

1 SUPREME COURT

2 STATE OF MISSOURI

3 CLARA FAATZ, et al., )

4 Appellants, )

5 vs. ) SC100277

6 JOHN ASHCROFT, MISSOURI )

7 SECRETARY OF STATE, et al., )

8 Respondents. )

9 IN THE CIRCUIT COURT OF MISSOURI

10 19TH JUDICIAL CIRCUIT, DIVISION I

11 HONORABLE JON E. BEETEM, JUDGE

12 CLARA FAATZ, et al., )

13 Plaintiffs, )

14 vs. ) 22AC-CC03185

15 JOHN ASHCROFT, MISSOURI )

16 SECRETARY OF STATE, et al., )

17 Defendants. )

18 RECORD ON APPEAL

19 JULY 12, 2023

20 VOLUME I OF I

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25 Kaye F. Asel, Certified Court Reporter  
Official Court Reporter, 19th Judicial Circuit  
Cole County, Missouri

1 APPEARANCES

2 For the Plaintiffs:

3 CHARLES W. HATFIELD AND ALIXANDRA COSSETTE  
4 Stinson LLP  
5 230 West McCarty Street  
6 Jefferson City, Missouri 65101  
7 (573) 636-6263

8 For the Defendants:

9 JEFF P. JOHNSON, Deputy Solicitor General  
10 JASON K. LEWIS, Chief Counsel for Governmental  
11 Affairs  
12 815 Olive Street - Suite 200  
13 St. Louis, Missouri 63101  
14 (314) 340-7832

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

2 THE COURT: This is 22AC-CC03185, Clara Faatz, and  
3 others, versus Jay Ashcroft in his official capacity, and  
4 others. For the Plaintiffs I've got Mr. Hatfield,  
5 Ms. Cossette.

6 And are you with the Plaintiffs?

7 MR. HATFIELD: So, Judge, Sean Nicholson, who is a  
8 witness.

9 THE COURT: Okay. All right. That is fine.

10 MR. HATFIELD: And Ms. Cossette and I are entered in  
11 the case.

12 THE COURT: You are the attorneys of record. And  
13 Jason Lewis.

14 MR. JOHNSON: Jeff Johnson.

15 THE COURT: Jeff Johnson.

16 MR. JOHNSON: This is our expert.

17 THE COURT: This is your expert.

18 All right. Did we find enough chairs?

19 Mr. Hatfield.

20 MR. HATFIELD: So, Judge, I think in pre-trial

21 discussions we agreed to give you a little bit of an

22 opening statement and then Plaintiffs have evidence for Docu

23 you.

24 So I prepared a little PowerPoint to just kind of

25 orient us, and I made notes as to where -- which exhibits



1 were kind of referring to in there. So Ms. Cossette is  
2 going to put it up there, but here's also a copy in paper  
3 there for you.

4 MR. JOHNSON: Also, very quickly for a preliminary  
5 matter before we -- so I don't interrupt Mr. Hatfield.  
6 Judge Beetem, we would like to re-up our motion in limine,  
7 at least to the extent that when they moved to qualify the  
8 expert, we would like a short time to do an exam just on  
9 the qualification for Your Honor if that is okay with you.

10 THE COURT: Very good.

11 MR. JOHNSON: However you want that done.

12 THE COURT: No, that is fine. It is a bench trial.

13 MR. HATFIELD: It makes sense.

14 I think Your Honor is generally familiar but to just  
15 kind of start, as they say, level set, right? Every ten  
16 years the United States does a census. After the census,  
17 according to the Missouri constitution, a Citizens  
18 Commission is appointed to try to draw Missouri legislative  
19 maps.

20 Your Honor knows that congressional maps are actually  
21 drawn by the legislature through a series of bills but we  
22 have a different process for the state legislature. Those  
23 citizens have equal Republicans and Democrats. They try to  
24 agree in this cycle, which we kind of refer to as the 2022  
25 cycle, using the '20 data. The House Democrat/Republican



1 Commission did agree, came up with maps and those have gone  
2 into effect. The Senate Citizens Commission did not agree.  
3 The constitution requires the Supreme Court to appoint from  
4 a group of appellate judges to draw a map and they did.

5 Under the constitution you get to review their work,  
6 which is a little novel, but they review yours a lot. I  
7 just want to make clear, Plaintiffs understand that we have  
8 the burden here and we understand that the court should be  
9 reluctant to set aside the work of the appellate judges who  
10 drew these maps, we accept all of that. In this case,  
11 however, we believe you must redraw some of the lines that  
12 they drew.

13 We're here today to discuss really only four districts  
14 out of the 34 Senate districts that violate the  
15 constitution. Those are Districts 34 and 12, which deal  
16 with Buchanan County, and all the way on the other side of  
17 the state, Districts 13 and 14, which are generally in  
18 northern St. Louis County.

19 And so, first of all, if we can go to the first  
20 PowerPoint slide, Alix, this is 12 and 34.

21 By the way, this picture, just for everybody, this is  
22 off the State's Senate website.

23 MR. JOHNSON: I'm fine.

24 MR. HATFIELD: -- but this is just for demonstrative.

25 So the colors here show you that District 34 runs kind

1 of right up I-29 and divides Buchanan County. That black  
2 line is Buchanan County that you can see here. And so the  
3 line for Districts 12 and 34 divides Buchanan County almost  
4 down the middle geographically.

5 The next set of districts is the City of Hazelwood.  
6 This is Districts 13 and 14. The pink is 13 and -- What  
7 is that? -- teal is 14. When you look at these maps,  
8 Judge, it is a little hard -- I mean, there are maps you  
9 can tell, but it is a little hard. There is no  
10 disagreement here, I believe.

11 The deposition of the Secretary of State's corporate  
12 representative, so we talked about Buchanan County, you  
13 agree that the final Senate map divides the City of  
14 Hazelwood, correct? Yes, it is my understanding, and there  
15 is other testimony we will put in the record that it does  
16 divide Hazelwood, and you can see that on one of the maps,  
17 it is not easy to see.

18 So what are we trying to prove to Your Honor. Let's  
19 look at these constitutional provisions which Your Honor  
20 heard about in some of the other arguments. So we talked  
21 about, I think it was Monday, Article III, Section 7  
22 governs the Senate maps. It refers back to Article III for  
23 the standards when it comes to drawing those maps.

24 First one is sometimes referred to as equal  
25 population. District shall be as equal as possible. And

1 I've highlighted here, measured by dividing the number of  
2 districts into the statewide population. So we've got down  
3 below 34 districts, total population divided by 34, you get  
4 an ideal population number. And it says in there that it  
5 is equal in population because you can't dial it down to  
6 the exact number if it deviates by more than 1 percent, if  
7 no district deviates by more than 1 percent, but the  
8 districts may be 3 percent if necessary to follow political  
9 subdivision lines in Section (4). So the very first thing  
10 we do is divide into 34 districts of equal population and  
11 it tells us to go look at Section (4) and see whether it  
12 impacts the deviation.

13 Next slide. These three -- Well, three of these four  
14 districts, 34, that is the Buchanan County, 13 and 14, all  
15 exceed 1 percent. This is an excerpt from an exhibit that  
16 actually the State's expert prepared. So all three of  
17 these deviate by more than 1 percent, 2.7, 2.67 and 2.67.

18 So that kicks us into the discussion we're really here  
19 about which is these political subdivisions.

20 This is not a new concept. In 1962 on the left, the  
21 Missouri Supreme Court reminded us that counties are  
22 important units. It has always been the policy of this  
23 state to have them composed of entire counties.

24 2012, which is the last time we did this, using the  
25 2010, the Appellate Judicial Commission in that matter, the

1 Johnson case, was found to have violated the county  
2 provision and the Supreme Court made that ruling. They  
3 tried to fix it and the Supreme Court said they couldn't do  
4 that. But when you read that ruling, they also said that  
5 what they did violated the constitution. The provision  
6 reflects Missouri's historical recognition of counties.

7 As Your Honor knows, next slide, we amended the  
8 constitution a couple of times in this area. That basic  
9 concept of keeping counties whole is contained now in the  
10 most recent version. If you want to read this, you may  
11 have to look at your paper.

12 THE COURT: Right. I have never figured out how to  
13 make it bigger.

14 MR. HATFIELD: It is quite all right.

15 So the constitution says -- So, again, we will begin  
16 with (1) and then we will look at (4). To the extent

17 consistent with subdivisions (1) to (3) -- Your Honor may  
18 have to think through this, you start at (1) go to (4).

19 Anyway, communities shall be preserved. Districts shall  
20 satisfy this requirement if districts follow political

21 subdivision lines to the extent possible using the

22 following criteria. And then you've got, first, each  
23 county wholly contained. I'm going to explain these a

24 little more. Second, if a county wholly contains more than  
25 one district. Third, split counties in county segments,

1 defined as any part of the county that is in a district not  
2 wholly within that county, shall be as few as possible.

3 We're under third for the Buchanan County matter. And  
4 fourth, as few municipal lines shall be crossed as  
5 possible. We're under four for that Hazelwood matter.

6 The Supreme Court did look at what the word possible  
7 means in an earlier version of the constitution and they  
8 struggled with it a little bit. Interestingly, if you look  
9 at the *Johnson* case, there are four I believe in majority,  
10 and I believe there were three in concurrence who disagreed  
11 a little with the analysis, so it is a pretty close case.

12 Possible, they said, holds an intermediate (neither  
13 strictly narrow or overly broad meaning, quote, being  
14 within or up to the limits of one's ability or capacity as  
15 determined by nature, authority, circumstances or other  
16 controlling factors, end quote.

17 So the Plaintiffs' position is that the constitution's  
18 use of the word possible really leaves no room for  
19 discretion. The question is, could you have done it up to  
20 your ability? Do you have the ability to do it  
21 differently? And that is an issue, Your Honor, we will  
22 have to look at.

23 Just by way of kind of a quick orientation to that  
24 provision. So the first one said generally that each  
25 county shall contain as many districts as population

1 allows. A really good example is Boone County. Boone  
2 County ended up being -- This is the enacted map. Boone  
3 County ends up being one Senate district. You are able to  
4 get everybody in there within the population deviation. I  
5 don't remember the exact, but it is less than 3 percent for  
6 sure. Greene County is another example. This is  
7 Springfield, Missouri. There is a whole Senate district  
8 inside Greene County. Jackson County is actually another  
9 example. There are one, two, three, four Senate districts  
10 all inside Jackson County who don't have to cross the lines  
11 at all.

12 Then the second one sometimes you can't get everything  
13 in the county, then you've got to go out further. So  
14 Jefferson County, District 22, is completely in Jefferson  
15 County but you run in to a problem because you are going to  
16 go over 3 percent, so the rest of Jefferson County is in a  
17 different district, but it all has to be in one, it can't  
18 be divided. You'll see that in a couple of places. Jasper  
19 and Newton are all together. And Clay is another  
20 interesting example. District 17 is completely in Clay and  
21 then there is people left over and so they are then  
22 combined with another Senate district here. So that is  
23 kind of the basic issue.

24 We're into the split counties problem and we showed  
25 you that blown up map. Platte and Buchanan are combined



1 together partially but the county is split this way and the  
2 rest of it is in District 12. And the municipalities  
3 section I think is fairly straightforward. So there are,  
4 of course, these other provisions that I just want to run  
5 through for Your Honor.

6 Next side. Sorry, you got it. Under Section (2),  
7 this is sometimes what is referred to as the racial, the  
8 racial component. It talks a little bit about the Voting I  
9 Rights Act. I don't know that we are going to need to  
10 parse through this, I hope not. But the State's expert  
11 tells us it is pretty easy to make the judgment that the  
12 VRA for racial gerrymandering is not really an issue for  
13 either of these modules or districts, right? Well, it is  
14 not for -- I think I said with respect to the northwestern  
15 module. I think I said that with respect to the  
16 northwestern module. With the St. Louis module, I said I  
17 would probably have to do the analysis, though I would be  
18 surprised if there were racially polarized voting. Even if  
19 there were, I would suspect that 44 percent in this  
20 circumstance would be enough to elect the black candidate  
21 of choice. There is other testimony about Hazelwood, but  
22 generally race is not going to be an issue here.

23 Section (3) is compactness, and I think both of the  
24 experts do have some things to say about compactness. I  
25 think it is important to understand before we get started



1 what that means.

2 Section (3) says: Subject to the requirements of  
3 subdivisions (1) and (2), so that is population proportion  
4 and race, districts shall be composed of contiguous  
5 territory as compact as may be. And the Supreme Court told  
6 us -- This as may be language has been in the constitution  
7 off and on for a while. As may be recognizes that  
8 compactness cannot be achieved with absolute precision.

9 And secondly, that compactness is, quote, subject, as it  
10 must be, to other more definitely expressed rules. I am  
11 not sure that is particularly helpful but you find it in  
12 the text.

13 In general the constitution tells us, compact  
14 districts are those which are square, rectangular or  
15 hexagonal in shape to the extent permitted by natural or  
16 political boundaries. So the compactness provision itself  
17 tells us the boundaries, the political boundaries are  
18 relevant. And you will hear testimony on this issue, I  
19 think.

