</p>

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<p style="text-align: right;">Page 229</p> <p>1 BY MS. ADEN:</p> <p>2 Q. On page 20 of your report -- I'm sorry --</p> <p>3 paragraph 20 on page 10 you say: "My conjecture" --</p> <p>4 A. Yes.</p> <p>5 Q. -- "is that the precincts that were</p> <p>6 exported from D2 during the redistricting cycle were</p> <p>7 further divided between D1 and D4 in order to</p> <p>8 minimize the absorption of all of the Democratic</p> <p>9 voters from D2 in any" -- "into any one other</p> <p>10 district."</p> <p>11 What do you mean by "conjecture"?</p> <p>12 A. So I didn't draw the map and I don't know</p> <p>13 what led to the decision to further subdivide that</p> <p>14 corner of Pulaski into two pieces.</p> <p>15 If the objective of the plan was to per</p> <p>16 the Amended Complaint, you know, dilute the voting</p> <p>17 strength of African American, Black voters, in</p> <p>18 district 2, then a map drawer, going back to my</p> <p>19 earlier testimony, would have only had to do two</p> <p>20 things: Include the couple of very heavily Black</p> <p>21 precincts that were adjacent to where they were</p>	<p style="text-align: right;">Page 231</p> <p>1 Q. Because that's pure conjecture?</p> <p>2 A. It's just complete conjecture. No idea.</p> <p>3 Q. Because you did not speak to any --</p> <p>4 (Whereupon, there was a disruption from</p> <p>5 the Zoom.)</p> <p>6 BY MS. ADEN:</p> <p>7 Q. So to close this out -- and maybe this is</p> <p>8 a good time for a five-minute --</p> <p>9 MS. BROYLES: Sure, yeah.</p> <p>10 BY MS. ADEN:</p> <p>11 Q. -- for that conjecture, it is not based on</p> <p>12 having spoken with any member of the general assembly</p> <p>13 as to why precincts were removed from D2?</p> <p>14 A. Or -- removed from D2 and then further</p> <p>15 subdivided into 1 and 4. I don't know either --</p> <p>16 nobody from the general assembly spoke with me about</p> <p>17 why either one of those things happened.</p> <p>18 And that's why I'm very careful to state</p> <p>19 factually that -- and just based on what I see, it's</p> <p>20 conjecture that I offer not based on any facts or</p> <p>21 inside knowledge.</p>
<p style="text-align: right;">Page 230</p> <p>1 already working and not included the two white</p> <p>2 precincts. That's one.</p> <p>3 And then when those voters were moved out</p> <p>4 of district 2, if that was the objective, it doesn't</p> <p>5 matter whether they go into one district or another</p> <p>6 district or two districts. If the objective is that</p> <p>7 they're gone from district 2, if that was the goal,</p> <p>8 then whatever happens to those voters after that</p> <p>9 shouldn't matter.</p> <p>10 So when I examine those precincts and look</p> <p>11 at the number of Democratic voters that were in that</p> <p>12 area I thought it worthy to provide an opinion -- and</p> <p>13 it is conjecture. I don't know for sure -- that the</p> <p>14 only reason I could think of that those voters would</p> <p>15 be further subdivided into two different districts</p> <p>16 once they were gone from district 2 is because maybe</p> <p>17 the Republican leadership of each one of those</p> <p>18 districts 1 and 4 said I don't want to take all of</p> <p>19 those Democratic voters.</p> <p>20 But I have no idea if that's what happened</p> <p>21 or not.</p>	<p style="text-align: right;">Page 232</p> <p>1 (A break was taken.)</p> <p>2 BY MS. ADEN:</p> <p>3 Q. So looking at -- we're back on the record.</p> <p>4 Looking at paragraph 26, did you also hypothesize</p> <p>5 that many of the most heavily Black counties would</p> <p>6 have been targeted to be split in order to assess</p> <p>7 whether Blacks in Arkansas were targeted for division</p> <p>8 to dilute their voting strength?</p> <p>9 A. I did this analysis to put myself in the</p> <p>10 position of the plaintiffs and say, What are the</p> <p>11 types of evidence? What other information can I come</p> <p>12 up with that would be indicative to me of invidious,</p> <p>13 I-N-V-I-D-I-O-U-S, line drawing?</p> <p>14 It wasn't to prove that there wasn't any</p> <p>15 racial motivation, but rather if I had done that</p> <p>16 analysis and I found that all of the most heaviest</p> <p>17 populated Black counties and heaviest populated Black</p> <p>18 cities and heaviest Black school districts, if those</p> <p>19 were split, that to me would have been an indication</p> <p>20 that there was a problem and that race was a motive.</p> <p>21 So at least for that one test that I did,</p>



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<p style="text-align: right;">Page 233</p> <p>1 I didn't find evidence of that using that one test.</p> <p>2 Q. And the one test is ranking the Black</p> <p>3 populations and counties, places --</p> <p>4 A. Yes.</p> <p>5 Q. -- judicial districts in order to document</p> <p>6 whether the highest -- the populations that are</p> <p>7 highest, as you've defined them, were the ones that</p> <p>8 were split or not?</p> <p>9 A. Yes.</p> <p>10 MS. BROYLES: Object to the form.</p> <p>11 BY MS. ADEN:</p> <p>12 Q. Yes is the answer? I'm sorry.</p> <p>13 A. Yes.</p> <p>14 Q. And specifically you were ranking these</p> <p>15 political boundaries -- these political entities,</p> <p>16 counties, places, judicial districts by the percent</p> <p>17 of any part Black within them?</p> <p>18 A. That's correct.</p> <p>19 Q. Okay. And on -- in paragraph 102 you make</p> <p>20 a specific finding that one very heavily Black</p> <p>21 county, Jefferson, is made whole while Pulaski</p>	<p style="text-align: right;">Page 235</p> <p>1 Q. And is splitting counties with more Black</p> <p>2 voters in them than the county split in the 2021</p> <p>3 congressional map the only way to harm Black voters?</p> <p>4 MS. BROYLES: Object to the form. And I'm</p> <p>5 going to further object to the extent that "harm" in</p> <p>6 the context is a legal context or harm in some other</p> <p>7 manner.</p> <p>8 A. Can you restate the question?</p> <p>9 BY MS. ADEN:</p> <p>10 Q. Is splitting counties with more Black</p> <p>11 voters in them than the counties split -- strike</p> <p>12 that. Let me try it another way.</p> <p>13 Is it possible to split one county in a</p> <p>14 way that harms Black voters such a Pulaski but not</p> <p>15 split other counties with Black voters?</p> <p>16 MS. BROYLES: Object to the form.</p> <p>17 A. When you speak of Black voters, I think of</p> <p>18 them as the totality of the state of Arkansas. And</p> <p>19 if you create a split in any one part of the state or</p> <p>20 you remedy a split in a part of the state such as was</p> <p>21 done with Jefferson, I think about the benefit or the</p>
<p style="text-align: right;">Page 234</p> <p>1 County, which has a higher number but much lower</p> <p>2 percentage any part Black population than Jefferson</p> <p>3 County is now split instead.</p> <p>4 Is that fair to say?</p> <p>5 A. That is correct, yes.</p> <p>6 Q. And you go on to provide the</p> <p>7 any-part-Black populations for Jefferson, Pulaski and</p> <p>8 rank them in relation to one another?</p> <p>9 A. That is correct.</p> <p>10 Q. Is splitting counties the only way to harm</p> <p>11 Black voters, in your opinion?</p> <p>12 MS. BROYLES: Object to the form.</p> <p>13 A. No. There's -- you know, history shows</p> <p>14 there's a variety of ways that voters can be harmed.</p> <p>15 So splitting a county is not the only way.</p> <p>16 BY MS. ADEN:</p> <p>17 Q. But it could be one way --</p> <p>18 MS. BROYLES: Object to the form.</p> <p>19 BY MS. ADEN:</p> <p>20 Q. -- evidence of one way?</p> <p>21 A. It could be evidence of a way.</p>	<p style="text-align: right;">Page 236</p> <p>1 harm to a population as the totality of all of the</p> <p>2 splits, not just looking at one in isolation.</p> <p>3 Saying, well, if you do that that's bad</p> <p>4 because you're not considering all of the other</p> <p>5 things that get done around it that might benefit</p> <p>6 that population as a whole.</p> <p>7 BY MS. ADEN:</p> <p>8 Q. But you're not taking a position, one way</p> <p>9 or the other, whether there's a legal requirement for</p> <p>10 plaintiffs to focus on one particular district and</p> <p>11 what happens within the particular district.</p> <p>12 Is that fair to say?</p> <p>13 MS. BROYLES: Object to the form. Calls</p> <p>14 for a legal conclusion that he's not giving.</p> <p>15 MS. ADEN: I'll strike that and say it</p> <p>16 another way.</p> <p>17 BY MS. ADEN:</p> <p>18 Q. You're not providing an opinion about</p> <p>19 whether or not it's sufficient for plaintiff's</p> <p>20 evidence to focus on how a particular district is</p> <p>21 drawn and the counties within them, one way or the</p>



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<p style="text-align: right;">Page 237</p> <p>1 other?</p> <p>2 MS. BROYLES: Object to the form.</p> <p>3 A. I am so sorry. I'm not following the</p> <p>4 question very well.</p> <p>5 BY MS. ADEN:</p> <p>6 Q. Let me go back. When you responded to me,</p> <p>7 you responded to, as I understood it, a view that --</p> <p>8 of how splitting of Black voters in a particular</p> <p>9 county would have an overall statewide effect.</p> <p>10 Is that the essence of what your response</p> <p>11 was?</p> <p>12 A. The essence is that there's populations</p> <p>13 that are split and consolidated all over the state.</p> <p>14 And so the benefit or any benefit or harm that is</p> <p>15 directly attributable to splitting should be viewed</p> <p>16 as the totality of those splits and those</p> <p>17 consolidations statewide, not picking one place and</p> <p>18 saying that was split, ergo all the Blacks -- African</p> <p>19 Americans in the state of Arkansas are harmed because</p> <p>20 of that one split.</p> <p>21 Q. But you don't know, one way or the other,</p>	<p style="text-align: right;">Page 239</p> <p>1 Q. Around the 26, 2 bullet.</p> <p>2 A. I want to find my appendix so I can speak</p> <p>3 accurately to it.</p> <p>4 Q. Okay. 93, 94.</p> <p>5 A. Yeah. So starting on about page 95 no.</p> <p>6 I'm sorry -- 94 -- 94. So those are the rankings.</p> <p>7 So we go down 38, the top 38 places none are split.</p> <p>8 If we go to the next 38 places, none of those are</p> <p>9 split.</p> <p>10 And then we get down to the first highest</p> <p>11 concentrated Black population place -- the</p> <p>12 incorporated places is North Little Rock, which is</p> <p>13 ranked 79th in the state.</p> <p>14 Q. And this ranking is based upon your</p> <p>15 determination of what heavy Black populations -- what</p> <p>16 would constitute a heavy Black population or not.</p> <p>17 Is that fair to say?</p> <p>18 MS. BROYLES: Object to the form.</p> <p>19 A. So I did a brief analysis to see if it</p> <p>20 makes any difference if I looked at voting age</p> <p>21 population or citizen voting age population, and it</p>
<p style="text-align: right;">Page 238</p> <p>1 whether it's sufficient evidence for plaintiffs to</p> <p>2 deduce evidence of splitting in one particular area</p> <p>3 of the state in order to prove their claim?</p> <p>4 MS. BROYLES: Object to the form. Calls</p> <p>5 for a legal conclusion.</p> <p>6 A. I can't conclude that, no.</p> <p>7 BY MS. ADEN:</p> <p>8 Q. Did you also analyze whether the -- let me</p> <p>9 strike that.</p> <p>10 I believe you said that you analyzed</p> <p>11 whether the heaviest Black cities and towns were</p> <p>12 targeted for splitting in the 2021 map?</p> <p>13 A. I did.</p> <p>14 Q. And you -- is it correct that you found</p> <p>15 similar to with the county ranking of any-part-Black</p> <p>16 populations that cities and towns with the highest</p> <p>17 any-part-Black voting age populations were not the</p> <p>18 ones split.</p> <p>19 Is that fair to say?</p> <p>20 A. That is correct. Give me a moment,</p> <p>21 please. I'm going to --</p>	<p style="text-align: right;">Page 240</p> <p>1 doesn't make any difference but maybe one ranking up</p> <p>2 or down. So the overall conclusion that you have to</p> <p>3 go a long ways down the list before you find a split</p> <p>4 place is -- the same is true regardless of which</p> <p>5 measure of APB you use.</p> <p>6 BY MS. ADEN:</p> <p>7 Q. But under any measure of total population,</p> <p>8 voting age population, citizen voting age population,</p> <p>9 it's your definition of what constitutes a heavy</p> <p>10 Black population or not that is part of the analysis</p> <p>11 that you provided?</p> <p>12 A. Yeah. So I think as a professional</p> <p>13 demographer what is a best practice would be when</p> <p>14 you're referring to a population that is</p> <p>15 predominantly or prevailing or heavily -- any</p> <p>16 characteristic that calculating a percent share of</p> <p>17 that population of the total and then ranking them</p> <p>18 for comparison would be a common and best practice.</p> <p>19 Q. But you're not forming an opinion about</p> <p>20 whether or not -- strike that.</p> <p>21 And, similarly, did you find that after</p>