20 Number (5) is partisan fairness. Partisan fairness is  
21 not really an issue here, although both the experts will  
22 mention it. The reason it is not an issue in what is  
23 sometimes called Clean 2, it was relegated to the least  
24 important position in the constitution. Districts shall be  
25 drawn in a manner that achieves both partisan fairness but

1 (1) to (4) shall take precedence over partisan fairness, so  
2 it is the last thing that anybody worries about.

3 So this is the map you saw a minute ago, Buchanan  
4 County divided. City of Hazelwood is also the issue. Next  
5 map. That is the same slide you saw a minute ago.

6 I don't think we have an issue with Hazelwood. I  
7 think this is going to be pretty easy for Your Honor,  
8 because the Secretary of State's expert witness drew a map  
9 of his own and when he did that -- We've talked about it  
10 already. It is possible to draw a redistricting of  
11 Missouri Senate districts that leaves Hazelwood intact but  
12 complies with all the other requirements of the Missouri  
13 constitution, correct? He said, it took some work to find  
14 it, but yes. The experts both agree you can do it and  
15 still comply with all the other requirements.

16 Question: So maybe you already answered this. You  
17 agree that the folks who enacted the current map could have  
18 drawn a map that crossed fewer municipal lines -- that's  
19 the language from the constitution -- in the St. Louis  
20 area, right? And the answer is yes. Both of the experts  
21 agree it was possible to do it, to draw a map that did not  
22 cross.

23 On the next page, we sort of went through all the  
24 different factors, crosses fewer municipal lines, complies  
25 with the Voting Rights Act, complies with the compactness

1 requirements. There is no problems with partisan fairness  
2 and there is no problem with population deviation. And he  
3 agrees that his map keeps Hazelwood together complies with  
4 all of those. I haven't talked with him, but we're fine  
5 with the way he drew that map that keeps Hazelwood  
6 together. So I honestly don't think Hazelwood is an issue  
7 in this case. I don't think there is much for you to  
8 decide.

9 He did not, however, draw a map to try to fix the  
10 Buchanan County issue. Go ahead.

11 THE COURT: Both sides agreed that there is a better  
12 way to do Hazelwood?

13 MR. JOHNSON: No, Your Honor. We agree that it is  
14 possible within the time and resources to draw their maps,  
15 but we don't necessarily agree that as few as possible does  
16 that much work for Hazelwood in this case.

17 MR. HATFIELD: All right.

18 THE COURT: Okay.

19 MR. HATFIELD: Expert did not attempt to draw a map  
20 that kept Buchanan County together. He didn't try to fix  
21 that. We're going to present some evidence to you that the  
22 Citizens Commission we talked about never divided Buchanan  
23 County. They were able to do it several times. You've  
24 already heard us mention, Marc Ellinger proposed some maps.  
25 He was the chairman. He didn't divide Buchanan County with

1 the ones he proposed. Susan Montee, the vice chairman, she  
2 proposed maps and never divided Buchanan. We have a map as  
3 discussed on Monday that we will tell you about that fixes  
4 the Buchanan County issue and the Hazelwood issue and  
5 complies with all of the other requirements of the  
6 constitution.

7 I don't believe the evidence is that the Secretary  
8 offers any defense at all on the Buchanan County map.  
9 Specifically we took their deposition and we asked why does  
10 the Secretary believe that this is constitutional and their  
11 only answer -- we've had a longer version of the  
12 definition -- they believe it is in the constitution. It  
13 was filed, it was received, it has 34 districts, and it  
14 speaks for itself, so as far as I know there is no evidence  
15 there.

16 There is an expert opinion, which if he tries to offer  
17 I don't know that Your Honor should actually hear it  
18 because it is really a legal conclusion, but their expert  
19 says that his opinion was, if the legislature has  
20 discretion -- that is exactly what he said by the way -- if  
21 the legislature has discretion, then the enacted maps are  
22 constitutional and that was it.

23 So we're here today because under Missouri  
24 Constitution Article III, Section 7, any action alleging  
25 the redistricting plan violates the constitution shall be

1 filed in Cole County, shall name the body, we named it --  
2 you know that whole story -- we named the Judicial Document  
3 Commission. Only --

4 THE COURT: Right.

5 MR. HATFIELD: -- only eligible voters who sustain an  
6 injury, we've got stipulations on who these folks are, they  
7 live in the districts, whose injury is remedied by a  
8 differently drawn district, we want to remedy it by drawing  
9 districts in a way that don't divide Buchanan and  
10 Hazelwood. If the court renders a judgment in which it  
11 finds a completed plan exhibits a violation, its judgment  
12 shall adjust only those districts and only those parts of  
13 district boundaries necessary to bring the map into  
14 compliance.

15 So our map only adjusts -- It has to adjust five  
16 districts. I told you that there were four in question.  
17 But when you move the lego blocks around to follow the  
18 counties, it touches on five districts, so we've got a  
19 proposed map that only adjusts those districts. I think  
20 the law is you can't go adjust other districts. You  
21 couldn't go mess with Boone County, Greene County, or any  
22 of those. That is essentially what we're asking you to do.

23 Judge, this may be for the end. But I am not sure  
24 whether you should take evidence here about how to draw the  
25 right map. We're going to give you some. I think both

1 parties are prepared to give you some, but when we get to  
2 the end, it may be that you say, you know, I want some  
3 proposals on how to fix that problem. My position today,  
4 you are trying to decide whether there is a violation and  
5 we may have to do a little more work on the remedy. We  
6 will give you all the evidence to fashion a remedy, and the  
7 State has evidence to fashion a remedy as well. I think we  
8 can establish for you a violation of the constitution  
9 because it was possible to draw maps that did not cross  
10 political subdivision lines as these do. Thank you.

11 MR. LEWIS: Your Honor, may it please the court.

12 THE COURT: Yes.

13 MR. LEWIS: Today Your Honor will hear evidence  
14 supporting the constitutionality of the Missouri State  
15 Senate map drawn in 2022 by the Judicial Redistricting  
16 Commission. JRC was uniquely situated in this case. It  
17 was appointed by the by the Supreme Court of Missouri after  
18 the Senate Independent Bipartisan Citizens Commission, that  
19 Mr. Hatfield referred to, failed to agree on a map. So I  
20 think there was some argument that the Citizens Commission  
21 drew a map. Well, there is no agreement on the map, and we  
22 will argue about relevancy in the exhibits. That is why  
23 the JRC was appointed because the Senate Commission was  
24 unable to agree to a map.

25 The redistricting process was under a short fuze even



1 before that due to nationwide delays which was reported to  
2 media about publication of the 2020 census data nationally.  
3 Yet under those uniquely short time lines I think was  
4 probably the most impressed redistricting timeline I've  
5 certainly done research on. The JRC ultimately drew a  
6 constitutional compliant plan, and we will talk about JRC's  
7 map complies with all the redistricting criteria. I want  
8 to stress that those timelines are important and provide a  
9 backdrop for the appropriate level of deference to give to  
10 the JRC's final map.  
11 Courts recognize in the *Johnson* case, a number of  
12 other cases, I think it is implicit in the plain meaning of  
13 the constitutional criteria that any fair reading of the  
14 five elements that Mr. Hatfield talked about -- we will  
15 talk about them too -- any fair reading allows for a  
16 deferring to the choices from the map drawing body given  
17 the resources, constraints and timelines at hand. And that  
18 is because the standard to assess any map is whether it is  
19 a perfect map. There is infinite ways to draw any map and  
20 likely countless ways to draw one that is constitutionally  
21 compliant. And this comes from the plain language of the  
22 constitution when it refers, for example, to nearly as  
23 equally as practical as possible. The *Johnson* case talked  
24 about what that standard means. We will talk about that as  
25 well.



1 Your Honor, to some degree it is not to dissimilar  
2 from these standards that the Missouri court used for  
3 assessing, for example, ballot titles in an initiative  
4 context where there is many different ways, ten different  
5 drafters can draw ten different summaries, and I think that  
6 is an analogous concept of the backdrop. That is clear  
7 from the case law that we will talk about here and we will  
8 see why the JRC's map meets all those criteria. And you  
9 will also see why Plaintiffs' proposal alternative map is  
10 just one of many ways to draw a map but we will see through  
11 our evidence here why the proposed map is not any better  
12 and why it is ultimately not a least changes map. Our  
13 expert will testify about, due to the population shifts in  
14 Missouri in the 2020 census, why it was essentially  
15 inevitable that tough choices would need to be made and why  
16 the current map reflects reasonable choices by the map  
17 drawers.

18 You've heard the opening statement here by Mr.  
19 Hatfield about the splits in Buchanan County and the City  
20 of Hazelwood. It is those only two splits that we're here  
21 to discuss. This is not a political gerrymandering case.  
22 It is not a racial gerrymandering, a Voting Right Acts  
23 case. Voting Right Acts challenges a first amended  
24 petition, I think all parties agree on that. Instead,  
25 we're only talking about a challenge under Article III,

1 Section 3(b)(4). And I stress (4) here because it is the  
2 redistricting criteria in Article III, Section 3(b) that  
3 are listed in order of priority. This challenge is about  
4 the fourth level of priority and that comes after three  
5 other criteria.

6 Your Honor, assuming we do not change any other  
7 districts from the previous State Senate map, it was  
8 immanently reasonable for JRC to have split Buchanan County  
9 and the City of Hazelwood. Not only do we not think that  
10 this actually destroys any true communities of interest as  
11 case law interprets that phrase, that criteria is still  
12 fourth down on the list of priority. The first on the list  
13 is subdivision (1), which states that, as you saw on the  
14 slides up here, that state districts shall be nearly equal  
15 as practicable in population. Nearly as equal as is  
16 practicable. Practicable going back to the reasonable  
17 choices of deference given to the JRC. Again, perfection  
18 is not required. We want the population deviators to  
19 numbers and we have a compliance in that area. And you  
20 will see our expert talk about why this is compliant.

21 And you'll hear evidence, Your Honor, of other  
22 simulations that have been wrong. I think it is in the  
23 number of thousands of other simulations that can be run.  
24 Using the 2020 census data, splits Buchanan County and  
25 Hazelwood, would occur with frequency. Those were the only

1 material changes from the previous map, and it was  
2 reasonable for the JRC not to change really the rest of the  
3 map. So with the changes in the 2020 census data and, for  
4 example, when allowing for just one more split as a  
5 baseline, and one split is completely fair and reasonable  
6 here, one split for county splits and one split with city  
7 splits, a split in Buchanan County occurs in 11 percent of  
8 the simulations, keeping in mind that there are over 110  
9 counties in Missouri; so for just one county to be split in  
10 11 percent of the universe of simulations, that strongly  
11 points in favor of the JRC's choice to split Buchanan  
12 County as a best choice under the circumstances.

13 As to Hazelwood, under those same conditions of  
14 allowing one more municipal split, Hazelwood is split in  
15 over 20 percent of the universe of simulations. And  
16 Hazelwood is so unique because it is so dense. Living in  
17 the area myself, there is a lot of dense municipalities in  
18 the area, one of the many dense municipalities in the  
19 region, so the numbers will show the JRC choices were  
20 reasonable, allowing for just one more split is a least  
21 amount of deference to be given. We're not asking for at  
22 the highest level of deference, is I think that would be  
23 warrant. But frankly, under the least amount of deference,  
24 given the JRC choices under the circumstances, these were  
25 reasonable choices. And we will talk about why that is

1 with our expert testimony.

2 I want to go back to the redistricting criteria.

3 Number (1), subdivision (1), nearly equal as practicable in

4 population, that is number one. And then we go back to

5 number (4). What does number (4) actually say? And that's

6 the only challenge in the lawsuit, subdivision (4).

7 What do Plaintiffs need to prove today? They need to

8 prove, quote, that to the extent consistent with

9 subdivisions (1), (2), (3), communities shall be preserved.

10 The plain text of the constitution subjects number (4), the

11 challenge here, to number (1). And, of course, districts

12 have to be compact. Compactness is in criteria number (3).

13 Compactness is above the challenge we have here, and you

14 will hear why today the compactness measurement is best for

15 the JRC's map.

16 And Mr. Hatfield did recognize, and I think he said

17 number (5), the partisan fairness, that's the last thing

18 that anyone cares about under the constitution based on the

19 order of priority. Number (4), the challenge here is just

20 one step above that, so we're really kind of at the bottom

21 of the priority list. Number (4) doesn't supercede number

22 (1). Subdivision (4) four is subject to number (1).

23 And we know from *Johnson* in 2012, Your Honor, the 2012

24 Missouri Supreme Court case, that practicable, possible

25 does not mean perfection. I want to read one line from the

1 Johnson case. And the court held that, quote: But showing  
2 the ability to attain greater mathematical precision is not  
3 enough for plaintiff to carry the burden. The plaintiff  
4 must also prove that any minimal and practical deviation  
5 from population and quality or compactness in a district  
6 does not result from application of recognized factors that  
7 may have been important considerations in the challenged  
8 map. The key phrase is minimal and practicable deviation  
9 from the *Johnson* case, and that is in 2012. As Mr.  
10 Hatfield mentioned, we've had one or two, actually two I  
11 think, changes from the redistricting criteria since then  
12 that we think even gives more deference to the map drawing  
13 choices here. Again, that is also assumed within  
14 subdivision (1).