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<p style="text-align: right;">Page 241</p> <p>1 ranking Arkansas's school districts by percentage of</p> <p>2 any part Black as with counties and places that a</p> <p>3 number of school districts with notably high Black</p> <p>4 population concentrations are newly split in and</p> <p>5 around Pulaski while other school districts with even</p> <p>6 higher concentrations of Black population under the</p> <p>7 2011 enacted map are made whole?</p> <p>8 A. That is correct.</p> <p>9 Q. And you did a similar analysis we referred</p> <p>10 to earlier dealing with judicial districts and</p> <p>11 whether or not they were split looking at the</p> <p>12 any-part-Black populations across the number of</p> <p>13 measures?</p> <p>14 A. Yeah. I did not have the time to complete</p> <p>15 that analysis. I only did that analysis for</p> <p>16 counties, places, and school districts.</p> <p>17 Q. Okay. But looking at 26, 4, for example?</p> <p>18 A. Which one?</p> <p>19 Q. I'm sorry. Paragraph 26 and it's like the</p> <p>20 subnumber 4.</p> <p>21 A. Para (sic) 26?</p>	<p style="text-align: right;">Page 243</p> <p>1 lot in this report.</p> <p>2 Q. Do you have any reason to dispute that the</p> <p>3 judicial districts established in and around Pulaski</p> <p>4 County were established to ensure non-dilution of</p> <p>5 Black voting strength?</p> <p>6 MS. BROYLES: Object to the form.</p> <p>7 A. I don't know.</p> <p>8 BY MS. ADEN:</p> <p>9 Q. And just circling back on this, when you</p> <p>10 were ranking counties and places and school</p> <p>11 districts, there is no bright line definition that</p> <p>12 you are giving of what makes something heavy or not</p> <p>13 heavy.</p> <p>14 Is that fair to say?</p> <p>15 A. No. For sure, I agree. It's relative.</p> <p>16 Q. Okay. You testified earlier that you're</p> <p>17 not a political scientist, right?</p> <p>18 A. I'm not.</p> <p>19 Q. And it's fair to say you are not qualified</p> <p>20 to opine on the sufficiency of considering one form</p> <p>21 of political data over another?</p>
<p style="text-align: right;">Page 242</p> <p>1 Q. Yes.</p> <p>2 A. Okay.</p> <p>3 Q. And I think I misspoke. Here you're</p> <p>4 talking about judicial districts --</p> <p>5 Is that fair to say?</p> <p>6 A. Yes.</p> <p>7 Q. -- and ranking them by their</p> <p>8 any-part-Black population?</p> <p>9 A. Yes. So there's no -- in paragraph 26</p> <p>10 bullet for -- there's not a reference to the ranking.</p> <p>11 There is just a general statement knowing already</p> <p>12 that Jefferson County has a very high percent APB,</p> <p>13 acknowledging that that district such as the -- the</p> <p>14 District such as the -- I'm sorry.</p> <p>15 The sixth circuit in Pulaski is newly</p> <p>16 split and other districts such as the heavily Black</p> <p>17 11th circuit west where Jefferson is -- has been made</p> <p>18 whole.</p> <p>19 So there's not the ranking and comparison</p> <p>20 of all of the districts against each other. It's</p> <p>21 just an analysis of two areas that we focused on a</p>	<p style="text-align: right;">Page 244</p> <p>1 MS. BROYLES: Object to the form.</p> <p>2 A. Can you clarify sufficiency of one form of</p> <p>3 political data, please?</p> <p>4 BY MS. ADEN:</p> <p>5 Q. So, for example, the sufficiency of using</p> <p>6 one election as compared to another. Is it fair to</p> <p>7 say that you're not qualified to make a determination</p> <p>8 about the sufficiency of considering one form of</p> <p>9 political data in terms of an election as compared to</p> <p>10 another?</p> <p>11 MS. BROYLES: I'm only going to object to</p> <p>12 the form to the extent that political data is so</p> <p>13 broad. So are you only meaning political data as in</p> <p>14 the election results? Or do you mean just political</p> <p>15 data in general? So I know you gave -- if you can</p> <p>16 kind of explain that just so we know.</p> <p>17 BY MS. ADEN:</p> <p>18 Q. How are you defining political data for</p> <p>19 purposes of your work in this case?</p> <p>20 A. So the political data that I have are the</p> <p>21 election data that were provided by the -- through</p>

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<p style="text-align: right;">Page 245</p> <p>1 counsel from the SOS office for the 2020 and 2022</p> <p>2 elections.</p> <p>3 Not being a political scientist, I don't</p> <p>4 have the authority or expertise to differentiate that</p> <p>5 any one particular election or any particular vintage</p> <p>6 is better or worse or has greater or lesser utility,</p> <p>7 which is why I'm lacking that expertise in</p> <p>8 decision-making ability.</p> <p>9 I present all of the most recent</p> <p>10 information we have available to inform the court.</p> <p>11 Q. And you're not offering a scientist</p> <p>12 analysis and analyzing what the aggregated election</p> <p>13 results mean.</p> <p>14 Is that fair to say?</p> <p>15 MS. BROYLES: Object to the form.</p> <p>16 A. My analysis of the election results is to</p> <p>17 summarize precinct level data to different districts</p> <p>18 under different plans and to report the outcomes of</p> <p>19 what the election looked like under those different</p> <p>20 scenarios.</p> <p>21 BY MS. ADEN:</p>	<p style="text-align: right;">Page 247</p> <p>1 A. So any amount of improvement in a race</p> <p>2 that was percent -- in this case percent Republican,</p> <p>3 there was a higher percent than what it would have</p> <p>4 been under the 2011 plan.</p> <p>5 BY MS. ADEN:</p> <p>6 Q. And higher could be 1 percent?</p> <p>7 A. It could be any amount.</p> <p>8 Q. .1 percent?</p> <p>9 A. .01 percent.</p> <p>10 Q. Okay. And a reduction in political</p> <p>11 performance, would that inversely mean by any amount,</p> <p>12 .1 percent or greater?</p> <p>13 A. Yes.</p> <p>14 Q. Do you know if that's how the Arkansas</p> <p>15 General Assembly would measure improvement in</p> <p>16 political performance?</p> <p>17 MS. BROYLES: Object to the form.</p> <p>18 A. I don't know.</p> <p>19 BY MS. ADEN:</p> <p>20 Q. Do you know if that's how the Arkansas</p> <p>21 General Assembly measured political performance if it</p>
<p style="text-align: right;">Page 246</p> <p>1 Q. Okay.</p> <p>2 A. And it is -- to be clear, it is not a</p> <p>3 sample of the data. There's no statistical analysis</p> <p>4 that can be done or should be done on those results.</p> <p>5 There's not a statistical test to say 62 is different</p> <p>6 than 60, for example, because it's a -- the entire --</p> <p>7 it is a census of all of the political election</p> <p>8 results for those races.</p> <p>9 Therefore, there are no distributions or</p> <p>10 statistics you can say to determine whether one is</p> <p>11 statistically significantly different than the other.</p> <p>12 Q. And you're providing that opinion not as a</p> <p>13 political scientist.</p> <p>14 Is that fair to say?</p> <p>15 A. As a statistician. And I'm saying I know</p> <p>16 that those numbers are a population and not a sample</p> <p>17 and, therefore, not subject to statistical testing.</p> <p>18 Q. Okay. So for purposes of your September</p> <p>19 16th report, what is an improvement in political</p> <p>20 performance from your perspective?</p> <p>21 MS. BROYLES: Object to the form.</p>	<p style="text-align: right;">Page 248</p> <p>1 did that at all in developing the 2021 congressional</p> <p>2 map?</p> <p>3 MS. BROYLES: Object to the form.</p> <p>4 A. I don't know.</p> <p>5 BY MS. ADEN:</p> <p>6 Q. So looking at footnote 44 again on page 54</p> <p>7 of your report, it reads: "My analysis is a simple</p> <p>8 mathematical calculation and reporting of Arkansas's</p> <p>9 election results and is not a definitive or</p> <p>10 scientific analysis of election results or is</p> <p>11 intended as proof of political gerrymandering. Such</p> <p>12 analysis and measures exist."</p> <p>13 Is that an accurate recitation of that</p> <p>14 footnote?</p> <p>15 A. Yes. That's correct.</p> <p>16 Q. And just to be clear, what do you mean by</p> <p>17 your calculation of reporting is not a scientific</p> <p>18 analysis?</p> <p>19 A. There are measures that have been</p> <p>20 developed by political scientists to assess these</p> <p>21 results and then to try and differentiate how much of</p>

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<p style="text-align: right;">Page 249</p> <p>1 these results are attributable to different reasons.</p> <p>2 So what I've done as a demographer is</p> <p>3 simply added up the results so that I can make an</p> <p>4 apples-to-apples comparison of what the race would</p> <p>5 look like under one scenario versus under a different</p> <p>6 scenario.</p> <p>7 Q. You don't know explicitly whether the</p> <p>8 Arkansas General Assembly in 2021 had a statewide</p> <p>9 goal to increase Republican advantage in every</p> <p>10 district.</p> <p>11 Is that fair to say?</p> <p>12 MS. BROYLES: Object to the form.</p> <p>13 A. It's -- it would be mathematically</p> <p>14 impossible to improve the Republican performance in</p> <p>15 every district, because any degree to which you're</p> <p>16 taking Republicans and adding them and improving them</p> <p>17 in one place is by definition reducing their</p> <p>18 influence in another one.</p> <p>19 BY MS. ADEN:</p> <p>20 Q. And is that because you looked at it and</p> <p>21 that's true in Arkansas based upon election results?</p>	<p style="text-align: right;">Page 251</p> <p>1 observations and knowledge working in other cases and</p> <p>2 seeing election results of differing political</p> <p>3 performance in different races.</p> <p>4 BY MS. ADEN:</p> <p>5 Q. And you also don't know, one way or the</p> <p>6 other, whether the Arkansas General Assembly had a</p> <p>7 goal to maintain partisan advantage by any particular</p> <p>8 measure in any particular district in the 2021</p> <p>9 congressional map?</p> <p>10 MS. BROYLES: Object to the form.</p> <p>11 A. I don't know that. And that is why we ran</p> <p>12 an analysis of all of the races. And, you know, if I</p> <p>13 had seen as a result of our analysis that, you know,</p> <p>14 there was some races where Republicans did better,</p> <p>15 maybe some did worse, that would call my conclusion</p> <p>16 into question.</p> <p>17 But in every race in 2020 and 2022 the</p> <p>18 numbers in each race were very consistent that it was</p> <p>19 two to -- and I'm going by memory -- 2.7 percentage</p> <p>20 points better under -- in every race under the 2021</p> <p>21 enacted plan than it was underneath the 2011 enacted</p>
<p style="text-align: right;">Page 250</p> <p>1 A. It's mathematically a proof. If you take</p> <p>2 -- you have a finite number of Republicans in the</p> <p>3 state. So if you take Republicans out of one</p> <p>4 district in order to improve the Republican</p> <p>5 performance in another district, then you're going to</p> <p>6 hurt the Republican performance in the original</p> <p>7 district and help it in the other one.</p> <p>8 There's no way besides adding more</p> <p>9 Republicans that you can improve the Republican</p> <p>10 performance of all four districts simultaneously.</p> <p>11 Q. Is it your belief that being a Republican</p> <p>12 is a static characteristic that does not change</p> <p>13 depending upon the election?</p> <p>14 MS. BROYLES: Object to the form.</p> <p>15 A. That is not my belief.</p> <p>16 BY MS. ADEN:</p> <p>17 Q. And is that not your belief because you're</p> <p>18 not a political scientist?</p> <p>19 MS. BROYLES: Object to the form.</p> <p>20 A. It's both my belief because I'm not a</p> <p>21 political scientist and also because of personal</p>	<p style="text-align: right;">Page 252</p> <p>1 plan.</p> <p>2 BY MS. ADEN:</p> <p>3 Q. But you don't know if the Arkansas General</p> <p>4 Assembly was looking at those election results?</p> <p>5 MS. BROYLES: Object to the form.</p> <p>6 A. No idea.</p> <p>7 BY MS. ADEN:</p> <p>8 Q. And, in fact, as a matter of fact they</p> <p>9 could not have been looking at the 2022 election</p> <p>10 results in 2021?</p> <p>11 A. That would be a trick.</p> <p>12 Q. And you don't know explicitly whether they</p> <p>13 had a partisan goal to increase a Republican</p> <p>14 advantage by any amount in CD2 in particular, do you?</p> <p>15 MS. BROYLES: Object to the form.</p> <p>16 A. No. I do not know. I look at the</p> <p>17 evidence and the outcomes, as I wrote in my</p> <p>18 supplemental report, because I don't as not being a</p> <p>19 political scientist have the ability to quantify what</p> <p>20 is a lot or enough of a move to be meaningful.</p> <p>21 But I can look at the outcome of the</p>