15 And finally Your Honor as to that point, of course it  
16 is permissible to split political subdivisions. We've seen  
17 a few on the map. Jefferson County, of course, a portion  
18 of that is assumed with other counties as well. Missouri  
19 has three or four fairly large population centers dispersed  
20 within the state with a lot of territory in between those  
21 relatively large population centers. For example, St.  
22 Louis and Jackson County are also split for some degree for  
23 example, so the issue cannot be that dividing a political  
24 subdivision by itself isn't permissible and dividing, as we  
25 know from tradition, history, is permissible so long as it

1 complies with criteria (1) in Article III, Section (3)(b).  
2 It does here.  
3 In conclusion, Your Honor, map drawers here, the JRC  
4 made reasonable choices under the circumstances. In fact,  
5 we think the best possible choices and the proper framework  
6 and analysis under the constitution points towards  
7 deference to those choices. Plaintiffs subdivision (4)  
8 challenge here is subject to the population criteria in  
9 subdivision (1) and ultimately their expert, for the  
10 reasons we discussed in our motion in limine, will be  
11 unable to point to any credible, reliable methodologies  
12 that point towards affirming a challenge against the map  
13 and drawing any other kind of map. Ultimately -- and we  
14 will talk about this later, Your Honor -- we think  
15 Plaintiffs' expert witness is not really an expert witness  
16 and Plaintiffs will be unable to show he has the  
17 credentials necessary to analyze the map and is frankly too  
18 personally invested in this map to be qualified as an  
19 expert witness, so we think, Your Honor, we will hear no  
20 evidence that is admissible for Plaintiffs to support their  
21 change. On the contrary, if the State presents its case  
22 later on, you'll hear substantial testimony, including  
23 JRC's map, should be used.

24 MR. HATFIELD: Thank you, Judge. The parties have  
25 entered into some stipulations. They were filed on CaseNet



1 last night. I don't know if they've been accepted but I  
2 have paper.

3 THE COURT: I would take a paper copy if you've got  
4 one.

5 MR. HATFIELD: Pardon?

6 THE COURT: Do you have a paper copy?

7 MR. HATFIELD: I do have a paper copy. We will hand  
8 these out.

9 We have joint stipulations and Joint exhibits. The  
10 Joint exhibits, there is a few extra on there so I'll just  
11 make my record clear.

12 THE COURT: Okay.

13 MR. HATFIELD: And so, Judge, on the joint  
14 stipulations, there are 33 joint stipulations that  
15 generally cover issues such as who the parties are, how the  
16 process worked, true and correct copies of certain maps, so  
17 we can cut through all of that, and then near the end there  
18 are some documents that will be relevant to particular  
19 witness testimony, but the parties have agreed on those 33  
20 stipulations of fact, and we move for their admission at  
21 this time.

22 MR. JOHNSON: No objection, Your Honor.

23 THE COURT: Okay. They shall be admitted.

24 (Joint Exhibit No. 1, Missouri Senate Redistricting  
25 Plan 2022 Judicial Redistricting Commission, was marked for



1 identification.)  
2 (Joint Exhibit No. 2, 2022 Judicial Redistricting  
3 Commission Senate Redistricting Plan Secretary of State  
4 Filing March 2022 District 13, was marked for  
5 identification.)  
6 (Joint Exhibit No. 3, 2022 Judicial Redistricting  
7 Commission Senate Redistricting Plan Secretary of State  
8 Filing March 2022 District 14, was marked for  
9 identification.)  
10 (Joint Exhibit No. 4, 2022 Judicial Redistricting  
11 Commission Senate Redistricting Plan Secretary of State  
12 Filing March 2022 District 12, was marked for  
13 identification.)  
14 (Joint Exhibit No. 5, 2022 Judicial Redistricting  
15 Commission Senate Redistricting Plan Secretary of State  
16 Filing March 2022 District 34, was marked for  
17 identification.)  
18 (Joint Exhibit No. 6, Missouri Roster 2023-2024, was  
19 marked for identification.)  
20 (Joint Exhibit No. 7, Senate Commission WP-Ellinger  
21 1-12.20.2021, was marked for identification.)  
22 (Joint Exhibit No. 8, Senate Commission WP-Ellinger  
23 2-12.22.2021, was marked for identification.)  
24 (Joint Exhibit No. 9, Senate Commission WP-Ellinger  
25 3-12.23.2021, was marked for identification.)

1 (Joint Exhibit No. 10, Senate Commission WP-Montee  
2 1-11.12.2021, was marked for identification.)  
3 (Joint Exhibit No. 11, Senate Commission WP-Montee  
4 2-11.12.2021, was marked for identification.)  
5 (Joint Exhibit No. 12, Senate Commission WP-Montee  
6 3-11.12.2021, was marked for identification.)  
7 (Joint Exhibit No. 13, Senate Commission WP-Montee  
8 4-12.16.2021, was marked for identification.)  
9 (Joint Exhibit No. 14, Senate Commission WP-Montee  
10 6-12.21.2021, was marked for identification.)  
11 (Joint Exhibit No. 15, Senate Commission WP-Montee  
12 6-12.21.2021, was marked for identification.)  
13 (Joint Exhibit No. 16, Defendant Secretary of State  
14 Ashcroft's Supplemental Answers to Plaintiffs' First Set of  
15 Interrogatories, was marked for identification.)  
16 (Joint Exhibit No. 17, Defendant Secretary of State  
17 Ashcroft's Responses to Plaintiffs' First Request for  
18 Admissions, was marked for identification.)  
19 (Joint Exhibit No. 18, 3-15-2022 Transmittal Letter  
20 from Judicial Redistricting Commission to Missouri  
21 Secretary of State, was marked for identification.)  
22 (Joint Exhibit No. 19, 2022 Judicial Redistricting  
23 Commission Senate Redistricting Plan Secretary of State  
24 Filing March 2022 Statewide Map, was marked for  
25 identification.)

1 (Joint Exhibit No. 20, 2-17-2022 Judicial  
2 Redistricting Commission Notice of Public Hearing, was  
3 marked for identification.)  
4 (Joint Exhibit No. 21, 2-25-2022 Public Hearing  
5 Sign-In Sheet, was marked for identification.)  
6 (Joint Exhibit No. 22, Curriculum Vitae of Sean  
7 Trende, was marked for identification.)  
8 (Joint Exhibit No. 23, 3-31-2022 E-Mails between  
9 Nicholson and Hatfield, was marked for identification.)  
10 (Joint Exhibit No. 24, 5-24-2022 E-Mails between  
11 Nicholson, Hatfield and Cossette, was marked for  
12 identification.)  
13 (Joint Exhibit No. 25, Caldwell Supplemental Response  
14 to SOS First Set of Interrogatories dated 4-5-2023, was  
15 marked for identification.)  
16 (Joint Exhibit No. 26, Population Deviation Chart  
17 created by Sean Trende, was marked for identification.)  
18 (Joint Exhibit No. 27, Compactness Charter Created by  
19 Sean Trende, was marked for identification.)  
20 MR. HATFIELD: Oh, sorry. Your Honor, the parties  
21 have also agreed on Joint exhibits. So Joint Exhibit 1 is  
22 the map that was filed by the Judicial Redistricting  
23 Commission. And in your book there is an exhibit list that  
24 kind of says generally what I'm going to say. Joint  
25 Exhibit 1 is the map.

1 Joint Exhibits 2 through 5 are kind of zoomed in on  
2 particular sections of that same map.

3 Joint Exhibit 6 is the Missouri Roster. I'm not sure  
4 that is going to be important here.

5 Joint Exhibits 7, 8, 9, 10, 11, 12, 13, 14 and 15 are  
6 maps that were proposed during the Citizens Commission  
7 process.

8 Joint Exhibits 16 and 17 are discovery responses from  
9 the Secretary of State.

10 Joint Exhibit 18 is a transmittal letter on the plan  
11 we're here about.

12 Joint Exhibit 19 is kind of another map of what the  
13 Judicial Redistricting Commission filed.

14 That is not a draft, right?

15 MR. JOHNSON: On 19?

16 MR. HATFIELD: Yes.

17 MR. JOHNSON: No.

18 MR. HATFIELD: That's the actual map.

19 MR. JOHNSON: Correct.

20 MR. HATFIELD: Joint Exhibit 20 has to do with notice  
21 of public hearing, as does 21.

22 This is a curriculum vitae for a witness of the  
23 Secretary of State.

24 Joint Exhibits 23, 24 are some e-mails that are  
25 relevant I assume to that witness.

1 Joint Exhibit 25 is Plaintiffs', one of Plaintiffs'  
2 interrogatory responses.

3 Joint Exhibits 26 and 27 are exhibits created by the  
4 Secretary of State's expert that were used in his  
5 deposition. So that is what those are.

6 We also have a thumb drive with all of those exhibits  
7 on it. I don't know if Your Honor is going to need it, but  
8 we have one.

9 We move for the admission of Joint Exhibits 1 through  
10 27.

11 MR. JOHNSON: Relevance. We object to relevance on  
12 the Missouri Roster because we don't understand how that is  
13 coming in. We also --

14 MR. HATFIELD: Let me interrupt, Mr. Johnson, for a  
15 minute. I think we had an agreement on admitting all  
16 these. If we didn't, we didn't. The agreement is, right,  
17 parties reserve the right to object to relevance?

18 MR. JOHNSON: That is correct.

19 MR. HATFIELD: I should have said that, that is my  
20 fault.

21 MR. JOHNSON: Right. That is fine.

22 MR. HATFIELD: No party is going to complain that  
23 these are not authentic documents, that they are not what  
24 they --

25 THE COURT: In a bench trial relevance becomes --

1 MR. HATFIELD: I should have said that at the  
2 beginning to make sure that we preserved. I think some of  
3 theirs aren't relevant, but we move for the admission of  
4 those Joint exhibits, Judge.

5 MR. JOHNSON: As to the stipulations, we don't have  
6 any issues with authenticity of the documents.

7 THE COURT: Everybody is permitted to argue what  
8 weight should be attributed to them. Then Joint 1 through  
9 27 are admitted.

10 (Joint Exhibit No. 1, Missouri Senate Redistricting  
11 Plan-2022 Judicial Redistricting Commission, was received  
12 into evidence.)

13 (Joint Exhibit No. 2, 2022 Judicial Redistricting  
14 Commission Senate Redistricting Plan Secretary of State  
15 Filing March 2022 District 13, was received into evidence.)

16 (Joint Exhibit No. 3, 2022 Judicial Redistricting  
17 Commission Senate Redistricting Plan Secretary of State  
18 Filing March 2022 District 14, was received into evidence.)

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20 Commission Senate Redistricting Plan Secretary of State  
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24 Filing March 2022 District 34, was received into evidence.)

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1 (Joint Exhibit No. 18, 3-15-2022 Transmittal Letter  
2 from Judicial Redistricting Commission to Missouri  
3 Secretary of State, was received into evidence.)

4 (Joint Exhibit No. 19, 2022 Judicial Redistricting  
5 Commission Senate Redistricting Plan Secretary of State  
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7 evidence.)

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14 Trende, was received into evidence.)

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19 evidence.)

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21 to SOS First Set of Interrogatories dated 4-5-2023, was  
22 received into evidence.)

23 (Joint Exhibit No. 26, Population Deviation Chart  
24 Created by Sean Trende, was received into evidence.)

25 (Joint Exhibit No. 27, Compactness Charter Created by

1 Sean Trende, was received into evidence.)

2 MR. HATFIELD: Judge, we also did some deposition  
3 designations and we provided them to the State yesterday,  
4 so as is sometimes a custom, I would have no objection to  
5 the State supplementing the record later with counter  
6 designations. They just saw them yesterday. We did make  
7 deposition designations.

8 (Plaintiffs' Exhibit No. P3, Secretary of State  
9 Deposition Designations, was marked for identification.)

10 MR. HATFIELD: Plaintiffs' Exhibit 3P deposition  
11 designations of the corporate designee of the Secretary of  
12 State. Generally there the witness talks about the  
13 Secretary of State's position on the judicial maps, agrees  
14 that they divide Buchanan County, agrees they divide  
15 Hazelwood and talks about their position on compactness,  
16 and identified some of the Judicial Commission maps, and  
17 that is why we're offering it. We would offer Exhibit P3.

18 MR. LEWIS: And, Your Honor, subject to the ability to  
19 do some counter designations, we don't object to those.

20 THE COURT: P3 is admitted on that condition.

21 (Plaintiffs' Exhibit No. P3, Secretary of State  
22 Deposition Designations, was received into evidence.)