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<p style="text-align: right;">Page 253</p> <p>1 election and the difference between what district --</p> <p>2 how district 2 performed in 2020 and how it performed</p> <p>3 in 2022.</p> <p>4 BY MS. ADEN:</p> <p>5 Q. So, relatedly, you don't know, one way or</p> <p>6 the other, whether if they had a goal to improve</p> <p>7 Republican advantage in any particular district if</p> <p>8 that goal was to do so by 1 percent or 5 percent or</p> <p>9 any other particular percentage?</p> <p>10 Is that fair to say?</p> <p>11 A. The general assembly knows the politics of</p> <p>12 the state much better than I do.</p> <p>13 Q. Do you agree that any map that increases</p> <p>14 the Republican vote share based on results from the</p> <p>15 2020 presidential election would be consistent with a</p> <p>16 goal to improve partisan vote share?</p> <p>17 MS. BROYLES: Object to the form.</p> <p>18 A. Can you please say it one more time?</p> <p>19 BY MS. ADEN:</p> <p>20 Q. Do you agree that any map that increases</p> <p>21 the Republican vote share by any amount based on</p>	<p style="text-align: right;">Page 255</p> <p>1 A. I don't have an opinion whether -- which</p> <p>2 -- I don't have an opinion which information source</p> <p>3 is the appropriate one for someone to make a</p> <p>4 decision, which is why I present all of the</p> <p>5 information.</p> <p>6 So someone who knows the politics of the</p> <p>7 state can make an informed decision with all of the</p> <p>8 information that I present to them. I don't attempt</p> <p>9 to influence anyone in my report to say focus on this</p> <p>10 presidential report or presidential outcome or focus</p> <p>11 on the senatorial outcome.</p> <p>12 BY MS. ADEN:</p> <p>13 Q. So your testimony a few moments ago is</p> <p>14 that Republican advantage can include increasing the</p> <p>15 vote share by .1 percent in a particular election.</p> <p>16 Is that fair to say?</p> <p>17 MS. BROYLES: Object to the form.</p> <p>18 A. It doesn't mean it's going to have an</p> <p>19 impact on the election, but any number that is</p> <p>20 greater than it was before is an improvement.</p> <p>21 BY MS. ADEN:</p>
<p style="text-align: right;">Page 254</p> <p>1 results from the 2020 presidential election would be</p> <p>2 consistent with a goal to improve partisan vote</p> <p>3 share?</p> <p>4 MS. BROYLES: Object to the form.</p> <p>5 A. The 2020 presidential election was an</p> <p>6 exceptional event in our nation's history.</p> <p>7 And as with the rest of my analysis in my</p> <p>8 report, I would not have an opinion on the outcome of</p> <p>9 a singular event that was one of the most standout</p> <p>10 exceptional political moments in the history of our</p> <p>11 country.</p> <p>12 I would look at all of the information we</p> <p>13 have for all the races we have available before</p> <p>14 making that judgment, which is why I did not just</p> <p>15 look at the presidential election results.</p> <p>16 BY MS. ADEN:</p> <p>17 Q. But because you're not a political</p> <p>18 scientist you don't know whether it's appropriate or</p> <p>19 not to look at multiple elections or one election.</p> <p>20 Is that fair to say?</p> <p>21 MS. BROYLES: Object to the form.</p>	<p style="text-align: right;">Page 256</p> <p>1 Q. And you don't dispute that it's</p> <p>2 appropriate to look at the 2020 presidential election</p> <p>3 because you yourself looked at the 2020 presidential</p> <p>4 election.</p> <p>5 Is that fair?</p> <p>6 A. I used the 2020 presidential election, and</p> <p>7 I think anyone analyzing this plan should look at</p> <p>8 that election and all of the election information</p> <p>9 that they believe is useful to inform a judgment</p> <p>10 about why this plan was drawn the way it was.</p> <p>11 Q. So not -- strike that.</p> <p>12 Accepting whether or not it's appropriate</p> <p>13 to look at multiple elections or not, based upon the</p> <p>14 fact that you looked at at least the 2020</p> <p>15 presidential election and you agree that a .1</p> <p>16 percentage could be an improvement in Republican</p> <p>17 advantage, do you have any reason to dispute that a</p> <p>18 map that increases the Republican vote share based on</p> <p>19 results from the 2020 presidential election would be</p> <p>20 consistent with an improvement of partisan vote</p> <p>21 share?</p>



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<p style="text-align: right;">Page 257</p> <p>1 MS. BROYLES: Object to the form.</p> <p>2 BY MS. ADEN:</p> <p>3 Q. Yes or no, and then please explain.</p> <p>4 A. Yes, and the explanation is that any</p> <p>5 improvement no matter how small may or may not have</p> <p>6 an impact that is sufficient to change the outcome of</p> <p>7 an election.</p> <p>8 So just saying it's an improvement doesn't</p> <p>9 necessarily mean -- the outcome of an election is the</p> <p>10 target is, do you win or lose the election? So</p> <p>11 saying it improves doesn't determine by how much. It</p> <p>12 needs to improve in order for you to win the</p> <p>13 election.</p> <p>14 Q. And is it your position that that is what</p> <p>15 the goal of the Arkansas General Assembly was in</p> <p>16 drawing the 2021 map, which was to improve the</p> <p>17 outcome of elections and specific elections?</p> <p>18 A. I want to be absolutely clear that I have</p> <p>19 no idea what the goal of the legislature was. I</p> <p>20 provide this information for the court to help make</p> <p>21 their own decision about what they thought drove the</p>	<p style="text-align: right;">Page 259</p> <p>1 Arkansas. So it would not be possible to look at the</p> <p>2 race, and the race as in to look at the election, and</p> <p>3 be able to make an informed opinion about how much or</p> <p>4 what degree the intersection of race and party was</p> <p>5 that drove the support for each representative.</p> <p>6 Q. And you're providing that statement based</p> <p>7 upon your understanding of Dr. Liu's testimony.</p> <p>8 Is that fair to say?</p> <p>9 A. I know that there are actually data</p> <p>10 available that show race by party for this state.</p> <p>11 But I did not consult those data, and I rely on Dr.</p> <p>12 Liu's statement for the purpose of this discussion.</p> <p>13 Q. And you did not report the data that you</p> <p>14 say exists regarding the racial breakdown of voting</p> <p>15 preferences of particular racial groups.</p> <p>16 Is that fair to say?</p> <p>17 A. No.</p> <p>18 MS. BROYLES: Sorry. I am going to just</p> <p>19 say that you are getting very close, in my opinion,</p> <p>20 to opening me being able to ask about Dr. Liu because</p> <p>21 of all the things that you've been discussing. So to</p>
<p style="text-align: right;">Page 258</p> <p>1 drawing of this plan.</p> <p>2 I have no idea what the legislature was</p> <p>3 thinking or why they were drawing the map the way</p> <p>4 they did.</p> <p>5 Q. In looking at paragraph 132, you opine on,</p> <p>6 quote, how close, end quote, the contest between</p> <p>7 Senator Elliott and incumbent Congressman Hill was in</p> <p>8 2020 (sic).</p> <p>9 Is that fair to say?</p> <p>10 A. I provide the statistics of the race, yes.</p> <p>11 Q. And did you look at how any of the</p> <p>12 projected outcomes of that election between Senate</p> <p>13 Elliott and Incumbent Hill were prior to the</p> <p>14 election?</p> <p>15 A. No. I looked at the outcome of the</p> <p>16 election.</p> <p>17 Q. Did you look at whether there were any</p> <p>18 racial differences and preferences for candidates in</p> <p>19 any of the elections that you looked at?</p> <p>20 A. According to Dr. Liu there are not any</p> <p>21 data that tell us what race by party voters are in</p>	<p style="text-align: right;">Page 260</p> <p>1 the extent that we're getting kind of close, I'm just</p> <p>2 letting you know.</p> <p>3 MS. ADEN: For the record, I'm asking him</p> <p>4 what is or is not in his expert report which should</p> <p>5 be a yes or no answer because the reports have been</p> <p>6 produced and they exist as a matter of fact.</p> <p>7 And so that is the question, not why or</p> <p>8 why not. It is, Did you report it in writing and in</p> <p>9 any of the reports that you exist (sic)? Yes or no.</p> <p>10 MS. BROYLES: I understand that, but I'm</p> <p>11 just -- I'm just letting you know.</p> <p>12 MS. ADEN: And you know my position.</p> <p>13 BY MS. ADEN:</p> <p>14 Q. Looking at paragraph 136, do you also find</p> <p>15 that if one were drawing D2 for political advantage</p> <p>16 importing Cleburne County and exporting equal parts</p> <p>17 of the heavily Democratic portions of Pulaski County</p> <p>18 not only would it be geographically easy and improve</p> <p>19 compactness but also create the most political</p> <p>20 benefit for Republicans?</p> <p>21 Is that an accurate quote from paragraph</p>



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<p style="text-align: right;">Page 261</p> <p>1 136?</p> <p>2 A. Yes, based on the election information</p> <p>3 that I have.</p> <p>4 Q. Looked at?</p> <p>5 A. Yes.</p> <p>6 Q. And what do you mean by "most political</p> <p>7 benefit for Republicans"?</p> <p>8 A. So I drew a variety of alternative plans</p> <p>9 and tested different scenarios -- you can see in my</p> <p>10 BGD1 and 2 plans -- to see if under other assumptions</p> <p>11 and under different draws was there some other way</p> <p>12 that this could have been drawn that gave them as</p> <p>13 much political benefit as the plan that they landed</p> <p>14 on.</p> <p>15 In the Amended Complaint they suggest that</p> <p>16 there is some other way that they could have created</p> <p>17 as much or more political benefit without going into</p> <p>18 this corner of Pulaski County.</p> <p>19 And in expert Cooper's report he says</p> <p>20 there's some other way that you could create as much</p> <p>21 or more political benefit. He fails to demonstrate</p>	<p style="text-align: right;">Page 263</p> <p>1 where is this draw that avoids splitting Pulaski that</p> <p>2 creates all of this political benefit for the</p> <p>3 Republicans? Where is it?</p> <p>4 Because if you look at this map they're</p> <p>5 very heavily in one part of the city. There are no</p> <p>6 other parts of that district where you could go to to</p> <p>7 get a geographically concentrated political benefit.</p> <p>8 But I tried. And both of my alternative</p> <p>9 plans, as well as all of Cooper's alternative plans,</p> <p>10 come up with somewhat to much less -- much lower</p> <p>11 political performance than the 2021 enacted plan did.</p> <p>12 Q. Okay. We will return to that. And are</p> <p>13 you saying that that's true under all elections</p> <p>14 examined?</p> <p>15 A. Yes.</p> <p>16 Q. Looking at your political performance</p> <p>17 tables such as Table VIII.A.1 on page 59 and VIII.A.2</p> <p>18 on page 60 and A.3 (sic) also on page 60, is it fair</p> <p>19 to say -- or is it accurate based upon your own</p> <p>20 charts that the enacted plan and the 2011 benchmark</p> <p>21 plan are identical for Republican vote share in the</p>
<p style="text-align: right;">Page 262</p> <p>1 that.</p> <p>2 And in both of my plans that are</p> <p>3 alternative plans that are admittedly two of an</p> <p>4 infinity (sic) number of options, both of those plans</p> <p>5 performed worse politically using 2020 and 2022</p> <p>6 election data than the 2021 enacted plan.</p> <p>7 Q. So most political benefit is, just to be</p> <p>8 clear, as good as -- as good as or .1 percentage</p> <p>9 better? Or what are you saying is the most -- as a</p> <p>10 specific concrete matter, what is most political</p> <p>11 benefit? How is that measured?</p> <p>12 MS. BROYLES: Object to the form.</p> <p>13 A. So it's comparing what the outcome of all</p> <p>14 of the elections would be under the 2021 plan versus</p> <p>15 the 2011 plan.</p> <p>16 So I measured that difference and then I</p> <p>17 said what if the election were held under BGD1, what</p> <p>18 is that difference? And I compared what would happen</p> <p>19 if the election were held under the BGD2 plan. What</p> <p>20 would that difference be?</p> <p>21 Because I was seeking objectively to say</p>	<p style="text-align: right;">Page 264</p> <p>1 2020 presidential election --</p> <p>2 MS. BROYLES: Object to the form.</p> <p>3 BY MS. ADEN:</p> <p>4 Q. -- overall?</p> <p>5 A. Can you please restate the question?</p> <p>6 Q. Yeah. Looking at the grand total vote</p> <p>7 shares in each of these three charts that are looking</p> <p>8 at different -- that are comparing the 2011 and the</p> <p>9 2021 map, is it fair to say that the overall vote</p> <p>10 shares are the same under each map?</p> <p>11 A. Mathematically that's a requirement</p> <p>12 because you're using the same number of Republican</p> <p>13 voters, just under a different plan.</p> <p>14 Q. And based upon your earlier testimony</p> <p>15 meeting or exceeding the electoral results in an</p> <p>16 election would accomplish an advantage.</p> <p>17 Is that fair to say?</p> <p>18 A. It's not fair to say because it would</p> <p>19 depend on the amount increase in the change because I</p> <p>20 don't know if a 1 percent or a tenth of a percent</p> <p>21 increase would be enough to make the difference if a</p>

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<p style="text-align: right;">Page 265</p> <p>1 Republican candidate wins the election or not.</p> <p>2 So I can't provide an opinion on whether</p> <p>3 an increase is effective or not. Only the election</p> <p>4 will tell us the results.</p> <p>5 Q. And is it fair to say that not only do you</p> <p>6 not know, you also don't know what the general</p> <p>7 assembly's perspective is on whether or not this</p> <p>8 improves their advantage, one way or the other?</p> <p>9 A. No idea.</p> <p>10 Q. Okay. In paragraphs 140 and 146 you</p> <p>11 reference competitive results. 140 and 146 are two</p> <p>12 different places where I saw you used the term</p> <p>13 "competitive." And I wanted to understand what you</p> <p>14 meant by that term.</p> <p>15 A. Sure. So this is in the context of the</p> <p>16 first district which only had a Republican candidate.</p> <p>17 There wasn't a Democratic candidate in the race.</p> <p>18 District 2 and district 3 did have a Democratic</p> <p>19 candidate and they had Democratic votes that were</p> <p>20 associated with that candidate.</p> <p>21 It doesn't mean anything with regards to</p>	<p style="text-align: right;">Page 267</p> <p>1 any-part-Black populations in the racial makeup of</p> <p>2 precincts?</p> <p>3 A. So referring to the map on page 61, which</p> <p>4 is figure VIII.A.8, this map shows the percent any</p> <p>5 part Black that was either moved or adjacent to the</p> <p>6 draw of the D2 line with D1 and D4.</p> <p>7 And this map is thematically shaded to</p> <p>8 show low percent any part Black, medium, and then</p> <p>9 high.</p> <p>10 The red indicates low percent any part</p> <p>11 Black. Yellow indicates moderate numbers -- and,</p> <p>12 again, this is relative to Pulaski County. Those</p> <p>13 percentages in yellow are actually quite high -- and</p> <p>14 then the green are very high percentages of any part</p> <p>15 Black.</p> <p>16 So in looking at this scale and knowing</p> <p>17 that the overall percentage of any part Black in the</p> <p>18 state was approximately 16 percent, then the two</p> <p>19 precincts, VTD 126 and 127, are below the statewide</p> <p>20 average, VTD 126 in particular, while the other</p> <p>21 precincts that are to the north and to the northeast</p>
<p style="text-align: right;">Page 266</p> <p>1 whether they were literally competitive or not. It's</p> <p>2 a fact that they had somebody in the race, and in</p> <p>3 district 1 there was not a Democratic candidate in</p> <p>4 the race.</p> <p>5 Q. So competitive means contested --</p> <p>6 A. Yes.</p> <p>7 Q. -- by a differing political party?</p> <p>8 A. Yes. It was uncontested in one and it was</p> <p>9 contested in two and three.</p> <p>10 Q. But you're not assigning any numerical or</p> <p>11 statistical definition to competitive for purposes of</p> <p>12 your report?</p> <p>13 A. No. It simply means there was somebody</p> <p>14 with the letter D next to them on the ballot.</p> <p>15 Q. Okay. So you looked at certain precinct's</p> <p>16 racial makeup and detail similar to -- well, you</p> <p>17 looked -- is it fair to say that you looked at</p> <p>18 certain precinct's racial makeup, for example, in</p> <p>19 paragraph 131 or between 142 and 148 in your report?</p> <p>20 A. That's correct.</p> <p>21 Q. Okay. What did you consider below</p>	<p style="text-align: right;">Page 268</p> <p>1 are somewhat higher to much higher than the state</p> <p>2 average of 16.5 percent.</p> <p>3 Q. So low is below the statewide average of</p> <p>4 16 percent and high is above the statewide average of</p> <p>5 16 percent, approximately?</p> <p>6 A. And if it's approaching 100 percent, then</p> <p>7 I would call that very high.</p> <p>8 Q. And these are not -- are these your</p> <p>9 definitions of low and high or do you have a basis</p> <p>10 for considering them low or high that you can share?</p> <p>11 A. I did not create a statistical</p> <p>12 distribution. These are conversational terms that I</p> <p>13 would use to describe something that is five times</p> <p>14 the percentage of APB of the statewide average.</p> <p>15 Q. Now, you looked at the turnout of certain</p> <p>16 precincts.</p> <p>17 Is that fair to say?</p> <p>18 A. I did.</p> <p>19 Q. And how did you calculate turnout?</p> <p>20 A. That was an extremely technical, very</p> <p>21 time-consuming, difficult exercise. But what we were</p>

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<p style="text-align: right;">Page 269</p> <p>1 able to be do is to take the -- eventually take the</p> <p>2 data on a number of voters and connect that with</p> <p>3 these pieces of geography that we call -- we'll call</p> <p>4 precincts.</p> <p>5 And what we would do is divide the</p> <p>6 population, which we had from the Secretary of State,</p> <p>7 a known number, by the citizen voting age population</p> <p>8 or the CVAP. That would be the population who are</p> <p>9 eligible to vote in the each one of those precincts.</p> <p>10 Q. Who else uses that method?</p> <p>11 A. The most recent place that I have seen</p> <p>12 that is the MIT elections lab, which we looked at and</p> <p>13 referred to recently when we were calculating voter</p> <p>14 turnout in the Mississippi case.</p> <p>15 The denominator for a voter turnout can be</p> <p>16 a variety of numbers from VAP to CVAP, but the</p> <p>17 citizen voting age population was the more highly</p> <p>18 regarded number because that is an estimate of the</p> <p>19 population who are actually eligible to vote.</p> <p>20 It's a refinement of the voting age</p> <p>21 population, some of whom are eligible and some of</p>	<p style="text-align: right;">Page 271</p> <p>1 statistical analysis.</p> <p>2 Is that fair to say?</p> <p>3 A. That's correct.</p> <p>4 Q. Do you have any reason to dispute that</p> <p>5 it's rare, if not impossible, to produce accurate</p> <p>6 estimates of precinct-level citizen voting-age</p> <p>7 populations?</p> <p>8 A. Yeah. So I think what you're getting at</p> <p>9 is the question of disaggregation of data. Sure. So</p> <p>10 I'm very fortunate that when I worked at the U.S.</p> <p>11 Census Bureau I was on the team that was part of the</p> <p>12 development -- the original development of the</p> <p>13 American Community Survey.</p> <p>14 That was, incredibly, 26 years ago. And</p> <p>15 since then when I worked there I was fortunate to</p> <p>16 learn the art and the science of what is called</p> <p>17 iterative proportional fitting or IPF, and the Census</p> <p>18 Bureau provides the CVAP data to the user community</p> <p>19 at the block group level of geography or BG level of</p> <p>20 geography.</p> <p>21 So we are not -- even though we need it,</p>
<p style="text-align: right;">Page 270</p> <p>1 whom are not.</p> <p>2 Q. When you deduced that turnout in</p> <p>3 particular Pulaski counties -- when you made an</p> <p>4 assessment of turnout in particular Pulaski</p> <p>5 precincts, did you make an assessment of turnout</p> <p>6 based upon its relationship to the state average?</p> <p>7 A. I did.</p> <p>8 Q. Okay. And you made a determination of</p> <p>9 some -- whether turnout in a particular precinct was</p> <p>10 significantly below or significantly above the</p> <p>11 average state turnout.</p> <p>12 Is that fair to say?</p> <p>13 A. It's not a statistical significance, but</p> <p>14 it's a numerically, significantly large number</p> <p>15 comparing the different geographies that we measured.</p> <p>16 Q. And similar to ranking Black populations</p> <p>17 low and high compared to like an average -- the</p> <p>18 average statewide Black voting age population, these</p> <p>19 are not -- these are colloquial ways of describing</p> <p>20 the turnout numbers in a particular precinct.</p> <p>21 You're not basing it on a particular</p>	<p style="text-align: right;">Page 272</p> <p>1 we are not provided what we call disaggregated data.</p> <p>2 It doesn't exist. So we're each kind of left to our</p> <p>3 own devices. I know a variety of suppliers use a</p> <p>4 variety of techniques to try and execute this.</p> <p>5 I can tell you and testify to the fact</p> <p>6 that the methodology that I use is consistent with</p> <p>7 the methodology that is used by the U.S. Census</p> <p>8 Bureau population estimates program. It's the</p> <p>9 definitive authoritative method for disaggregating</p> <p>10 data.</p> <p>11 When we do that process, without getting</p> <p>12 into the weeds, you have to have what are called</p> <p>13 marginals. They're targets. Because if you just</p> <p>14 have a block group, you don't know how to take data</p> <p>15 from a block group and put this many people here and</p> <p>16 that many people there and that many people there.</p> <p>17 So what my methodology does is it uses the</p> <p>18 official 2020 Census Block data as the marginals. So</p> <p>19 if you have a block group and it has 20 people in it,</p> <p>20 for example, and the census said there's five people</p> <p>21 in this block and five in this one and five in this</p>