23 MR. HATFIELD: And, Judge, I'm not going to hand them  
24 up to you right now, but we have them.

25 (Plaintiffs' Exhibit No. P4, Trende Deposition

1 Excerpts, was marked for identification.)

2 MR. HATFIELD: Judge, Exhibit P4 is deposition

3 excerpts of Mr. Sean Trende, sitting here today, who was

4 designated by the Secretary of State as a witness in this

5 case. Just in case Your Honor looks back at the transcript

6 later, on page 4 he provides a list of the opinions that he

7 has formed in this case. On page 5 through 6, we discussed

8 Hazelwood. On page 7, we discussed -- 7, 8 and 9, we

9 discussed the racial issues which I think Mr. Lewis agrees

10 now is not an issue. On page 9, we also discuss

11 compactness requirements, and that includes page 10. On

12 page 11, there is a brief discussion of Buchanan County,

13 which continues on page 12, and that is why we're going to

14 offer Exhibit P4 for admission.

15 MR. JOHNSON: Subject to the same. Also, we will

16 likely be calling Mr. Trende.

17 (Plaintiffs' Exhibit No. P4, Trende Deposition

18 Excerpts, was received into evidence.)

19 THE COURT: I would think so. You brought him.

20 MR. HATFIELD: All right. Plaintiffs call Sean

21 Nicholson.

22 THE COURT: All right. Raise your right hand.

23 (Witness sworn)

24 THE COURT: Thank you.

25

1 SEAN NICHOLSON,

2 having been duly sworn or affirmed by the Court, was  
3 examined and testified as follows:

4 DIRECT EXAMINATION BY MR. HATFIELD:

5 Q. Good morning, Mr. Nicholson. So sitting in  
6 front of you there are some books. The big one is Joint  
7 exhibits and the small one is Plaintiffs' exhibits, and we  
8 may refer to those as we go through your testimony.

9 A. Okay.

10 Q. And you're welcome to refer to those, subject to  
11 objections that may be lodged.

12 So we've got it, tell the court your name.

13 A. My name is Sean Nicholson.

14 Q. Where are you from?

15 A. I grew up between Palmyra and Hannibal. I live  
16 in Lee's Summit now. I went to the Palmyra High School,  
17 the University of Missouri and then Georgetown University.

18 Q. And what degrees do you hold?

19 A. The Mizzou degree is in sociology, and my  
20 masters from Georgetown is in communication culture and  
21 technology.

22 Q. All right. And you've been sitting here. We're  
23 here about voter distribution and maps and all that. What  
24 work experience do you have relevant to those topics?

25 A. So I work in campaigns. They are predominantly

1 issue campaigns, ballot campaigns, legislative advocacy in  
2 Missouri and around the county. In the course of that work  
3 we -- I pay close attention to voting patterns, demographic  
4 data to figure out, you know, frankly how to win elections  
5 but also on the advocacy side if different policies or  
6 proposals comply with the law and will be within the bounds  
7 of what is possible.

8 Q. So you mentioned initiative petitions. Have you  
9 done any work on initiative petitions that proposed to  
10 amend the constitution with respect to legislative  
11 redistricting criteria?

12 A. I have. I filed the initiative petition that  
13 eventually became known as the Clean Missouri; that  
14 campaign was in 2018. Was also active in legislative  
15 advocacy and policy discussions around legislative  
16 proposals to change some of those voter approved rules. I  
17 was the campaign manager for what you referred to earlier  
18 as the Clean campaign in 2020 as well.

19 Q. And in the course of those, did you have  
20 occasion to learn anything about how the Missouri  
21 legislative redistricting process works?

22 A. I learned a lot.

23 Q. How did you learn a lot?

24 A. Early work was in understanding different policy  
25 choices that could be put forward before voters in the

1 public to change how redistricting would work and the  
2 implications for some of those different choices. In the  
3 course of those, both campaigns, spent a lot of time  
4 talking with the public, talking with leaders, talking with  
5 reporters on the implications of potential choices that  
6 could be made. Not all of those conversations were with  
7 folks who thought that what we were proposing were great  
8 ideas and so there was a lot of try by fire to explain and  
9 understand different points of view on policy choices that  
10 could be made.  
11 And then I would also say expertise deepened during  
12 the first campaign and then advanced in the second campaign  
13 as I understood different choices and policies from similar  
14 campaigns across the county and also from different  
15 proposals that came out of the General Assembly on how to  
16 change the redistricting process.

17 Q. All right. So you've been here when the 2020  
18 census data came out. Did you have any involvement in the  
19 legislative redistricting process that occurred after that  
20 data came out?

21 A. I was really active in organizing citizen input  
22 and activity around that Citizens Commission. I also  
23 advocated directly and worked -- advocated directly with a  
24 number of the commissioners, particularly on the Democratic  
25 side. I worked to draw maps both for the House and Senate



1 commissions, so, yeah, I did. I spent a lot of time  
2 thinking about, understanding the different map choices  
3 that could be made.

4 Q. Did you have any involvement in drawing the  
5 House maps that were eventually adopted and enacted?

6 A. I did. I drew a lot of maps for the House  
7 districts. Some of the districts that I worked to draw  
8 ended up becoming a part of the final draft based on  
9 proposals that were made to the Citizens Commission and the  
10 Citizens Commission subsequent approval of a compromised  
11 plan.

12 Q. Did you have any particular region that you were  
13 focused on?

14 A. I spent a lot of my time focused on the suburbs  
15 but also drew districts all over the state trying to help  
16 the commissioners and help all of the advocates who were  
17 trying to get to a good final plan, you know, get to a  
18 solution that was, you know, ultimately was adopted.

19 Q. So when you drew the maps that we talked about  
20 with the House and even with the Senate, what is the  
21 process to figure out how to draw a map?

22 A. So step one is understanding the rules that the  
23 constitution lays out for what is required. And then as a  
24 practical matter, using different software tools.  
25 Maptitude is one tool. Dave's Redistricting app is another

1 tool that is more public facing. The first thing is  
2 figuring out the easy things. So it is a great big huge  
3 problem to solve, so figure out what the easy things are  
4 first.

5 On the Senate map that means Boone County is a Senate  
6 district. It means that Jasper and Newton are Senate  
7 districts because they fall within the 3 percent allowance.

8 And then as the work continues, most of it then focuses on  
9 the big tickets which are in Jackson, St. Charles and St.  
10 Louis County.

11 As a practical matter, the way the constitution is  
12 written, you are supposed to keep counties together, so you  
13 do that first, and then you work to the places where there  
14 is more discretion given later on.

15 Q. And when you, when you were giving that answer  
16 you talked a little bit about Maptitude and Dave's

17 Redistricting. Is there some state government office that  
18 is involved in the redistricting process?

19 A. Yes. So during the Citizens Commission process,  
20 the Office of Administration provided technical support

21 both for the commissioners and for the public. The tool  
22 that they recommended using is Dave's Redistricting app. I

23 believe that recommendation is still on the Office of  
24 Administration's website today.

25 Q. And the tool that they recommended using was

1 what, just to be clear?

2 Official Court IA. The tool is recommended for using for both  
3 drawing and analyzing draft plans and quite frankly final  
4 plans as well.

5 Q. And I think there is some testimony that is  
6 actually already in the record because the court has  
7 already accepted it, that Mr. Trende believes that Dave's  
8 Redistricting is the best publicly available program. Do  
9 you agree?

10 A. I agree with Mr. Trende's assessment.

11 Q. Okay. And what about -- You said you used  
12 Maptitude. I don't know it is important, but give the  
13 court a brief -- Why Maptitude, what is it?

14 A. So it is fundamentally the same. I think the  
15 differences between Maptitude and Dave's Redistricting is  
16 not all that different than Microsoft Word and Google Docs,  
17 it is the same end product. One is available for everyone  
18 to use. Maptitude can allow additional layers of data to  
19 be added. It can allow more precision, where you are  
20 really getting into super fine things, but Dave's is great.  
21 And certainly when it comes to whether or not counties and  
22 municipalities are kept whole it is more than efficient.

23 Q. I've been struggling with Dave's. It kind of  
24 sounds like somebody's garage. In your experience, was  
25 there an agreement on Dave's?

1 A. Yes. It was -- Yes. There was an agreement  
2 that Dave's was a totally adequate good tool. It is  
3 recommended by OA for evaluating maps. And their data, in  
4 terms of population and demographics, comes straight from  
5 the Census Bureau which is, you know, that is the shared  
6 data set that everyone is using.

7 Q. So it may be obvious we're maybe skipping a  
8 step. Explain to the Judge. We open up Dave's and we say  
9 draw me 34 maps, or do you have to give it instructions?

10 A. So you start with the state of the jurisdiction  
11 where you want to draw. Step one is, I want to draw  
12 Missouri Senate maps and there is 34 districts, and it will  
13 tell you, okay, the ideal population is about 180,000  
14 people. And then you start to assemble shapes and you  
15 start with the biggest units that you can, so the biggest  
16 units in Missouri are counties and that is what the  
17 constitution says you need to prioritize, and you figure  
18 out what combination of counties can get you to a legal map  
19 that follows the requirements of subdivision (1) in terms  
20 of population allowance. Dave's will tell you, Maptitude  
21 will tell you, hey, you've added too many, you don't have  
22 enough people. Yeah, you are assembling shapes to figure  
23 out is this a district that is legal. And then beyond use,  
24 do you have a legal district, do you have a full map where  
25 all the districts are legal.

1 Q. Well -- And you said are legal. You've heard  
2 the opening. It sounds like we've actually accomplished a  
3 little something, we narrowed some of the issues. So did  
4 Dave's give you data to help you analyze the other factors,  
5 such as the racial factor?

6 A. Yeah. Dave's Redistricting app allows you to  
7 see final districts or any district that you might want to  
8 contemplate what racial demographics are for that district.  
9 The black voter age population, the Latino voter  
10 population, all that data comes directly from the Census  
11 Bureau, and Dave's Redistricting app amounts or combines  
12 that data based on the shapes that are put together for a  
13 proposed or final district.

14 Q. Speaking of shapes, how or does Dave's help you  
15 analyze compactness in any way?

16 A. Yes. Dave's Redistricting app also provides a  
17 number of different scores on a number of different things  
18 that may be interesting on redistricting. Compactness is  
19 one of those. Dave's Redistricting app provides  
20 compactness scores for plans.

21 Q. And then how do you use Dave's to make sure you  
22 are following subdivision (4), which is the issue here, Docu  
23 about county lines and municipal lines?

24 A. So the practical way to know if you are  
25 following county and municipal lines is to operate with

1 those as whole units from the beginning. You can also  
2 officially inspect and see. There are layers to see where  
3 the county lines and where the municipal lines, is this  
4 split or not.

5 I will say during the Citizens Commission process it  
6 was -- you could see the shared assessment of how to  
7 interpret the law come together from how the commissioners  
8 were operating, and the challenging parts were what to do  
9 in the big counties, not whether or not the rural counties  
10 has to be kept whole.

11 MR. JOHNSON: Objection, Your Honor. I would like to  
12 strike everything he said after discussing what the  
13 commissioners and the Citizens Commission did as opinion  
14 evidence and not factual evidence at this time because he  
15 has not been certified as an expert.

16 MR. HATFIELD: I don't think I asked him to offer an  
17 opinion. I don't know that he did. He is reporting what  
18 he personally witnessed in Missouri.

19 THE COURT: I think that is where we are at this  
20 point, so the objection is overruled.

21 BY MR. HATFIELD:

22 Q. So you mentioned that Citizens Commission  
23 process, and I kind of talked about it in opening, but my  
24 opening is not really the record, so let's have you explain  
25 to the Judge at a fairly high level.



1 A. Okay.

2 Q. What was the Citizens Commission?

3 A. So the Citizens Commission, there were two  
4 caucuses that were created under rules outlined by the  
5 constitution. They were empaneled to go figure out what  
6 the new House map should be, what the new Senate map should  
7 be, so two different bodies, and they got to work over a  
8 period of months trying to figure out where there would be  
9 consensus and they tried to reach that consensus. The  
10 House Commission ultimately did. The Senate Commission did  
11 not.

12 Q. Let's talk about the Senate Commission. Did the  
13 Senate Commission elect a chair?

14 A. The Senate Commission elected Marc Ellinger as  
15 the chair. He functionally served as the leader of the  
16 Republican caucus. And then Susan Montee, who is a  
17 Democrat, was selected to be the vice chair.

18 Q. And as a part of that process, did you, Mr.  
19 Nicholson, draw State Senate maps?

20 A. I did. I drew State Senate maps, some of which  
21 were ultimately submitted by commissioners.

22 Q. And when you did that, did you use Maptitude, or  
23 Dave's, or both?

24 A. I used both. So my recollection is a lot of the  
25 early work happened in Maptitude, but for sharing and

1 evaluating maps Dave's Redistricting app was used

2 frequently as a tool as well.

3 Q. All right. And when you drew those maps at the

4 JRCC, what criteria did you consider in coming forth with

5 maps?

6 A. So the most important criteria was what the

7 constitution said. I mean, there are rules that you have

8 to follow and what the commissioners -- And then what I saw

9 was that most of the discussion was about choices that

10 could be made with inside those constitutional bounds.