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<p style="text-align: right;">Page 273</p> <p>1 one and five in this one, my methodology would take</p> <p>2 the data from the survey and make it align with what</p> <p>3 the official U.S. Census Bureau's block level data</p> <p>4 were reported as.</p> <p>5 It's as granular and accurate and as</p> <p>6 refined as any estimate of those data can possibly</p> <p>7 be.</p> <p>8 If you only use those data once you have</p> <p>9 disaggregated them down to hundreds of thousands of</p> <p>10 individual blocks, I absolutely agree they're not</p> <p>11 reliable. I mean, they're barely reliable at the</p> <p>12 block group level.</p> <p>13 But if you look at the number of precincts</p> <p>14 in the state of Arkansas, there's 2500 of them.</p> <p>15 There's 2300 block groups. It's a virtually</p> <p>16 identical number of VTDs or precincts and block</p> <p>17 groups.</p> <p>18 So on the whole you're just taking one</p> <p>19 group of 2300 pieces of geography that has been</p> <p>20 disaggregated to 2020 census data and then</p> <p>21 aggregating it into the same number of another piece</p>	<p style="text-align: right;">Page 275</p> <p>1 analyze historical patterns of racial disparities and</p> <p>2 turnout in Arkansas?</p> <p>3 A. Not historical. I did not have time.</p> <p>4 Q. Did you look at more recent patterns of</p> <p>5 racial disparities and turnout in Arkansas?</p> <p>6 A. I did not have time.</p> <p>7 Q. So you have no findings about -- strike</p> <p>8 that.</p> <p>9 A. I would like to note that there,</p> <p>10 unfortunately, was an inconsistency in the data from</p> <p>11 the state of Arkansas where votes were not -- my</p> <p>12 understanding is they were not placed correctly or</p> <p>13 treated correctly -- they were not correctly assigned</p> <p>14 or attributed to the correct precinct in the 2022</p> <p>15 election.</p> <p>16 And that's why you see a little square</p> <p>17 with the N/A in it. It's not an irregularity in our</p> <p>18 data. It's an irregularity in the voting data in the</p> <p>19 state of Arkansas. And it's a known problem with</p> <p>20 that precinct with the states voting data, not ours.</p> <p>21 Q. Now, you have talked about alternative</p>
<p style="text-align: right;">Page 274</p> <p>1 of geography.</p> <p>2 So since the number of pieces of geography</p> <p>3 are the same as what the Census Bureau reports and</p> <p>4 those data have further been grounded in what the</p> <p>5 decennial census says, I'm very comfortable with the</p> <p>6 adjustments that we made in order to create VTD level</p> <p>7 CVAP estimates.</p> <p>8 They're as good scientifically as anybody</p> <p>9 could possibly create.</p> <p>10 Q. You mentioned our method. Is your method</p> <p>11 one that has been embraced by a court or any academic</p> <p>12 literature?</p> <p>13 A. For decades in every -- every piece of</p> <p>14 detailed data that is produced by the U.S. Census</p> <p>15 Bureau's population estimates program. I've also</p> <p>16 written a book on it.</p> <p>17 Q. In peer-reviewed literature?</p> <p>18 A. It's in a published book by Springer</p> <p>19 journal's methodology book for redistricting</p> <p>20 analysts.</p> <p>21 Q. In looking at voter turnout, did you</p>	<p style="text-align: right;">Page 276</p> <p>1 maps interspersed throughout the day. So I want to</p> <p>2 turn to Section 9 of your report beginning at page</p> <p>3 79.</p> <p>4 A. Sure.</p> <p>5 Q. Is your definition of alternative plan</p> <p>6 that you're using here a technical term?</p> <p>7 A. No.</p> <p>8 Q. Okay. And you referenced earlier that</p> <p>9 BGD2 -- B, as in boy, the BGD2 map that you report in</p> <p>10 your September 16th report is an example of an</p> <p>11 alternative map that could have been drawn without</p> <p>12 splitting counties and that could have achieved the</p> <p>13 same political outcome as the 2021 enacted map.</p> <p>14 Is that fair to say?</p> <p>15 A. There's two questions in there. It can be</p> <p>16 achieved without splitting counties, but it did not</p> <p>17 end up providing a politically beneficial outcome.</p> <p>18 Q. And is it your opinion that you have</p> <p>19 looked at every variation of maps and whether or not</p> <p>20 one could be drawn without splitting counties that</p> <p>21 could have achieved the same political outcome as the</p>

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<p style="text-align: right;">Page 277</p> <p>1 2021 enacted plan?</p> <p>2 MS. BROYLES: Object to the form.</p> <p>3 A. I assessed numerous combinations of</p> <p>4 counties concurring district 2 in each different</p> <p>5 direction that I could think of and I could not come</p> <p>6 up with a combination that ended up with a favorable</p> <p>7 performance or outcome for Republicans keeping</p> <p>8 counties whole.</p> <p>9 To the best of my knowledge in assessing</p> <p>10 expert Cooper's maps, he claims that his maps have</p> <p>11 superior political performance.</p> <p>12 But the data within his own report as well</p> <p>13 as all the data in my rebuttal report show that his</p> <p>14 maps have -- his alt 1 and alt 2 maps have inferior</p> <p>15 political performance. His third map has better</p> <p>16 political performance than the 2021 enacted.</p> <p>17 BY MS. ADEN:</p> <p>18 Q. We will get in more detail to that. But I</p> <p>19 want to ask you about paragraph 170 where you report</p> <p>20 that plaintiffs advocate for congressional maps that</p> <p>21 minimize the change from the 2011 enacted plan, end</p>	<p style="text-align: right;">Page 279</p> <p>1 Q. -- compared to the 2011 map?</p> <p>2 A. Yes.</p> <p>3 Q. Did you start from scratch in developing</p> <p>4 BGD1 and BGD2?</p> <p>5 A. No. I started with the existing -- with</p> <p>6 the 2021 enacted district 2.</p> <p>7 Q. 2021 enacted district 2?</p> <p>8 A. That's correct.</p> <p>9 Q. And manipulated the lines starting from</p> <p>10 district 2 and its surrounding districts?</p> <p>11 A. Yes. I did not draw the other districts</p> <p>12 because it wasn't important. However, we could draw</p> <p>13 district 2. If there was some other way to draw</p> <p>14 that, the other districts could get sorted out later.</p> <p>15 Q. So neither -- it's your view that neither</p> <p>16 BGD1 or BGD2 function as full alternative plans?</p> <p>17 A. That's absolutely true.</p> <p>18 Q. They're being offered as reconfigured or</p> <p>19 they are focused on district 2 only.</p> <p>20 Is that your perspective?</p> <p>21 A. That's exactly right.</p>
<p style="text-align: right;">Page 278</p> <p>1 quote, and reduce or eliminate the splits of Pulaski</p> <p>2 while balancing the population as closely as</p> <p>3 possible.</p> <p>4 Did I read that accurately?</p> <p>5 A. Please say it one more time.</p> <p>6 Q. Looking at paragraph 1720, you report that</p> <p>7 plaintiffs advocate for congressional maps that</p> <p>8 minimize the change from the 2011 enacted map and</p> <p>9 reduce or eliminate the splits of Pulaski while</p> <p>10 balancing the population as closely as possible.</p> <p>11 A. Yes.</p> <p>12 Q. What is the basis for your assertion that</p> <p>13 plaintiffs advocate for minimal change from the 2011</p> <p>14 map?</p> <p>15 A. In their complaint, they state that there</p> <p>16 was significantly more population that needed to be</p> <p>17 -- that was moved than needed to be moved.</p> <p>18 Q. And that is the basis for your statement</p> <p>19 that we wanted a minimum change map --</p> <p>20 MS. BROYLES: Object to the form.</p> <p>21 BY MS. ADEN:</p>	<p style="text-align: right;">Page 280</p> <p>1 Q. Okay. Is that the case even though</p> <p>2 changes to the boundary of one district have an</p> <p>3 impact on the compactness, the other traditional</p> <p>4 redistricting principles that will impact the entire</p> <p>5 statewide plan?</p> <p>6 A. It would. I could have spent an enormous</p> <p>7 amount of time trying to configure alternatives for</p> <p>8 district 1, 3, and 4 to try and optimize all of those</p> <p>9 other criteria, but those districts aren't being</p> <p>10 litigated.</p> <p>11 And those -- in this case the goal is to</p> <p>12 try and see how you can make district 2 perform well,</p> <p>13 And whatever happens with those other districts</p> <p>14 downstream from that was work that I was willing to</p> <p>15 deal with later.</p> <p>16 It's a massive amount of effort to try and</p> <p>17 create brand-new districts since they weren't the</p> <p>18 ones that we were going to be discussing in this</p> <p>19 case.</p> <p>20 Q. Now, I understood from your report that</p> <p>21 you based one of your maps on Representative Speaks's</p>



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<p style="text-align: right;">Page 281</p> <p>1 whole county plan. Is that not accurate?</p> <p>2 A. Yeah. At the time I didn't know that it</p> <p>3 was the same map as -- you know, draw of D2 because I</p> <p>4 was kind of watching the videos and learning about</p> <p>5 what these other alternative plans were while I was</p> <p>6 writing my report.</p> <p>7 So I kind of figured out that by studying</p> <p>8 her map when I was watching the video that it was the</p> <p>9 same map as what I had come up with.</p> <p>10 Q. So you drew the map or the district first</p> <p>11 and then you looked at the video or parts of the</p> <p>12 video and understood that there was a Speaks whole</p> <p>13 county plan?</p> <p>14 A. Yeah.</p> <p>15 Q. And that is when you said that your D2</p> <p>16 matches up with her D2?</p> <p>17 A. Yeah. Imagine my surprise.</p> <p>18 Q. Did you ever look to see if Pulaski County</p> <p>19 could only be split once instead of twice?</p> <p>20 A. Yeah.</p> <p>21 Q. And did you report those results?</p>	<p style="text-align: right;">Page 283</p> <p>1 fact, draw that district in?</p> <p>2 A. I did.</p> <p>3 Q. Okay.</p> <p>4 A. So on page 101 what this tells you is how</p> <p>5 many people from 2 got sent into districts 1 and</p> <p>6 district 4. It gives you the map. So that gives us</p> <p>7 the map to say how many people were moved into each</p> <p>8 one of those districts.</p> <p>9 That helps us with the math of what is the</p> <p>10 total -- if you were asking about what is the total</p> <p>11 number of people who were moved out of 2, it's 41,392</p> <p>12 people got moved out between 1 and 4.</p> <p>13 So if you're asking did I draft a plan</p> <p>14 that would undo that double (inaudible) collapse</p> <p>15 (sic) a county, then I did do that.</p> <p>16 Q. This information that you provide, does</p> <p>17 that account for traditional redistricting principles</p> <p>18 and other information that one might use in order to</p> <p>19 redraw a district or a whole plan?</p> <p>20 A. So my draft BGD1 plan got rid of the</p> <p>21 double split. It got rid of the split into one and</p>
<p style="text-align: right;">Page 282</p> <p>1 A. So I do in places. I have in my -- in --</p> <p>2 in two different places. One is in the voter turnout</p> <p>3 data. I show an aggregate of what all of the</p> <p>4 precincts that were excised -- what they looked like.</p> <p>5 And then this is the benefit of the core</p> <p>6 retention analysis that we do because it tells you</p> <p>7 exactly how many people get sent from what district</p> <p>8 to which other district.</p> <p>9 Forgive me for a moment. Here we go.</p> <p>10 So I'm looking at page 101, Appendix D1.</p> <p>11 And so what that appendix shows, referring to the</p> <p>12 second district, is how many people went into</p> <p>13 district 1, how many people were retained in district</p> <p>14 2, which was, you know, 95 percent of the total</p> <p>15 population of D2, and then how many people got</p> <p>16 shipped into D4.</p> <p>17 Q. And so you're -- between the chart on page</p> <p>18 101 and your turnout analysis you're saying that data</p> <p>19 would underline -- would underlie a plan -- would</p> <p>20 give you the fodder for a plan that would split only</p> <p>21 one -- Pulaski one way versus 2. But you did not, in</p>	<p style="text-align: right;">Page 284</p> <p>1 it kept a small split between district 2 and district</p> <p>2 4. I'm on page 78.</p> <p>3 And so that draw we did a thorough</p> <p>4 assessment of that with compactness, political</p> <p>5 performance, core retention. We analyzed everything</p> <p>6 and drew this map with the consideration of those</p> <p>7 traditional redistricting principles.</p> <p>8 Q. That has one split or two splits?</p> <p>9 A. One split.</p> <p>10 Q. BGD1?</p> <p>11 A. Yes. That has one -- the remaining</p> <p>12 precincts that are there, this was more of a least</p> <p>13 change plan, not trading Cleburne County for more</p> <p>14 precincts in South Little Rock.</p> <p>15 It got rid of the Cleburne County and said</p> <p>16 let's just -- you know, 16- or 17,000 people that</p> <p>17 need to leave district 2, let's just start by taking</p> <p>18 those out of the -- some precincts that are in one</p> <p>19 part of that split. So that enabled us to get rid of</p> <p>20 the one-four split and just have one split of the</p> <p>21 county.</p>

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<p style="text-align: right;">Page 285</p> <p>1 Q. But it's your overall finding that that</p> <p>2 plan is not a sufficient alternative plan because it</p> <p>3 does not increase Republican advantage in multiple</p> <p>4 elections?</p> <p>5 A. That's one part of it, for sure. The</p> <p>6 other part is that it's just a fortune of the numbers</p> <p>7 that if you include Cleburne County and then you</p> <p>8 geographically work up from the southern edge of</p> <p>9 Pulaski, you're able to really closely and easily</p> <p>10 balance the deviation in district 2.</p> <p>11 It just works out that way. If you take</p> <p>12 Cleburne County out, the problem becomes that in</p> <p>13 those precincts in South Pulaski County, they've got</p> <p>14 a lot of people in them, 2-, 3-, 4,000 people each.</p> <p>15 So if you take Cleburne County out, it's</p> <p>16 -- there's no magic to this. It's just the</p> <p>17 geographic fact that if you take those people out and</p> <p>18 then you start working up from the southern edge of</p> <p>19 Pulaski that you start getting into precincts where</p> <p>20 you're adding or subtracting 4,000 people.</p> <p>21 And so the population deviation, no matter</p>	<p style="text-align: right;">Page 287</p> <p>1 that BGD1 could have been -- could have otherwise</p> <p>2 satisfied traditional redistricting principles?</p> <p>3 MS. BROYLES: Object to the form.</p> <p>4 A. It's one of many possible alternatives,</p> <p>5 but it's a viable -- I'll call it a viable plan.</p> <p>6 BY MS. ADEN:</p> <p>7 Q. And if we included political performance</p> <p>8 into our assessment of BGD1 and we had no information</p> <p>9 that the Arkansas General Assembly expected</p> <p>10 particular elections to be used to assess political</p> <p>11 advantage, if that was a requirement, is it fair to</p> <p>12 say that there's at least one election that you</p> <p>13 looked at that showed that BGD1 would have improved</p> <p>14 -- would have been the same or improved the</p> <p>15 Republican advantage in that map?</p> <p>16 MS. BROYLES: Object to the form.</p> <p>17 A. Let me check and make sure. Can we refer</p> <p>18 to table -- page 83 --</p> <p>19 BY MS. ADEN:</p> <p>20 Q. Okay.</p> <p>21 A. -- Table IX.F.1 at the bottom? So reading</p>
<p style="text-align: right;">Page 286</p> <p>1 what precinct you pick, isn't going to be 100 people</p> <p>2 or 500 people or 700 people. It's going to be</p> <p>3 thousands of people. And that's why -- that's a</p> <p>4 feature of this plan. And it's within, you know,</p> <p>5 what they said the courts would tolerate, but it's a</p> <p>6 much higher deviation than what's in the enacted</p> <p>7 plan.</p> <p>8 Q. But you don't know, one way or another,</p> <p>9 whether or not the deviation would have been</p> <p>10 acceptable to the 2021 general assembly but for</p> <p>11 comparing it to the 2021 enacted plan?</p> <p>12 A. Yeah. I don't know.</p> <p>13 MS. BROYLES: I'm going to object to the</p> <p>14 form.</p> <p>15 A. I don't know.</p> <p>16 BY MS. ADEN:</p> <p>17 Q. So if the Arkansas General Assembly had a</p> <p>18 deviation that was -- if the Arkansas General</p> <p>19 Assembly would have tolerated a deviation above what</p> <p>20 its 2021 enacted plan could have been, accepting the</p> <p>21 political performance information, would you agree</p>	<p style="text-align: right;">Page 288</p> <p>1 across you can see the presidential race in the 2011</p> <p>2 -- under the 2011 enacted is 53.1. The 2021 enacted</p> <p>3 is 2.1 percentage points higher, 55.2. The BGD1 plan</p> <p>4 is -- it might round to two-tenths of a difference,</p> <p>5 but here it looks like it is three-tenths of a</p> <p>6 percentage point of an improvement over the 2011</p> <p>7 enacted plan.</p> <p>8 In the Senate, similarly there's</p> <p>9 two-tenths of a percent of improvement. And in the</p> <p>10 House there is also two-tenths of a percentage</p> <p>11 improvement for the Republicans under that plan.</p> <p>12 Q. But we don't know, one way or the other,</p> <p>13 what the general assembly -- Arkansas General</p> <p>14 Assembly would have or could have considered a</p> <p>15 Republican advantage in a particular map?</p> <p>16 MS. BROYLES: Object to the form.</p> <p>17 A. No idea.</p> <p>18 BY MS. ADEN:</p> <p>19 Q. Okay.</p> <p>20 MS. ADEN: Let's mark as Exhibit 2 your</p> <p>21 rebuttal report dated September 23.</p>

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<p style="text-align: right;">Page 289</p> <p>1 (Exhibit Number 2 was marked for</p> <p>2 identification and was attached to the deposition.)</p> <p>3 BY MS. ADEN:</p> <p>4 Q. Do you recognize your rebuttal report?</p> <p>5 A. I do.</p> <p>6 Q. Okay. And is that a full and complete</p> <p>7 copy of your rebuttal report?</p> <p>8 A. Let me just take a quick look. It looks</p> <p>9 like it.</p> <p>10 Q. Do you agree that this report responds to</p> <p>11 some of the findings and opinions of plaintiff's</p> <p>12 expert Bill Cooper?</p> <p>13 A. It does.</p> <p>14 Q. Would you agree that this report does not</p> <p>15 respond to the findings and opinions of plaintiff's</p> <p>16 other experts?</p> <p>17 A. It does not.</p> <p>18 Q. With respect to responding to Bill</p> <p>19 Cooper's findings, the main focus of your rebuttal</p> <p>20 report is responding to the two maps identified as</p> <p>21 alternatives 1 and 2 that Cooper disclosed.</p>	<p style="text-align: right;">Page 291</p> <p>1 A. It is.</p> <p>2 Q. Now, you reference here maps that were</p> <p>3 reviewed by the Arkansas legislature?</p> <p>4 A. Yes.</p> <p>5 Q. And you earlier testified that you</p> <p>6 reviewed some of the videos of the redistricting</p> <p>7 process. What is your basis for your opinion that</p> <p>8 this alternative 2 is a radical departure from any</p> <p>9 map that was considered by the Arkansas legislature?</p> <p>10 A. So the maps that I was focused on and</p> <p>11 trying to pay close attention to were the whole</p> <p>12 county maps that were presented. There were three of</p> <p>13 them. This looked very different from any one of the</p> <p>14 whole county maps that I saw.</p> <p>15 There may have been more whole county</p> <p>16 maps. I don't know -- but I know there were three</p> <p>17 for sure, and this did not look like any of the three</p> <p>18 of them.</p> <p>19 Q. And just based upon your previous</p> <p>20 testimony, is the focus on at least those three whole</p> <p>21 county maps that you looked at, is that because of</p>
<p style="text-align: right;">Page 290</p> <p>1 Is that fair to say?</p> <p>2 MS. BROYLES: Object to the form. To the</p> <p>3 extent they couldn't have offered criticism of all</p> <p>4 three because we didn't have it.</p> <p>5 MS. ADEN: Right.</p> <p>6 BY MS. ADEN:</p> <p>7 Q. But at the time that you wrote the</p> <p>8 rebuttal report and disclosed it on September 23rd,</p> <p>9 is it fair to say that the main focus of the rebuttal</p> <p>10 is responding to the two maps identified as</p> <p>11 alternatives 1 and 2 that Cooper disclosed in his</p> <p>12 September 16th report looking at paragraph 73 of --</p> <p>13 is that fair to say?</p> <p>14 A. It is.</p> <p>15 Q. Okay. And you describe Mr. Cooper's</p> <p>16 alternative plan 2 as a, quote, radical departure</p> <p>17 from any map you reviewed that was considered by the</p> <p>18 Arkansas legislature and represents a significant</p> <p>19 reconfiguration of the existing 2011 enacted map.</p> <p>20 And I'm citing paragraph 5.</p> <p>21 Is that accurate?</p>	<p style="text-align: right;">Page 292</p> <p>1 the recognition that you understood from your review</p> <p>2 of the limited legislative videos that keeping</p> <p>3 political -- keeping counties whole was an important</p> <p>4 consideration amongst the Arkansas General Assembly</p> <p>5 in 2021?</p> <p>6 A. Yes. That's correct.</p> <p>7 Q. Okay. And the purpose of your 9 --</p> <p>8 September 23 rebuttal report, according to paragraph</p> <p>9 5, was to test these two plans, alternative 1 and 2,</p> <p>10 to assess their features and determine whether the</p> <p>11 plaintiffs were correct in stating that other plans</p> <p>12 could have fulfilled partisan goals without singling</p> <p>13 out Black voters to such a degree?</p> <p>14 A. That is correct. And I approached this</p> <p>15 objectively and as factually as possible. I didn't</p> <p>16 run my analysis in any different way than I ran any</p> <p>17 of the analysis of my own maps or of the other maps</p> <p>18 that I had from the legislature.</p> <p>19 Q. And you say at paragraph 77 of your</p> <p>20 rebuttal that looking at alternative plans 1 and 2</p> <p>21 that there is effectively no difference in county</p>

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<p style="text-align: right;">Page 293</p> <p>1 splits between those maps.</p> <p>2 Is that fair to say?</p> <p>3 A. That's correct.</p> <p>4 Q. Okay.</p> <p>5 A. I can't remember which one was which. I</p> <p>6 think one had one split and one had two splits of</p> <p>7 counties.</p> <p>8 Q. Okay. And the difference between one and</p> <p>9 two in your view is not effectively different?</p> <p>10 A. Yes. In the context of the reduction from</p> <p>11 the historic plan that was established that had five,</p> <p>12 one or two to me would be a significant -- either one</p> <p>13 of those would be a significant improvement.</p> <p>14 Q. Okay. Is it also fair to say that you</p> <p>15 compared the geographic compactness based on certain</p> <p>16 measures of the alternative plans alt 1 and alt 2 to</p> <p>17 the 2011 and 2021 congressional enacted maps?</p> <p>18 A. I did.</p> <p>19 Q. Okay. And, again, you don't dispute that</p> <p>20 -- the Reock and Polsby-Popper's statistical measures</p> <p>21 of compactness that Cooper reports for alternative</p>	<p style="text-align: right;">Page 295</p> <p>1 MS. ADEN: Exhibits.</p> <p>2 A. They are reported by Maptitude, but they</p> <p>3 are not reported in his report. I don't know why.</p> <p>4 BY MS. ADEN:</p> <p>5 Q. And if the map -- if the Reock and</p> <p>6 Polsby-Popper scores that Mr. Cooper reports are</p> <p>7 accurate, you don't have any reason to dispute that</p> <p>8 those are statistical measures that are common</p> <p>9 statistical measures that courts have accepted?</p> <p>10 MS. BROYLES: Object to the form.</p> <p>11 A. Given the numerous errors in his report I</p> <p>12 will say -- I will hedge this on, if they are</p> <p>13 correct, then I do not disagree with you.</p> <p>14 BY MS. ADEN:</p> <p>15 Q. And by "numerous errors," those are the</p> <p>16 errors that you documented in your rebuttal report?</p> <p>17 A. In this report, yes.</p> <p>18 Q. Okay. And they're about less than five</p> <p>19 errors that you would estimate?</p> <p>20 A. Including how many people live in</p> <p>21 Arkansas. They're not -- the numeric number of them</p>
<p style="text-align: right;">Page 294</p> <p>1 plan 1 and 2, you don't dispute the accuracy of those</p> <p>2 numbers, do you?</p> <p>3 A. Well, the problem is that Mr. Cooper --</p> <p>4 Q. Well, let me ask: Do you dispute the</p> <p>5 accuracy of the numbers that he reports, the Reock</p> <p>6 and the Polsby-Popper numbers for those plans? Yes</p> <p>7 or no, and then please explain.</p> <p>8 A. The answer is I don't know because he</p> <p>9 doesn't provide all the information on the scores by</p> <p>10 district, so I don't know how he gets to a final</p> <p>11 number.</p> <p>12 He reports a composite number that's not</p> <p>13 documented that I've never seen before. So there's</p> <p>14 no real way for me to give an opinion whether his</p> <p>15 number is accurate or not because I don't know what</p> <p>16 it is.</p> <p>17 Q. And you don't know whether or not those</p> <p>18 numbers are reported in any of the appendices that he</p> <p>19 provided alongside his report?</p> <p>20 MS. BROYLES: Which appendices? Do you</p> <p>21 mean exhibits?</p>	<p style="text-align: right;">Page 296</p> <p>1 is not as important as the significance and</p> <p>2 importance of the numbers that you need to get right</p> <p>3 when you do this. And knowing the number of people</p> <p>4 who live in a state, that's a good starting place.</p> <p>5 Q. Do you know if the numerical -- the</p> <p>6 typographical errors affected the overall percentages</p> <p>7 that were reported in the chart?</p> <p>8 MS. BROYLES: Object to the form.</p> <p>9 A. No. This is not a game of horseshoes and</p> <p>10 hand grenades. Having numbers that are just close</p> <p>11 enough in this arena if you're an expert is not good</p> <p>12 enough. You need to have the right numbers because</p> <p>13 having accurate numbers is reflective of your</p> <p>14 expertise and the accuracy of your entire report.</p> <p>15 BY MS. ADEN:</p> <p>16 Q. And have you in any of your reports that</p> <p>17 you've submitted and in any of the expert testimony</p> <p>18 that you've given ever had any errors in them?</p> <p>19 A. Not once ever.</p> <p>20 Q. Not one? You've never had to make a</p> <p>21 correction?</p>