11 Q. Okay. And so in coming up with those maps, did

12 you use all of the criteria in the constitution?

13 A. Yes. Yes. I made sure in any maps that I drew

14 that I was looking at all of the criteria of the

15 constitution.

16 Q. And so we had a little bit of discussion. Like

17 I said, you've been here. In using those criteria, you've

18 heard one of them referred to as communities of interest.

19 A. Uh-huh.

20 Q. What, what did you do to understand what was

21 meant by communities of interest as a criteria for map

22 drawing?

23 A. In some states communities of interest is a term

24 of art. I mean, whatever the map drawers want. In

25 Missouri, the constitution with the rules that were

1 approved in 2020, it is very explicit that counties and  
2 municipalities are the only communities of interest that  
3 matter. That became relevant in some ways. There are  
4 communities in Missouri that are not incorporated in  
5 municipalities and those don't have any protection by the  
6 constitution, but subdivision (4) says here's how to  
7 protect counties and then here's how to protect  
8 municipalities.

9 Q. And in working on that Citizens Commission and  
10 then drawing those maps, how did you approach the  
11 compactness requirement?

12 A. So compactness was always a concern. We had  
13 a -- I had an understanding, other folks who were working  
14 on maps had an understanding, that it is one of the  
15 criteria that had to be followed, but it was secondary to  
16 the subdivisions above it. So step one is, you have to  
17 have districts with a legal number of people within 3  
18 percent or 1 percent and if you wanted to exceed 1 percent,  
19 you had to follow the county and municipality lines, that  
20 is a pretty clear requirement of subdivision (1). As a  
21 practical matter, subdivision (2) -- I agree with the  
22 assessment of Mr. Trende, that it is not really relevant  
23 for these districts, but as a practical matter, whether or  
24 not you comply with subdivision (2) really pertain to  
25 Jackson County, St. Louis County and St. Louis City.

1 Q. I understand that there was -- and you may have  
2 mentioned it -- there was some process to propose maps to  
3 the Citizens Commission for consideration. Can you tell  
4 the Judge a little what that was like?

5 A. Yes. So there were two different methods by  
6 which maps were considered or made public with the Citizens  
7 Commission. Any member of the public could propose maps.  
8 This was a more open process than it has been in past years  
9 with advances in technology. But then also commissioners  
10 themselves proposed maps and then those maps that were  
11 proposed formally and considered are what appear on the OA  
12 website right now under commission work product.

13 Q. And so when you say "on the OA website," when  
14 they proposed maps, what was the Office of Administration's  
15 involvement in that process?

16 A. My recollection watching the meetings was that a  
17 commissioner would hand the junk drive to a staffer and the  
18 staffer would go to their terminal and they would upload it  
19 for everyone to see. They put it on a central large  
20 screen. Yeah. And that became the shared, hey, this is  
21 the proposal, this is what we think. Yeah.

22 Q. And did you draft maps that the Citizens  
23 Commission considered?

24 A. Yes. I drafted at least most of the maps, if  
25 not all of the -- most of the maps that are listed as or

1 affiliated with Susan Montee on the OA website. I talked  
2 directly with her and worked directly with her to figure  
3 out those proposals.

4 Q. Let's look at Joint Exhibit 14 for a moment.

5 So --

6 MR. HATFIELD: By the way, for the room, on

7 Ms. Cossette's screen it has the right thing. Up there it

8 doesn't. Maybe we can talk just a minute and see how we

9 do.

10 BY MR. HATFIELD:

11 Q. You've got a paper copy in front of you. The

12 big book is the Joint exhibits.

13 A. Okay.

14 Q. And if you would go to tab number 14 --

15 A. Yes.

16 Q. -- we see a document here --

17 MR. HATFIELD: We have it on the screen.

18 BY MR. HATFIELD:

19 Q. -- that says at the top, Senate Commission WP -

20 Montee 5, and based on that are you able to recognize

21 whether this is a map that you drew?

22 A. I believe it is, yes.

23 Q. And this was a map that was considered by the

24 commission?

25 A. Yes.

1 Q. And just to run ahead across with the examples  
2 not adopted by the commission, right?

3 A. Correct.

4 Q. On this map that you drew did you divide  
5 Buchanan County?

6 A. Buchanan is not divided. It is kept whole.

7 Q. And the Judge can see it, but it is part of  
8 district -- Which district?

9 A. It is part of District 12 in this draft.

10 Q. Okay. And -- Okay. And if we were to zoom,  
11 zoom, zoom, does this map divide Hazelwood?

12 A. Hazelwood is kept whole. It does not divide  
13 Hazelwood.

14 Q. And that has to do with Districts 13 and 14,  
15 right?

16 A. Yes. Yeah.

17 Q. When you drew this map, you found it possible to  
18 draw a map using all of the criteria that did not divide  
19 Buchanan County, correct?

20 A. Yes. It is definitely possible.

21 MR. JOHNSON: Objection, Your Honor. He is offering  
22 expert testimony without having certified him.

23 MR. HATFIELD: I am not asking for an opinion.

24 THE COURT: What is the opinion that you think he is  
25 giving?



1 MR. JOHNSON: He just said that -- Counsel's question  
2 was whether or not he found it possible to not divide and  
3 to comply with the constitution and he said, yeah, I was  
4 able to comply without separating Buchanan County.

5 THE COURT: I think complying with the constitution  
6 would be a legal question.

7 MR. HATFIELD: Your Honor, you've got the transcript.  
8 I think what I asked him was, right, we talked about what  
9 criteria did he use, and I think the question was, were you  
10 able to draw a map that did not divide Buchanan County that  
11 complied with all the other criteria that you were using?

12 THE COURT: Objection overruled. He can answer that  
13 question.

14 BY MR. HATFIELD:

15 Q. I think he already did, but I want to make sure.

16 A. Yes, I was able to draw a map without dividing  
17 Buchanan or Hazelwood.

18 Q. And let's look at Joint Exhibit 15. Is this a  
19 map that you drew and that the Citizens Commission  
20 considered?

21 A. I believe it is, yes.

22 Q. And similarly in this version, were you able to  
23 draw a map using all of the criteria you talked about  
24 before that did not divide Buchanan County?

25 A. Yes.

1 MR. JOHNSON: Objection. The document speaks for  
2 itself. Whether or not the Counties are divided or not is  
3 based on the document.

4 THE COURT: Okay. I'll take you at your word  
5 because -- I can tell Buchanan County is not divided. I  
6 have got no idea as to Hazelwood. I'll just take you at  
7 your word that it doesn't divide Hazelwood.

8 MR. HATFIELD: Right. I think that is why I kind of  
9 need the witness.

10 THE COURT: Yeah.

11 MR. HATFIELD: And I don't think that I asked that. I  
12 think we're still on Buchanan County.

13 BY MR. HATFIELD:

14 Q. And, Mr. Witness, your answer with regard to  
15 being able to draw a map without dividing Buchanan County  
16 was?

17 A. Yes, I was able to draw a map without dividing  
18 Buchanan County.

19 Q. And with respect to the City of Hazelwood, if  
20 you were to draw a map, if the court would be able to zoom  
21 in on this or look at the underlying data on the PDF's that  
22 we have, were you able to draw this map without dividing  
23 the municipality of Hazelwood?

24 A. Yes.

25 Q. All right. Now, you talked about the maps that

1 you drew as being the Montee maps. Did you also have  
2 occasion to look at other maps that were considered by the  
3 Joint Commission that you did not draw?

4 A. Yes. I looked and evaluated maps that  
5 Republican commissioners, particularly Marc Ellinger,  
6 proposed as well.

7 Q. And let's look at Joint Exhibit 8.

8 MR. HATFIELD: And for the record, Judge, there are  
9 several of these in here. I am not going through every  
10 single one of them but they are Joint exhibits.

11 BY MR. HATFIELD:

12 Q. Joint Exhibit 8 at the top says Ellinger 2. Is  
13 this the example of the type of map you were talking about?

14 A. Yes.

15 Q. And did you undertake any analysis of whether  
16 these maps also used the criteria that we've talked about?

17 MR. JOHNSON: Objection, Your Honor. Criteria --

18 THE COURT: Let me ask this question. Do you take  
19 this map and you put it in Dave's Redistricting tool or  
20 whatever the other one was called --

21 MR. HATFIELD: Maptitude.

22 THE COURT: -- Maptitude, does it respond with a  
23 request that says that?

24 THE WITNESS: Maptitude can run that report for all  
25 the political subdivisions. In Dave's, it is a visual

1 analysis and you can check and see with each municipal  
2 shape is it broken up, or each county. It doesn't produce  
3 a report in the same way that Maptitude does, but you can  
4 certainly see whether or not a community is broken up.

5 THE COURT: Well, I think given that this tool is on  
6 the OA website, it is made available to everybody, and it  
7 sounds like everybody agrees this is a tool that we use, I  
8 don't know that that requires expert testimony, and it is  
9 certainly subject to cross-examination. I mean, I use the  
10 map and it came out with this. I put it into the Dave's  
11 Redistricting tool.

12 MR. JOHNSON: Okay.

13 THE COURT: I don't think it requires an expert  
14 opinion. Your guy can say I put it in Dave's Redistricting  
15 tool and I got a different answer, I guess.

16 MR. HATFIELD: Yeah.

17 BY MR. HATFIELD:

18 Q. So with respect to, Mr. Witness, with respect to  
19 Joint Exhibit 8, the Ellinger map -- Mr. Johnson is  
20 actually right, it looks on here it did not divide Buchanan  
21 County, right?

22 A. It does not.

23 Q. And were there other Ellinger maps that were  
24 also proposed that did not divide Buchanan County?

25 A. It is my recollection that none of the Ellinger

1 maps split up Buchanan County.

2 Q. So, Mr. Nicholson, let's talk a little bit about

3 what the Judge was asking and I think I know where we're

4 going. So let's look at this one that is up here, and

5 maybe the easy thing to do is look at district -- I guess

6 this is 21 right here, the Ellinger map, and I think that

7 is 12, although Mr. Ellinger's map redistricting skills may

8 not be perfect.

9 But if we look at District 21 in Dave's, what can you

10 tell -- what does Dave's tell you about District 21?

11 A. So in Dave's --

12 MR. JOHNSON: Objection. This isn't in Dave's.

13 MR. HATFIELD: Oh, this one?

14 MR. JOHNSON: That is a good point.

15 BY MR. HATFIELD:

16 Q. Was this in Dave's?

17 A. I probably uploaded it to Dave's to look at.

18 Q. Okay. Let's do it this way. It is a good

19 point. So if Dave's has a district like this --

20 A. Uh-huh.

21 Q. -- you have a map and you have some counties --

22 I don't know this one is in Dave's or not -- but what would

23 Dave's tell you about a particular district in St. Louis

24 County?

25 MR. JOHNSON: Objection, Your Honor. Now we have a

1 hypothetical as to what Dave's Redistricting would tell  
2 him, that is purely expert testimony. Experts are allowed  
3 to answer questions about what hypothetical programs in  
4 software will tell you about things, right? It requires  
5 specialized experience. It requires knowledge and also  
6 experience in doing these things.

7 THE COURT: Okay. This is a tool that is on the OA  
8 website available to the public.

9 MR. JOHNSON: This map --

10 THE COURT: The question was --

11 MR. JOHNSON: I'm sorry, Your Honor.

12 THE COURT: The question was, if you put in a  
13 district, what response or, you know, what evaluation do  
14 you get out of the program, so I think all this goes to the  
15 weight that this gets. But, I mean, if you are going to  
16 put a tool on the website and give it to the public but  
17 then say, I'm sorry, only an expert can testify, that  
18 doesn't make any sense to me.

19 MR. JOHNSON: Your Honor, if it doesn't require an  
20 expert to help the court, further the court's understanding  
21 of how the redistricting software, the various  
22 redistricting softwares calculate compactness, calculate,  
23 you know, decide whether or not things are good for a  
24 purpose but purposes these things are for equal in  
25 population, then anyone can do it, Ratatouille, anyone can



1 cook, and that is certainly, certainly not something that  
2 helps the court understand any of the issues in the case.

3 So it would be irrelevant on top of that as to what his  
4 opinion is as to hypothetically what this software does.

5 MR. HATFIELD: I am not sure where we are, Judge, in  
6 terms of -- I think there is an objection to this witness  
7 telling you what Dave's software -- what kind of metrics  
8 Dave's software gives you about districts.

9 MR. JOHNSON: May I ask the court reporter to read the  
10 question back?

11 THE COURT: Sure.

12 (At this time the record was read back as requested.)

13 MR. JOHNSON: So he is testifying to a complex piece  
14 of software as to what it would say about this set of  
15 counties. So the objections again are, this is properly in  
16 the realm of expert testimony because it requires  
17 specialized experience to know what the software is  
18 actually telling you. And also if the court decides not,  
19 then it is not really relevant for a layman -- It is not  
20 relevant because the court can do it for itself. And it is  
21 not helpful.