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<p style="text-align: right;">Page 297</p> <p>1 A. There was one correction of one number one 2 time. 3 Q. So it's possible? 4 A. Louisiana. If you look at my reports 5 they're about ten times the size and complexity of 6 his. His is not being able to write a number down 7 from one page onto another page. 8 My -- the one error one time in reports 9 and analysis that are vastly larger and more complex 10 than his was a result of complex mathematics, not 11 writing a number down right, and he is unable to 12 write down a lot of numbers correctly repeatedly. 13 Q. Based upon your assessment of his work in 14 this case or other cases? 15 A. This and other cases. It's a repetitive 16 problem. 17 Q. And earlier you did not disagree with my 18 recitation of court findings that found Mr. Cooper 19 credible and rejected your testimony as non-credible 20 based upon the substance of the testimony. 21 Is that fair to say?</p>	<p style="text-align: right;">Page 299</p> <p>1 rigorous analysis that shows a ranking of all of the 2 congressional districts by all of the measures for 3 the entire United States to show exactly where each 4 one of these districts would fall in a national 5 ranking under the existing map as well as where his 6 plans would fall. 7 It is a statistical analysis and a metric 8 that statisticians would know and respect to say that 9 if there is a number that moved from the first 10 quartile of a distribution to the middle of the 11 distribution if it changes 25 percentage points that 12 that is a norm and an actual statistic, not a made-up 13 one, that would -- statisticians would regard as a 14 significant change. 15 Q. And do you find that on average that, 16 quote, on average nationally Cooper's alt 2 districts 17 would fall from being in the top quartile to only 18 being in the average, end quote? 19 A. Yes. 20 Q. So it's your position that Cooper's alt 2 21 districts would not be within the norm even if they</p>
<p style="text-align: right;">Page 298</p> <p>1 A. I agree with that. Getting your numbers 2 right is important. I cannot speak for the court why 3 they would find him credible if his numbers were not 4 right. 5 Q. Is it fair to say that you dispute Mr. 6 Cooper's finding that alternative plan 2's 7 compactness is within the norm based on statistical 8 measures of other congressional districts nationwide? 9 A. It is. 10 Q. Okay. And is it fair to say that you 11 dispute that you base your dispute on the, quote, 12 ranking of Arkansas's districts among all U.S. 13 Congressional districts by measure, end quote? 14 A. There's two parts to this. First of all, 15 Mr. Cooper does not provide what a norm is. I have 16 no idea what he's talking about. There are no norms, 17 and he does not provide a statistical defense or an 18 analytic defense of what a norm is. He just makes it 19 up and says it's within some mysterious norm because 20 he says so. 21 I present because I've done this work a</p>	<p style="text-align: right;">Page 300</p> <p>1 are as better than more than half of the 435 2 congressional districts? 3 MS. BROYLES: I'm going to object to the 4 form to the extent -- well, I'll just object to the 5 form. 6 A. Yes. I -- 7 BY MS. ADEN: 8 Q. Yes or no and then please explain. 9 A. Yes. I disagree with that because the 10 national rankings provide a range of values with 11 which we can compare one plan to another plan. You 12 can't compare the number and just say, well, it is 13 the same as the national average; therefore, it's 14 okay. 15 And you can use that number in saying it 16 would rank in the middle compared to where it ranks 17 right now, which is the top 25 percent, and say it 18 would fall by 25 percent. 19 It's analogous to saying Wyoming. Wyoming 20 is a square, and since it's its own district, it has 21 almost perfect compactness. It's ranked Number 1 in</p>



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<p style="text-align: right;">Page 301</p> <p>1 the country because it is so symmetrical and so 2 square. 3 But if you changed it or you split it in 4 some way and all of a sudden, you know, it fell like 5 25 or 50 percentage points nationally to what the 6 national average is, then that wouldn't be fair to 7 say it's okay or its norm (sic) because it's now 8 within the national average. 9 Q. But looking at your September 23 report, 10 rebuttal report, as with your September 16th original 11 report, you do a differential core retention analysis 12 as well? 13 A. Um-hum. 14 MS. BROYLES: When you say um-hum, you 15 have to say yes or no. 16 A. Yes, and I do that on all of these plans. 17 BY MS. ADEN: 18 Q. And you note in footnote 5 that you and 19 Mr. Cooper assess core retention differently? 20 A. Which page are you on? 21 Q. I am looking at page 8.</p>	<p style="text-align: right;">Page 303</p> <p>1 Arkansans who were in a different district than they 2 need to be. 3 So the difference that I think about when 4 I say, yeah, there's that 4 percent difference, 5 that's 140,000 people and 40 percent more people got 6 moved than were under the enacted plan. 7 Q. And do you have any reason to dispute that 8 a court ordered special master's plan in the Alabama 9 congressional redistricting case that you testified 10 in had a core retention of around 87 percent? 11 A. Every state is different and it's not fair 12 to compare one state to another state for a variety 13 of reasons. 14 Q. Including Wisconsin? 15 A. It is an illustration of what an 16 exceptional core retention rate is when it's mandated 17 by the courts. 18 Q. As a point of comparison? 19 A. Yep. 20 MS. ADEN: Okay. Let's take a five-minute 21 break, please.</p>
<p style="text-align: right;">Page 302</p> <p>1 A. Yes. 2 Q. Okay. And is it accurate to say that, 3 quote, neither analysis is right or wrong and the 4 same overall conclusions will be reached with either 5 method? 6 Is that fair to say? 7 A. That is fair to say, yes. 8 Q. Is it your position that a 4.6 percent 9 lower overall core retention rate between alternative 10 1 in the 2021 enacted plan makes the alt 1 plan not 11 comparable to the 2021 (sic) enacted plan even when 12 two of the four CDs in the plan have nearly equal 13 populations? 14 A. So the reason that I believe these are not 15 comparable is not based on that percentage point 16 difference. What I examined here in comparing pages 17 41 to 42 is that under the 2021 enacted plan there 18 were a total of 234,000 people who were moved. 19 Under Cooper's plan there were 374,000 20 people moved. 50 percent more -- 40 percent, 50 21 percent more people were moved. That's 140,000 more</p>	<p style="text-align: right;">Page 304</p> <p>1 (A break was taken.) 2 MS. ADEN: I would like to mark as Exhibit 3 3 your supplemental report dated October 7th, 2024. 4 (Exhibit Number 3 was marked for 5 identification and was attached to the deposition.) 6 BY MS. ADEN: 7 Q. Do you recognize this document? 8 A. I do. 9 Q. Is this a full and complete copy of your 10 supplemental report? 11 A. It looks like it. 12 Q. Okay. When did you begin working on this 13 supplemental report? 14 A. This one? 15 Q. Yes. 16 A. Pretty much immediately after I got a copy 17 of Mr. Cooper's rebuttal expert report. Probably 18 within two or three days. 19 Q. And that's the rebuttal report that was 20 disclosed or dated September 23rd? 21 A. Yeah. I think that's right. And so I got</p>

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<p style="text-align: right;">Page 305</p> <p>1 a copy of that like the day after and I was on this</p> <p>2 within a couple days after that and then got it</p> <p>3 submitted on October 1st.</p> <p>4 Q. And this report contains updated data and</p> <p>5 -- including tables and so forth?</p> <p>6 A. Yes.</p> <p>7 Q. How long did it take to complete?</p> <p>8 MS. BROYLES: Object to the form.</p> <p>9 A. Maybe two days, about.</p> <p>10 BY MS. ADEN:</p> <p>11 Q. Did anyone, including Eric, assist with</p> <p>12 this supplemental report?</p> <p>13 A. He quality controlled the compactness</p> <p>14 scores and he may have quality controlled the core</p> <p>15 retention numbers, but he was unavailable to do the</p> <p>16 complete quality control of all these numbers.</p> <p>17 Q. And when did you send this to defense</p> <p>18 counsel as a final product?</p> <p>19 A. I think on the date on the front, October</p> <p>20 1st.</p> <p>21 Q. Okay. And do you recall what time of the</p>	<p style="text-align: right;">Page 307</p> <p>1 A. That's correct.</p> <p>2 Q. Okay. Would you agree that those are</p> <p>3 categories of information you also reported on in</p> <p>4 your September 16th and September 23rd reports?</p> <p>5 A. It is.</p> <p>6 Q. Would you agree that this report does not</p> <p>7 respond to the findings and opinions of plaintiff's</p> <p>8 other experts?</p> <p>9 A. That's correct.</p> <p>10 Q. Looking at several paragraphs, paragraphs</p> <p>11 15 through 20 at a high level, did you compare the</p> <p>12 demographics of Arkansas's 2011 and 2021 enacted</p> <p>13 plans with alt 3 as well as with other plans with the</p> <p>14 particular focus on the demographics of CD2?</p> <p>15 A. I did.</p> <p>16 Q. Okay. And this is similar to how you</p> <p>17 compared the demographics of other maps in your and</p> <p>18 Mr. Cooper's respective initial and rebuttal reports</p> <p>19 with Arkansas's 2011 and 2021 enacted plans?</p> <p>20 A. It is consistent.</p> <p>21 Q. And as with other comparisons, you used</p>
<p style="text-align: right;">Page 306</p> <p>1 day?</p> <p>2 A. I don't.</p> <p>3 Q. Okay. Do you have --</p> <p>4 A. There will be a timestamp on the document</p> <p>5 that I sent to them.</p> <p>6 Q. Okay. Do you agree that this supplemental</p> <p>7 report is limited to providing, quote, an analysis of</p> <p>8 a third alternative map, alt 3, end quote, that Mr.</p> <p>9 Cooper presented in the September 23rd rebuttal</p> <p>10 report?</p> <p>11 A. Yes. That's correct.</p> <p>12 Q. Okay. And that analysis is only limited</p> <p>13 to updating tables and assessments you already did</p> <p>14 for alternative plans 1 and 2 and then running them</p> <p>15 for alternative plan 3?</p> <p>16 A. That's correct.</p> <p>17 Q. And by analysis is it fair to say that</p> <p>18 essentially you provide updated data in this report</p> <p>19 assessing the alt 3 plan with respect to</p> <p>20 demographics, compactness, core retention, and</p> <p>21 political performance?</p>	<p style="text-align: right;">Page 308</p> <p>1 total population, voting age population, and citizen</p> <p>2 voting age population data to report the demographics</p> <p>3 under alt 3?</p> <p>4 A. It is.</p> <p>5 Q. And looking at paragraph 20, does the</p> <p>6 first line read Table IV.A.5 showing the 2020</p> <p>7 population and by race and ethnicity for the --</p> <p>8 A. Enacted plan in D2.</p> <p>9 Q. -- 2011 enacted plan in D2?</p> <p>10 A. This is the alt 3 plan -- alt 2, alt 3</p> <p>11 plan.</p> <p>12 Q. So is that a typo? Should the labeling on</p> <p>13 the chart say alt 3, Cooper's alt 3, rather than</p> <p>14 2011?</p> <p>15 A. This is alt 3, yes.</p> <p>16 Q. Okay. Is that a typo that could be</p> <p>17 corrected if we needed to?</p> <p>18 A. Yes.</p> <p>19 Q. Okay. Looking at paragraphs 21 through</p> <p>20 28, did you compare the compactness of districts and</p> <p>21 various plans including alt 3 with Arkansas's 2011</p>