22 THE COURT: Well, I guess I'm the judge of what is  
23 helpful, so I just -- The way I understood the question of  
24 it is, what kind of information do you get back from this  
25 program, and you can put your guy on there and he thinks it

1 gives different information, then the court is here to hear  
2 that. But in terms of what happened when this guy put this  
3 in this map, I think he is qualified to testify to that.  
4 And I think it goes to the weight at the end of the day.

5 Objection is overruled.

6 BY MR. HATFIELD:

7 Q. So generally, what kind of information?

8 A. So Dave's provides population, demographic data  
9 and some partisan historical data for any plan and for all  
10 the districts in a hypothetical plan, and so what -- I  
11 looked at a lot of different plans in Dave's and what it  
12 would provide for these combination of counties or these  
13 combinations of counties and jurisdictions would be how  
14 many people were in that district, according to the 2020  
15 census, is the district contiguous, that is a yes or no  
16 question that is required by the Missouri constitution. It  
17 would say does this district comply with 3 percent  
18 population allowances, yes or no. That is a binary  
19 question. And then it would have columns of data for a  
20 bunch of different demographic numbers that come from the  
21 Census Bureau. And then also election, partisan, voting  
22 history that Dave's Redistricting tool has compiled over  
23 the years.

24 Q. So my wind up for this pitch, if you move the  
25 line and add a county, what happens?

1 A. So --

2 MR. JOHNSON: Objection, Your Honor. Again, this is a  
3 hypothetical question as to what happens in a different  
4 software program that is not technically this exhibit. And  
5 at a minimum I would ask the court and/or counsel to  
6 clarify, that he is only testifying as a fact witness at  
7 this point.

8 MR. HATFIELD: You are looking at me. I don't know  
9 whether I need to tell you whether this witness is  
10 testifying as a fact witness, but it sounds to me like so  
11 far that is what he is doing.

12 THE COURT: So far he did this and this is what he got  
13 back.

14 MR. JOHNSON: Except he was talking about what things  
15 could happen if you did different things in a software  
16 program that is not represented in the exhibit before you  
17 that he claims to have experience in, so either he can  
18 qualify as an expert for having experience working with  
19 Dave's Redistricting, it is so awesome, and he has done it  
20 for a dozen years, right, or he is a fact witness saying  
21 what he did in Dave's Redistricting, what specifically he  
22 did in Dave's Redistricting, not what he could have or  
23 potentially would have done, those are hypotheticals that  
24 are offered by experts, that is not a fact.

25 THE COURT: Well, he has got experience with Dave's.

1 And the way I understood the question was, if you took a  
2 county out or added a county in, when the machine changes  
3 its report, and what -- I mean, does it re-adjust. I just  
4 don't see this as expert testimony. I just see this as,  
5 you know, what happens with this particular -- I mean,  
6 expert testimony in the sense of -- he has used the Dave's  
7 Redistricting tool, I think he has enough experience to  
8 testify as to what it does. You change the county line,  
9 you take a county in, you put a county out, you draw a line  
10 somewhere else, and it calculates based on the census data,  
11 as I understand it, what that district looks like, so I  
12 don't think that -- I think this guy is qualified, to the  
13 extent he has to qualify, to those facts. The objection is  
14 overruled.

15 BY MR. HATFIELD:

16 Q. So you heard what the Judge said. That is what  
17 I'm trying to have you explain to him, you know, you could  
18 draw this map in a slightly different way and use Dave's --  
19 how would you use Dave's as you change the lines?

20 A. Yes. So at this stage, if I was wanting to  
21 evaluate this particular plan or any plan, you would move  
22 counties or voting districts or census blocks between  
23 districts and then Dave's, or the other tools, would tell  
24 you the new data for that new hypothetical district that  
25 you had just set up. If you added a county to a particular

1 district, it would tell you both of the districts that were  
2 just modified because it got moved; they are both still  
3 legal on the population deviation requirement or not. It  
4 would tell you yes or no these counties are contiguous, so  
5 this is a legal district or not. Other evaluations of  
6 other criteria in the constitution require more analysis,  
7 but on those simple are you following subdivision (1)  
8 population deviation requirements, it is a yes or no  
9 question.

10 Q. Let me do this just to make sure we've got a  
11 record on this. So you were familiar with the Citizens  
12 Commission?

13 A. Yes.

14 Q. Did anybody on the Citizens Commission claim to  
15 be an expert of any type?

16 A. I don't recall, I don't recall that, no.

17 Q. They were -- Who appointed them?

18 A. Commissioners were selected in a multi step  
19 process. They were nominated by congressional district  
20 committees of two major parties and selected by the  
21 governor.

22 Q. As far as you know, were there any requirements  
23 that they be experts on how to do map drawing or  
24 demographics or any social sciences at all?

25 A. I don't believe those requirements are spelled

1 out in the constitution. And my recollection is they were  
2 people from many industries and backgrounds.

3 Q. At least on the House side that you worked on,  
4 those folks were able to draw a map that ended up being  
5 enacted, correct?

6 A. Correct.

7 Q. And on the Senate side, generally was your  
8 observations that folks were able to propose maps and at  
9 least half of them were able to agree on a map?

10 A. Correct. Yeah. There was no problem proposing  
11 maps and evaluating them.

12 Q. So there was a map that was created and that is  
13 what we're here to talk about. Hold on one second. Let me  
14 make sure. Yeah. And so Joint Exhibit 1 is in front of  
15 the court already. You've got a big book there, but I  
16 think Ms. Cossette is going to be able to do this.

17 MS. COSSETTE: Yes.

18 MR. HATFIELD: Joint Exhibit 1 is ready to go.

19 BY MR. HATFIELD:

20 Q. Are you familiar with this document?

21 A. Yes.

22 Q. And did you review it at the time that it was  
23 enacted?

24 A. Yes, I did review it at the time it was enacted.

25 Q. And did you notice anything in reviewing it



1 about the political subdivision splits that we're talking

2 about today?

3 A. Yes. It was immediately apparent that Buchanan  
4 County had been split.

5 Q. Okay. And this is page --

6 MR. HATFIELD: So, Judge, because of the way  
7 everything was produced, at the very bottom every page has  
8 the same number, but when you go back to look at this

9 later, there are these little -- that's the same number on  
10 every single page down there. Right above that there is a  
11 number there?

12 THE COURT: Yeah.

13 BY MR. HATFIELD:

14 Q. So on page 8 of 52 --

15 MS. COSSETTE: 252.

16 BY MR. HATFIELD:

17 Q. -- of 252, did you understand this to be a blow  
18 up the Judicial Commission made of Buchanan County?

19 A. Yes.

20 Q. And do you have an understanding of the  
21 political subdivisions within Buchanan County that you  
22 gained from your personal drawing of maps?

23 A. I do, yeah.

24 Q. Do you know what is going on with this little  
25 jet out up here?

1 A. So the lines of the City of St. Joseph aren't on  
2 this map, but my recollection is that that line is  
3 following the municipal boundaries of the City of St.  
4 Joseph.

5 Q. Okay. And then if we flip on to page -- I'm  
6 sorry. Now I'm going to go to a different exhibit, which  
7 is Joint Exhibit 5. This is also in evidence. At the top  
8 it says Judicial Redistricting Commission, Senate  
9 Redistricting Plan. Have you seen a map like this before  
10 in your work on redistricting?

11 A. Yes.

12 Q. And generally what does this map show us?

13 A. This shows the final version of Senate District  
14 34 that came out of the Judicial Redistricting Commission,  
15 and that's the current District 34.

16 Q. And so there is a legend over there on the right  
17 side.

18 A. Yeah.

19 Q. And is there a way for the court to tell if that  
20 legend is -- if we had a really good copy, if you zoomed in  
21 on the PDF -- where the municipalities are?

22 A. So there is -- In the legend it says  
23 "Incorporated Places," which are relevant here, and if you  
24 zoomed in you would be able to see the boundaries, like the  
25 south and west side of the City of St. Joseph, and I

1 believe you would also see the bright green line, which is  
2 the edge of the Senate district line up -- Essentially you  
3 can't see the city limit because the green line is bigger  
4 and brighter.

5 Q. And is there something in the legend about  
6 counties?

7 A. There is. There is -- Counties are in the  
8 legend.

9 Q. Okay. And it is not completely clear on that  
10 version, so that is why I just wanted to -- And when you  
11 look at that legend, I think we've all agreed, Buchanan  
12 County is divided between two State Senate districts,  
13 right?

14 A. Yes.

15 Q. You heard Mr. Lewis say in his opening that --  
16 well, I'm paraphrasing, but it is okay to divide counties  
17 sometimes. In your map drawing, did you at times divide  
18 counties?

19 A. According to how the constitution says you can  
20 and are allowed to divide counties, yes.

21 Q. So give me an example.

22 A. So an example is the City of Jackson or the  
23 County of Jackson, with a priority on keeping the county  
24 whole, there are now four Senate districts wholly contained  
25 with inside. Wholly contained I believe is the language

1 from the constitution. If you could point me to the right  
2 exhibit, I'm happy to read directly from it. Wholly  
3 contained is one of the things that the constitution asks  
4 for.

5 And then there are counties such as Greene, Clay,  
6 Jefferson where the constitution says if you can put a  
7 Senate district entirely inside the county do that, and  
8 then the remainder part should be kept whole and attached  
9 to neighboring counties, so those are a couple of  
10 representative examples.

11 Q. So this is page 127 of Joint Exhibit 1. This is  
12 Jackson County.

13 A. Uh-huh.

14 Q. It says it anyway. Is this kind of what you  
15 were talking about just a minute ago?

16 A. It is.

17 Q. So here -- Well, tell the Judge, what is  
18 happening here in Jackson County?

19 A. So I would need to pull the population deviation  
20 numbers for each of the individual districts from one of  
21 the Joint exhibits, but all of these districts are

22 completely inside Jackson County per the constitution. In  
23 general terms, the northeastern District 11 is the City of  
24 Independence. Buckner, like those communities are kept  
25 whole. The southeast district is the City of Lee's Summit

1 and other unincorporated areas, and then districts -- the  
2 two districts on the western side follow a good chunk of  
3 the City of Kansas City municipal lines.

4 Q. So if we go one page earlier, page 11 of 252 on  
5 the Judicial Redistricting Plan, is this an example of  
6 another type of county split that you are talking about?

7 A. Yeah. In subdivision (4) there is an in  
8 priority order or in order sequencing to how you deal with  
9 the bigger counties, and this is an example of either the  
10 second or third requirement that says, if the district can  
11 be wholly contained inside a county -- that is what we see  
12 here as District 22 -- you can put all of that inside the  
13 boundaries of Jefferson County, and the remainder is now  
14 what is District 3 and got appended to other whole  
15 counties.

16 Q. So in the Senate plan that was filed, were you  
17 able to ascertain, is there a whole Senate district inside  
18 of Buchanan County?

19 A. There is not a whole county inside -- There is  
20 not a whole district inside Buchanan County.

21 Q. And let's now -- Let's talk about Hazelwood for  
22 just a minute.

23 A. Yeah.

24 Q. Joint Exhibit 2. Can you tell the court what  
25 Joint Exhibit 2 shows us?

1 A. Joint Exhibit 2 is State Senate District 13 in  
2 the enacted plan that came from the Judicial Commission.  
3 It borders District 14 and it is a chunk of northern St.  
4 Louis County.

5 Q. Similarly -- Although the copy here, the colors  
6 aren't great, but is there a legend here that would show  
7 you where the municipal lines are?

8 A. The legend shows both county and municipal  
9 lines.

10 Q. And I am not going to be able to do this. Can  
11 you tell us kind of where Hazelwood is?

12 A. So Hazelwood is in the vicinity of your finger  
13 right now, yeah, about where the number says 14. And the  
14 district line, the green line that is the boundary of 13,  
15 goes through the incorporated boundaries of the City of  
16 Hazelwood.

17 Q. So this kind of line right here, this green  
18 line?

19 A. Yes.

20 Q. Okay. All right. And then -- So in looking at  
21 Joint Exhibit 1, let's look at page 15 of 22. Or 252. I  
22 said -- It is page 15.

23 MS. COSSETTE: I've got it up.

24 BY MR. HATFIELD:

25 Q. And have you seen information like this going



1 through mapping and Dave's, et cetera?

2 Official Court Document IA. A. Yes.

3 Q. What are we looking at? It says it but just  
4 tell the Judge what we're seeing here.

5 A. Yes. This is a chart that outlines the  
6 deviation of each of the Senate districts in the enacted  
7 plan. That is how many more or fewer people it has than  
8 the ideal population number. The constitution is very

9 clear that under these circumstances you can -- you've got  
10 to keep the deviation under 1 percent and if you want to go  
11 to 3 percent, per the other conditions, so the final column  
12 is what I would have spent most of the time looking at in

13 drawing and evaluating plans, which is, you know, are any

14 of these more than 3 percent in absolute terms, and then of  
15 the ones that are more than 1 percent, do they follow the  
16 community boundaries as outlined in the constitution.

17 Q. So somebody asked -- I know the Judge is good at  
18 math. -- some of these are negative numbers?

19 A. Yes.

20 Q. Can you explain positive versus negative  
21 numbers?

22 A. Yeah. So if you are looking at Districts 33 and  
23 34, District 33 has 2,400, 2,500 people less than the  
24 181,000, which is the ideal population, so that works out  
25 to minus 1.37 percent. 34 has about -- almost 5,000 more

1 than the ideal number, so the deviation is 2.71. So what  
2 matters for our analysis or in my experience the analysis  
3 that is done is that absolute value, so it doesn't matter  
4 positive or negative. It just means is that first numeral  
5 3 or greater.

6 Q. Could you tell whether, in looking at the maps  
7 in dividing Buchanan County, could you tell whether you  
8 have to divide Buchanan County to comply with the  
9 population proportion requirements?

10 A. Can you ask that again so I make sure I  
11 understand.

12 Q. Yeah. Could you tell whether you must divide  
13 Buchanan County in order to comply with the population  
14 requirements?

15 A. So District 34 has a population deviation of  
16 2.71, so my next step would be, in evaluating this plan,  
17 are the relevant jurisdictions kept together, and so I was  
18 frankly surprised when Buchanan County was split given  
19 these population deviation numbers.

20 Q. Okay. And so let's talk a little bit about  
21 compactness because I understand the State's expert wants  
22 to talk about compactness. Did you find anything in what  
23 the Judicial Commission filed, Joint Exhibit 1, that would  
24 assist us and assist the court in compactness analysis?

25 A. No. I didn't see any compactness data in the

1 JRC's submission.

2 Q. And did you take a look to see, in terms of  
3 looking at the shapes, give you any insight how you should  
4 think about compactness?

5 A. So I looked at the language of the constitution,  
6 the things that were notable to me were no metrics were  
7 specified. There are specific rules to follow on other  
8 criteria but not on compactness. It is in general standard  
9 and it also mentions that the in general requirement you've  
10 got to follow political and geographic boundaries.

11 Q. All right. So in terms of what the commission  
12 did and how they approached compactness -- Let's look at  
13 page 12 again of Joint 1, which is Jackson County. And  
14 here we have District 7, is that right? This entire red  
15 outline is District 7?

16 A. That's right.

17 Q. And then we have District 9, that entire red  
18 outline. And so in using the tools, how do you -- what  
19 will the tools tell you about whether those are compact?

20 A. So you could get a compactness score for the  
21 overall plan. You could also look to find compactness

22 scores for particular districts. There are a number of  
23 different measurements for compactness. My approach in  
24 general over a few years is not to be overly relying on any  
25 one metric for any goal but to look at a combination of

1 scores or metrics together for a multi part analysis.

2 Q. So let's look at, for a minute, at page 10 of

3 252, and tell the court -- probably pretty obvious, but

4 what are we looking at here?

5 A. We are looking at Greene County. Greene County

6 is one of the counties that is larger. The population of

7 Greene County is greater than a State Senate District.

8 District 30 is wholly contained inside Greene County and it

9 mostly follows the municipal boundaries for the City of

10 Springfield. There are a couple of census blocks that are

11 added outside, but it doesn't cross city lines, so my read

12 of this is that the Judicial Redistricting Commission kept

13 Springfield whole, that was a goal, and that is --

14 MR. JOHNSON: Objection, Your Honor. He is now

15 testifying as to what the Judicial Commission's goal was

16 and there is no foundation laid as to whether he knows what

17 the --

18 THE COURT: Sustained.

19 BY MR. HATFIELD:

20 Q. Okay. And are you familiar with the boundaries

21 of the City of Springfield?

22 A. Yes.

23 Q. How are you familiar with those?

24 A. I am familiar from drawing a lot of maps that

25 involved Greene County and the City of Springfield.

1 Q. Did you actually draw a map close to or that is  
2 this map?

3 A. I did not draw this map, but I drew a lot of  
4 maps that look a lot like this.

5 Q. Okay. And so when you said a minute ago it  
6 generally follows the boundaries, that is based on actual  
7 review of the boundaries of the city?

8 A. Correct, yes.

9 Q. Okay. All right. So you looked at the Judicial  
10 Commission map. Did you then try using the criteria and  
11 the tools that we've talked about a minute ago to draw, as  
12 I think the Judge put it on Monday, a better map?

13 A. I did.

14 Q. And what criteria did you use in drawing your  
15 better map?

16 A. I used all the criteria that are in the  
17 constitution.

18 Q. Okay. And did you come up with something?

19 A. I did.

20 Q. And when you say better map, were you able to  
21 come up with a map that employed all of the criteria we  
22 talked about but did not divide Buchanan County?

23 A. Yes.

24 Q. And were you able to come up with a map that  
25 employed all of the criteria we talked about and did not

1 divide the City of Hazelwood?

2 Official Court Document Yes.

3 (Plaintiffs' Exhibit No. 1, Nicholson Proposed Remedy  
4 Map, was marked for identification.)

5 BY MR. HATFIELD:

6 Q. And look at Plaintiffs' -- that is your small  
7 book on your left -- Plaintiffs' Exhibit 1.

8 MR. JOHNSON: I don't have a copy.

9 MR. HATFIELD: I thought you had a book. Sorry.

10 MR. JOHNSON: No, that is fine.

11 BY MR. HATFIELD:

12 Q. Plaintiffs' Exhibit 1 --

13 MR. HATFIELD: By the way, it says Exhibit B. That is  
14 Exhibit B to the petition that was filed and I just want to  
15 keep it straight.

16 THE COURT: Okay.

17 BY MR. HATFIELD:

18 Q. In looking at Plaintiffs' Exhibit 1, have you  
19 seen this document before?

20 A. Yes.

21 Q. What is this?

22 A. This is a printout from the Dave's Redistricting  
23 app of -- I believe it is a map that I drew to keep  
24 Buchanan whole and keep Hazelwood whole.

25 Q. And we've got a PDF of this on a thumb drive,



1 but this is something that the court could zoom in on if it  
2 wanted to, correct?

3 A. Yes.

4 Q. And I notice -- This is my fault. It doesn't  
5 really have county lines on it, does it? Or does it?

6 A. That is correct. This particular version  
7 doesn't have county lines but it does have incorporated  
8 municipal boundaries.

9 Q. That is what kind of looks like lights that are  
10 municipalities?

11 A. I say lakes.

12 Q. So does this map that you drew, but I think you  
13 answered but let's just be clear, it creates a new map that  
14 does not divide Buchanan County, correct?

15 A. Correct.

16 Q. And in order to do that, what did you have to  
17 change?

18 A. So the first step I did was, I knew from  
19 experience that the part of Clay County that is not in

20 District 17 could be combined with Platte County to be the  
21 population -- like within the population deviation bounds,

22 and I then had a District 21 and a District 12 that  
23 weren't -- they didn't have the right number of people and

24 so then it was a process of figuring out which counties

25 ought to be moved or could be moved from one district to

1 the other to have legal districts for District 12 and

2 District 21.

3 Q. Let's back up for a minute. You talked about

4 Platte County and what did you say, Clay?

5 A. Yeah. The northern part of Clay County, yes.

6 Q. What district did that become on the map that

7 the Judge is looking at?

8 A. That became District 34.

9 Q. Okay. And then let's just break it in to steps.

10 So once you did that, what happened with -- Pick a

11 district. One of the districts was too big, too small?

12 A. Yes. So District 21 would have had too few

13 people because there are a lot of people who live in

14 northern Clay County, so once that portion of the county

15 was added to District 34, combined with Platte County, you

16 needed to add more humans to District 21, which is orange

17 in this printout, in this display, and so my recollection

18 of the changes is that some of those northwestern counties,

19 they are mercifully square blocks in north central

20 Missouri, those got added across. And then I was able to

21 look -- If anyone wants to look in Dave's, there is a

22 statistic button in the top right corner, that is where you

23 look and see, okay, do these new districts have an

24 acceptable number of people that is inside the deviation

25 requirements.

1 Q. And we put it into evidence, but Mr. Trende did  
2 some analysis of your map and the population statistics in  
3 terms of whether they have populations. Have you reviewed  
4 that?

5 A. I did look at that, yes.

6 Q. And do you agree with his analysis of how the  
7 populations are divided?

8 A. Yes. It seems correct to me.

9 Q. All right. And then you said you used all the  
10 other criteria, and, you know, I think we've got an  
11 agreement here on what we're really talking about. Did you  
12 look to see whether there was any issue with the racial  
13 requirement in your map?

14 A. So, yes, I was able to see in the statistics  
15 section what the different racial characteristics are of  
16 the new districts. I also knew from experience that in  
17 northwestern Missouri that it wasn't going to be a big  
18 issue, but I was able to look at the data.

19 Q. It is not a big issue because these are  
20 predominantly white districts?

21 A. Yeah.

22 Q. And were you able to, for your map, were you  
23 able to access any statistics about compactness?

24 A. Yes. I was able to look at compactness scores  
25 for this plan.

1 Q. And what did you find about your compactness  
2 scores?

3 A. The compactness scores provided by Dave's show  
4 that this possible alternative was as compact as what the  
5 Judicial Redistricting Commission put forward.

6 Q. And similarly the state's expert -- We put in  
7 some deposition exhibits. I think they may be a Joint  
8 exhibit. -- he did some analysis on various measures of  
9 the compactness of your map, and did you have any reason to  
10 disagree with the analysis he did?

11 A. I don't have any reason to disagree with that  
12 analysis.

13 Q. All right. And then the fifth factor we've all  
14 kind of agreed it doesn't matter. Let's make sure the  
15 court understands. Are you changing the partisan makeup of  
16 any of these districts in a substantial way?

17 A. No, not in a substantial way.

18 Q. And I think we have some deposition testimony on  
19 that, that Mr. Trende says he doesn't think it does either.  
20 Do you agree with that?

21 A. I do.

22 Q. All right. I think we just talked about what  
23 I'm going to call the northwest quadrant. If the court  
24 were to zoom all the way in a PDF, does your map leave the  
25 municipality of Hazelwood completely intact?

1 A. It does.

2 Q. And how many -- I think you used the word  
3 humans. How many humans did you have to move to draw a map  
4 that left Hazelwood intact?

5 A. It was not a lot relatively speaking. I don't  
6 remember the exact number, but what it led to is one of the  
7 districts being out of compliance, so once it got added to  
8 the new district, too many people, so some folks in the  
9 neighboring or in other municipalities, unincorporated  
10 areas, along the boundary between 13 and 14, needed to be  
11 adjusted.

12 Q. Do you recall generally, are we talking about  
13 1,000 people?

14 A. A few thousand people.

15 Q. Okay. And similarly, in doing that, were you  
16 able to review statistics on what your new map looks like?

17 A. Yes.

18 Q. And you were able to come to a population  
19 deviation there?

20 A. Yes.

21 Q. Mr. Trende has done some analysis of your map  
22 and do you agree with his analysis?

23 A. I do.

24 Q. And were you able to do some compactness or see  
25 some compactness analysis there?

1 A. Yes.

2 Q. And Mr. Trende, do you agree with Mr. Trende's  
3 analysis of the measurements on compactness?

4 A. I have no reason to disagree with his analysis.

5 Q. All right. And what about the racial issue,  
6 does your map create an issue under the racial criteria?

7 A. I don't believe so. And I generally agree with  
8 Mr. Trende's analysis from what I reviewed, that this is  
9 not a racial gerrymandering concern or case with these two  
10 districts.

11 Q. And on your maps, to keep the record straight,  
12 in that area we do have a higher percentage of black voters  
13 than we would in Buchanan County, so generally what  
14 statistics do you see on your new districts?

15 A. So my recollection is that the black voting age  
16 population in the map that I drew increased by a small  
17 amount for District 14. It decreased by a small amount in  
18 District 13 but not enough to change any sort of partisan  
19 outcomes. So, yes, small amounts, yeah.

20 Q. All right.

21 MR. HATFIELD: Move for the admission of Plaintiffs'

22 1.

23 THE COURT: Plaintiffs' 1 is your proposed map. Is  
24 that correct?

25 MR. HATFIELD: Yes.



1 THE COURT: Plaintiffs' 1 to be admitted.

2 (Plaintiffs' Exhibit No. 1, Nicholson Proposed Remedy  
3 Map, was received into evidence.)

4 BY MR. HATFIELD:

5 Q. So we're almost done here, Mr. Nicholson. Just  
6 talking about Buchanan, the Buchanan County issue for just  
7 a moment. You walked the court through what I call the  
8 Montee maps, the ones that you drew for the Judicial  
9 Commission.

10 A. Uh-huh.

11 Q. Is Plaintiffs' 1 that you drew similar in any  
12 way to the Joint exhibit we looked at a minute ago, the  
13 Montee map?

14 A. Yes. Particularly with the northern part of  
15 Clay County and all of Platte County, there were choices  
16 that could be made where the lines for what is now District  
17 17 were, and I don't remember the exact spots where those  
18 were, but northern Clay and Platte is similar. In the  
19 constitutional requirements for how to fix potential  
20 problems, the constitution says only modify the districts  
21 that are required; so the choices made by the Judicial  
22 Redistricting Commission throughout the rest of the state  
23 do limit the number of county combinations that would be  
24 allowed to have legal Districts 21 and 12, but it is pretty  
25 similar.