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<p style="text-align: right;">Page 309</p> <p>1 and 2021 enacted plans?</p> <p>2 A. I did.</p> <p>3 Q. Did you also provide the, quote, average</p> <p>4 for all districts, end quote, across these various</p> <p>5 plans?</p> <p>6 A. I did.</p> <p>7 Q. And did you provide compactness scores</p> <p>8 with a specific focus on D2 for these various plans?</p> <p>9 A. I did.</p> <p>10 Q. And this is similar to how you compared</p> <p>11 the compactness of other maps in your and Mr.</p> <p>12 Cooper's respective initial and rebuttal reports with</p> <p>13 Arkansas's 2011 and 2021 enacted plans?</p> <p>14 A. It's consistent.</p> <p>15 Q. And as with other comparisons, did you</p> <p>16 report various statistical measures, including</p> <p>17 Polsby-Popper and Reock?</p> <p>18 A. I did.</p> <p>19 Q. Looking at paragraphs 29 through 30, did</p> <p>20 you compare the overall core retention of various</p> <p>21 plans, including alt 3, by race and ethnicity with</p>	<p style="text-align: right;">Page 311</p> <p>1 Q. Okay. Looking at paragraph 31 through 33,</p> <p>2 did you compare the political performance of</p> <p>3 districts and various plans including alt 3 with</p> <p>4 Arkansas's 2021 enacted plan?</p> <p>5 A. I did.</p> <p>6 Q. And you did so using the 2022 election</p> <p>7 results as one of the elections that you did in your</p> <p>8 original and rebuttal reports?</p> <p>9 A. That's correct.</p> <p>10 Q. And specifically you're using election</p> <p>11 results for the 2022 Senate, congressional, governor,</p> <p>12 Attorney General, and Secretary of State contest by</p> <p>13 congressional district?</p> <p>14 A. That is correct.</p> <p>15 Q. And you can see that Cooper's -- looking</p> <p>16 at the results of these analysis, do you concede that</p> <p>17 Mr. Cooper's analysis of the 2020 presidential race</p> <p>18 under alt 3 is correct for district 2?</p> <p>19 A. I'm so sorry. Say that one more time.</p> <p>20 Q. Do you concede that Cooper's analysis of</p> <p>21 the 2020 presidential race under alt 3 is correct for</p>
<p style="text-align: right;">Page 310</p> <p>1 Arkansas's 2011 and 2021 plan?</p> <p>2 A. The way core retention is measured is that</p> <p>3 2011 is the base, and so it's not as if there's a</p> <p>4 2011 core retention number that's the baseline</p> <p>5 against which other plans are measured.</p> <p>6 But it is accurate to say that I measured</p> <p>7 the 2021 enacted and Cooper's alt 1, 2, 3 against the</p> <p>8 2011 plan.</p> <p>9 Q. Okay. Did you also provide the specific</p> <p>10 core retention for specific districts in alt 3</p> <p>11 looking at page 13, Table VI.3, for example?</p> <p>12 A. Yes.</p> <p>13 Q. And you used the differential core method</p> <p>14 measure like you did in your original rebuttal</p> <p>15 reports for this supplemental report?</p> <p>16 A. I did.</p> <p>17 Q. And this is similar to how you compared</p> <p>18 and measured the core retention of other maps in your</p> <p>19 and Mr. Cooper's respective initial and rebuttal</p> <p>20 reports with Arkansas's 2011 and 2022 enacted maps?</p> <p>21 A. Yes.</p>	<p style="text-align: right;">Page 312</p> <p>1 district 2?</p> <p>2 A. I don't think I ran the presidential race.</p> <p>3 Q. Have you provided testimony that disputes</p> <p>4 Mr. Cooper's results of the 2020 presidential race</p> <p>5 under alt 3 for district 2?</p> <p>6 A. I'm sorry. I don't see anywhere in my</p> <p>7 report that I analyzed the 2020 presidential race.</p> <p>8 Q. So does that mean that you do not have any</p> <p>9 written testimony that disputes his numbers for the</p> <p>10 2020 presidential election under alt 3?</p> <p>11 MS. BROYLES: Object to the form.</p> <p>12 A. I don't have any analysis of the 2020</p> <p>13 presidential election under alt 3.</p> <p>14 BY MS. ADEN:</p> <p>15 Q. Okay. So does that mean that you don't</p> <p>16 have any analysis that disputes that the political</p> <p>17 performance of district 2 under alt 3 is better than</p> <p>18 D2 and the 2020 enacted map under the 2020</p> <p>19 presidential election?</p> <p>20 MS. BROYLES: Object to the form.</p> <p>21 A. I don't have the evidence to agree or</p>

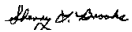
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<p style="text-align: right;">Page 313</p> <p>1 disagree.</p> <p>2 BY MS. ADEN:</p> <p>3 Q. Okay. Looking at Table VII.A on page 14</p> <p>4 of your report, does that table report the 2022</p> <p>5 Republican performance by D2 by plan?</p> <p>6 A. Yes.</p> <p>7 Q. Yes. And do you agree that Republican</p> <p>8 performance in alt 3 performs better than the 2021</p> <p>9 enacted plan under all five elections you reported?</p> <p>10 A. It does.</p> <p>11 Q. Okay. And the Republican performance in</p> <p>12 alt 3 performs better at least -- by at least 4</p> <p>13 percent in the 2021 enacted plan under the five</p> <p>14 elections?</p> <p>15 A. That's correct. And that's visually</p> <p>16 depicted in the next page, 15.</p> <p>17 Q. Okay. Accepting that Arkansas has never</p> <p>18 drawn such a district, do you have any reason to</p> <p>19 dispute that since after the 2000 census Arkansas's</p> <p>20 minority population that you -- that is available</p> <p>21 under the census data comprising Black and Latino</p>	<p style="text-align: right;">Page 315</p> <p>1 option. So to the extent that it's, quote/unquote,</p> <p>2 unresponded to, there is information in the report</p> <p>3 throughout the process regarding the hypothetical</p> <p>4 plan.</p> <p>5 BY MS. ADEN:</p> <p>6 Q. As you sit here today, do you have any</p> <p>7 written analysis that disputes the -- that after the</p> <p>8 2000 census Arkansas's minority population comprising</p> <p>9 Black and Latino voters has been sufficient to</p> <p>10 encompass around 40 percent of the population in a</p> <p>11 single congressional district as reflected in the</p> <p>12 hypothetical plan Mr. Cooper disclosed on September</p> <p>13 16th?</p> <p>14 MS. BROYLES: Object to the form.</p> <p>15 A. I have not done an analysis to confirm or</p> <p>16 refute whether the data presented by Mr. Cooper in</p> <p>17 his hypothetical plan is correct or not.</p> <p>18 BY MS. ADEN:</p> <p>19 Q. Okay. But if he was reporting Black and</p> <p>20 Latino minority populations using the 2020 census</p> <p>21 results, that information would have been available</p>
<p style="text-align: right;">Page 314</p> <p>1 voters has been sufficient to encompass around 40</p> <p>2 percent of the population in a single congressional</p> <p>3 district?</p> <p>4 MS. BROYLES: Object to the form and --</p> <p>5 object to the form.</p> <p>6 A. I have not been able to draw such a</p> <p>7 district. Mr. Cooper drew a hypothetical plan, I</p> <p>8 think he referred to it as, in one of his reports,</p> <p>9 which I have not been able to test or validate any of</p> <p>10 those numbers.</p> <p>11 BY MS. ADEN:</p> <p>12 Q. So, as you sit here today, having provided</p> <p>13 a supplemental report dated October 1, you have not</p> <p>14 responded to the hypothetical plan analysis that Mr.</p> <p>15 Cooper reported in his September 16th original expert</p> <p>16 report?</p> <p>17 A. I discuss it in my --</p> <p>18 Q. Yes or no, and then please explain.</p> <p>19 MS. BROYLES: Hold on. I'm going to</p> <p>20 object to the form because it's irrelevant in that he</p> <p>21 completely withdrew it from his testimony as an</p>	<p style="text-align: right;">Page 316</p> <p>1 to you as of September 16th when -- or as of</p> <p>2 September 23rd when any rebuttal reports and response</p> <p>3 to Mr. Cooper's initial report were disclosed?</p> <p>4 MS. BROYLES: Object to the form.</p> <p>5 A. That's correct.</p> <p>6 MS. ADEN. I need to take another quick</p> <p>7 five just to see if there's anything else before we</p> <p>8 can turn it over to Ms. Broyles. Actually, ten, to</p> <p>9 be honest, because by the time we walk out and --</p> <p>10 MS. BROYLES: Why don't we leave because</p> <p>11 we're not -- we don't have anything.</p> <p>12 MS. ADEN: That might be useful. Off the</p> <p>13 record.</p> <p>14 (A break was taken.)</p> <p>15 BY MS. ADEN:</p> <p>16 Q. Mr. Bryan, you are back on the record, if</p> <p>17 that's okay?</p> <p>18 A. Sounds good.</p> <p>19 Q. One final question. Over the course of</p> <p>20 today's testimony, and in particular during breaks,</p> <p>21 have you talked about the substance of your testimony</p>

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<p style="text-align: right;">Page 317</p> <p>1 with your counsel?</p> <p>2 A. Yes.</p> <p>3 Q. Have you talked about how to answer or not</p> <p>4 answer a question with your counsel?</p> <p>5 A. Yes.</p> <p>6 Q. Have you been given guidance about how to</p> <p>7 provide an answer to particular topics that might</p> <p>8 come up in the deposition?</p> <p>9 A. No. More in the manner of responding</p> <p>10 clearly with yes/no answers and not trailing off at</p> <p>11 the end of my sentences.</p> <p>12 Q. But have there been moments or any</p> <p>13 conversations about how to substantively respond --</p> <p>14 A. No.</p> <p>15 Q. -- to questions being asked in the</p> <p>16 deposition?</p> <p>17 A. No.</p> <p>18 Q. And that is over the course of the day?</p> <p>19 A. Yes.</p> <p>20 MS. ADEN: Okay. I thank you for your</p> <p>21 patience with me today, and I don't have any</p>	<p style="text-align: right;">Page 319</p> <p>1 MS. ADEN: Same order, please.</p> <p>2 MADAM REPORTER: Regular delivery as well?</p> <p>3 MS. ADEN: Yes, please.</p> <p>4 (Signature having not been waived, the</p> <p>5 deposition of Thomas Mark Bryan continued at 6:54</p> <p>6 p.m.)</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p>
<p style="text-align: right;">Page 318</p> <p>1 questions until redirect, potentially.</p> <p>2 MADAM REPORTER: Reading and signing, Ms.</p> <p>3 Broyles?</p> <p>4 MS. BROYLES: Yes. We're reading and</p> <p>5 signing.</p> <p>6 MADAM REPORTER: And would you like a</p> <p>7 copy?</p> <p>8 MS. BROYLES: Yeah, we should. I assume</p> <p>9 that was -- well, I guess -- I forgot -- yes, I would</p> <p>10 like a copy.</p> <p>11 MADAM REPORTER: eTran, hardcopy, or both?</p> <p>12 MS. BROYLES: etran is fine.</p> <p>13 MADAM REPORTER: Regular delivery?</p> <p>14 MS. BROYLES: No. Can do you a rough?</p> <p>15 And I think we did -- I don't even remember how many</p> <p>16 --</p> <p>17 MADAM REPORTER: Regular delivery for the</p> <p>18 final?</p> <p>19 MS. BROYLES: Yes, that's fine.</p> <p>20 MADAM REPORTER: Ms. Aden, when would you</p> <p>21 like the transcript?</p>	<p style="text-align: right;">Page 320</p> <p>1 CERTIFICATE OF NOTARY PUBLIC</p> <p>2 I, SHERRY L. BROOKS, a Notary Public in</p> <p>3 and for the DISTRICT OF COLUMBIA, before whom the</p> <p>4 foregoing deposition was taken, do hereby certify</p> <p>5 that the witness whose testimony appears in the</p> <p>6 foregoing deposition was duly sworn by me; that the</p> <p>7 testimony of said witness was taken by me in</p> <p>8 Shorthand at the time and place mentioned in the</p> <p>9 caption hereof and thereafter transcribed by me; that</p> <p>10 said deposition is a true record of the testimony</p> <p>11 given by said witness; that I am neither counsel for,</p> <p>12 related to, nor employed by any of the parties to the</p> <p>13 action in which this deposition was taken; and</p> <p>14 further, that I am not a relative or employee of any</p> <p>15 counsel or attorney employed by the parties hereto,</p> <p>16 nor financially or otherwise interested in the</p> <p>17 outcome of this action.</p> <p>18 </p> <p>19 SHERRY L. BROOKS</p> <p>Notary Public in and for</p> <p>DISTRICT OF COLUMBIA</p> <p>20 My commission expires: November 30, 2025</p> <p>21</p>



**THOMAS M. BRYAN**  
**The Christian Ministerial vs Thurston**

**October 03, 2024**  
**321-324**

Page 321

1 ACKNOWLEDGMENT OF DEPONENT

2

3 ASSIGNMENT NO.: J11818702

4 CASE CAPTION: CHRISTIAN MINISTERIAL ALLIANCE V -

5 THURSTON

6

7 DEPONENT: THOMAS MARK BRYAN

8

9 DECLARATION UNDER PENALTY OF PERJURY

10 I declare under penalty of perjury that I

11 have read the entire transcript of my Deposition

12 taken in the captioned matter or the same has been

13 read to me, and the same is true and accurate, save

14 and except for changes and/or corrections, if any, as

15 indicated by me on the DEPOSITION ERRATA SHEET

16 hereof, with the understanding that I offer these

17 changes as if still under oath.

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