1 Q. And so you've described it to me as lego blocks.

2 A. Uh-huh.

3 Q. And tell me what that means.

4 A. The lego block metaphor made sense to me because

5 you are moving whole chunks. You are not moving just

6 precincts inside a county if you don't have to. If you can

7 use big blocks, whatever shape you make, you are using --

8 you are not using teeny tiny pieces, you are using larger

9 blocks. And the way I understand the constitutional rules

10 and the way I evaluated maps keeping counties whole and

11 contiguous is clearly a priority and so the counties became

12 legal blocks in my mind, drawing and evaluating different

13 plans.

14 Q. For example, on this one we can't really see it,

15 but somewhere up there there is Mercer County, it is a

16 little square, that is one of the lego blocks you might be

17 able to move either direction?

18 A. Yeah, exactly.

19 MR. HATFIELD: I don't have any further questions for

20 this witness.

21 THE COURT: Take about a ten-minute break.

22 MR. HATFIELD: Thank you.

23 (At this time a recess was taken.)

24 CROSS-EXAMINATION BY MR. JOHNSON:

25 Q. Thank you, Mr. Trende (sic).

1 MR. HATFIELD: Nicholson.

2 BY MR. JOHNSON: an Official Court Document Not an Official Court Document

3 Q. I'm sorry, Nicholson. Two Seans here today. I  
4 apologize.

5 We have met each other before, right?

6 A. Yes.

7 Q. Just to be clear, your testimony this morning,

8 you are not testifying as an expert designated by the

9 Plaintiff. Is that correct?

10 MR. HATFIELD: Object, that it calls for a legal  
11 opinion.

12 MR. JOHNSON: Your Honor, it calls for what is he here  
13 testifying for. Certainly goes to credibility of the  
14 witness.

15 THE COURT: He is -- I assume he is testifying to his  
16 experiences doing what he is doing, so it is what it is.

17 BY MR. JOHNSON: Not an Official Court Document Not an Official Court Document

18 Q. Okay. So just to be clear, before 2016, you  
19 didn't have any experience in legislative redistricting or  
20 map drawing, right?

21 A. I don't recall any.

22 Q. In fact, your first redistricting work in  
23 general was in 2016, right?

24 A. No.

25 Q. Mr. Trende (sic), do you remember when we talked

1 last?

2 A. Mr. Nicholson.

3 Q. Sorry, Mr. Nicholson. Do you remember when we  
4 talked last?

5 A. Yes.

6 Q. And it was at your deposition, right?

7 A. Yes.

8 Q. And you were under oath?

9 A. Yes.

10 Q. And you were being truthful with me then, right?

11 A. Yes.

12 Q. Would you pull the Trende deposition in, please.

13 THE COURT: I assume the Nicholson deposition?

14 MR. JOHNSON: Sorry.

15 THE COURT: That is all right.

16 MR. HATFIELD: Judge, I know it is a judge tried case,

17 but I object to the improper impeachment to question the

18 witness about the deposition.

19 THE COURT: Well, there is a way to do that.

20 MR. HATFIELD: Yes, sir.

21 THE COURT: Okay.

22 MR. HATFIELD: I withdraw. Let's wait and see what

23 happens.

24 MR. JOHNSON: You guys want a copy of it?

25 MR. HATFIELD: Sure.

1 MR. JOHNSON: If I may approach, Your Honor. Sorry.

2 THE COURT: All right.

3 MR. JOHNSON: Thank you, Your Honor.

4 BY MR. JOHNSON:

5 Q. For you, sir. If you could turn to page 31,  
6 please.

7 A. Okay.

8 Q. Are you there, sir?

9 A. Yeah.

10 Q. At line 9, it reads, Question: So someone is  
11 paying you guys to come up with redistricting policy?

12 A. Yeah.

13 Q. Correct?

14 A. Yeah.

15 Q. And then your answer starts: So that was my  
16 first foray into redistricting work starting in 2016. Did  
17 I read that correctly?

18 A. Yeah. That was in context of what we just  
19 talked about, which was communications work in 2011 and  
20 2012 redistricting process.

21 Q. Your communications in the redistricting, in the  
22 redistricting process, right?

23 A. Around that, yeah. As we talked about in that  
24 deposition, I did communications work and then advocating  
25 for more competitive seats, more competition work in

1 partisan fairness, yes.

2 Q. That was providing political news coverage --

3 COURT REPORTER: I'm sorry, you're going to have to  
4 repeat that question again. I didn't get that one at all.

5 BY MR. JOHNSON:

6 Q. That was providing political news coverage for  
7 Fired Up Missouri?

8 A. I don't remember if that was when I worked at  
9 Fired Up Missouri or when I worked at Progress Missouri. I  
10 thought it was Progress Missouri, but 2011 is when I  
11 transitioned between the two jobs.

12 Q. Okay. And in 2011, you weren't drawing any  
13 maps, right?

14 A. Correct.

15 Q. And in 2011, no one asked you to consult on the  
16 maps, right?

17 A. Correct.

18 Q. And to be clear, you remember when Mr. Hatfield  
19 asked you questions about when you were working with the,  
20 when you were working with the Senate Independent  
21 Bipartisan Commission, right?

22 A. I believe so, right.

23 Q. You didn't serve on the commission?

24 A. I did not.

25 Q. You didn't work for the commission, right?



1 A. I don't believe the commission had any  
2 employees, no.

3 Q. But you were not being paid by the commission,  
4 correct?

5 A. Correct. I don't think the commission was  
6 paying anyone.

7 Q. You were not a consultant for the Bipartisan  
8 Citizens Commission, right?

9 A. I talked a lot with members of the commission,  
10 but I did not have an official role for the commission, no.

11 Q. You were not a consultant for the Bipartisan  
12 Citizens Commission, correct?

13 A. Correct.

14 Q. You attended public hearings with the Citizens  
15 Commission, right?

16 A. I did.

17 Q. You saw maps that were presented at the Citizens  
18 Commission hearing?

19 A. I did.

20 Q. And then you also saw other maps by other  
21 citizens or other groups that did not get submitted to the  
22 Citizens Commission, right?

23 A. I did.

24 Q. And you weren't privy to internal commissioner  
25 e-mails, correct?

1 A. I don't remember if I saw a Sunshine e-mail, so  
2 I don't remember whether or not I saw commissioner  
3 correspondence or not.

4 Q. You told me that you weren't privy to none that  
5 weren't made public, right?

6 A. Okay.

7 Q. Yes?

8 A. That is what I said.

9 Q. And the only Missouri commission process that  
10 you advocated with that enacted the map was the House  
11 Citizens Commission, right?

12 A. If that is one of the two commissions, then  
13 yeah.

14 Q. That was the only two commissions that enacted,  
15 correct?

16 A. There were two; the House commission is the only  
17 one that reached consensus, correct.

18 Q. And then you remember a question by Mr. Hatfield  
19 asking you, when you were working on the Citizens  
20 Commission in the House drawing those maps, how did you  
21 handle compactness, right?

22 A. Okay.

23 Q. But you didn't work for the House Commission,  
24 right?

25 A. I did not work for the House Commission.

1 Q. You just had a similar advocacy orientation to  
2 try to get the best possible House maps?

3 A. That sounds like what I said.

4 Q. I think you also stated that you gained a lot of  
5 redistricting experience or reaching policy experience in  
6 doing work within Amendment 1 campaign in 2018, correct?

7 A. That is one of the redistricting campaigns I  
8 worked on, yeah.

9 Q. But during the 2018 Amendment 1 campaign, your  
10 duties did not include census data for drawing a map,  
11 right?

12 A. The census, the 2020 census was done after the  
13 2018 campaign.

14 Q. So your campaign duties did not include  
15 reviewing census data to draw a map, correct?

16 A. Correct.

17 Q. That rule did not involve drawing maps at all,  
18 right?

19 A. I did not draw any maps in 2018, during the 2018  
20 campaign, no.

21 Q. And let's skip back to your experience in 2011  
22 and 2012.

23 A. Okay.

24 Q. I'm sorry, excuse me. So in the 2010  
25 redistricting cycle, you helped with communications to run

1 a bipartisan effort to achieve more competition and more  
2 partisan fairness in the 2011-2012 process, right?

3 A. Yes.

4 Q. Your role was more of a communications role at  
5 the time?

6 A. Yes.

7 Q. And that involved press materials, talking to  
8 reporters, helping to support litigants in that lawsuit,  
9 right?

10 A. That sounds right.

11 Q. And in 2011 you didn't do any maps, right?

12 A. Right.

13 Q. Now you work for GPS Impact, correct?

14 A. Yes.

15 Q. And you primarily work with advocacy and ballot  
16 campaigns?

17 A. Yes.

18 Q. As a campaign manager for the 2018 Amendment 1  
19 initiative, you were primarily responsible for organizing  
20 the work to get the petition in a position where it was  
21 ready to file, right?

22 A. That was one of the parts of the campaign.

23 Q. But was primarily responsible for doing that,  
24 right?

25 A. During the signature gathering phase, signature

1 gathering was the most important work.

2 Q. But first it was, first it was to get the  
3 petition in a position to file, right?

4 A. That comes before signature gathering, yes.

5 Q. And then you organized a coalition to tell  
6 people to get out and vote yes, right?

7 A. That is a decent summary.

8 Q. And those were your day-to-day tasks as the  
9 campaign manager, right?

10 A. There is a lot of different days and a two-year  
11 campaign but, yeah, that is a reasonable summary.

12 Q. You've never drawn a map that was accepted by a  
13 court, correct?

14 A. I don't think anyone sued on that House map.  
15 I am not aware of any litigation pertaining to the House  
16 map.

17 Q. Okay. But a court hasn't ever approved a map  
18 that you've drawn, correct?

19 MR. HATFIELD: Objection, Judge. Calls for  
20 speculation on the part of the witness based on what he  
21 said.

22 MR. JOHNSON: It is his personal knowledge as to what  
23 his work has done.

24 THE COURT: I don't know that he would know whether or  
25 not his map was approved by the court.

1 MR. JOHNSON: Well, Your Honor, he is here testifying  
2 about other maps he is drawing, certainly he would know.

3 MR. HATFIELD: I withdraw my objection, Judge. If he  
4 knows, I'm okay.

5 THE COURT: Okay. If you can answer the question,  
6 answer the question.

7 THE WITNESS: I'm not aware of any.

8 BY MR. JOHNSON:

9 Q. You've never drawn a map that was adopted by a  
10 legislative body?

11 A. Do we count the House, either of the  
12 redistricting committees as legislative bodies?

13 Q. So as to the -- Whichever, answer the question.

14 A. I don't think the commissions are legislators,  
15 so no.

16 Q. And you've never served as a special master for  
17 redistricting, right?

18 A. Correct.

19 Q. And no court has asked you to consult in drawing  
20 a map?

21 A. I don't know what the court has asked of me, but  
22 I'm here today.

23 Q. Right. But did the judge extended an offer,  
24 here, please come, let me know?

25 A. I don't remember who subpoenaed me in



1 deposition, so I don't know your office or the court, but  
2 I'm trying--I don't know who was the front man on that  
3 subpoena in request for a deposition.

4 Q. But to your knowledge you didn't receive a  
5 letter from Judge Beetem saying, you know, please come  
6 testify, we'd love to hear what you said?

7 A. To my knowledge, I don't know.

8 Q. A legislative body hasn't asked you to consult  
9 to draw a map, correct?

10 A. I've not consulted for a legislature, no.

11 Q. And you didn't consult for either the House  
12 Commission or the Senate Independent Commission, right?

13 A. It is my understanding that there were no  
14 consultants who worked for either commissions.

15 Q. You spent a lot of time talking today about  
16 Dave's Redistricting and potentially Maptitude, right?

17 A. Yes.

18 Q. And the closest thing to formal training you  
19 have on Maptitude is a single briefing by the National  
20 Democratic Redistricting Committee?

21 A. That is -- Yeah. I did attend a briefing, yeah.

22 Q. And otherwise you watched publically available  
23 how-to-do videos by Maptitude's creator, Caliper?

24 A. I did watch some videos.

25 Q. And you agree that trial and error and

1 on-the-job training is required to best understand how to  
2 use Maptitude?

3 A. I certainly think that on-the-job work with the  
4 tools is more instructive and informative than formal  
5 trainings.

6 Q. Because Maptitude isn't intuitive at all, right?

7 A. I don't -- That is -- I wouldn't characterize it  
8 that way.

9 Q. So if we can go to page 171 of your deposition

10 --

11 A. Okay.

12 Q. -- and line 18.

13 A. Okay.

14 Q. Question: Are those the ones that, like,  
15 Maptitude puts forth so people can, like, use it? Did I  
16 read that question correctly?

17 A. What page?

18 Q. We're on page 171.

19 A. Okay. What's the question?

20 Q. Am I reading this correctly at line 18,

21 Question: Are those the ones that, like, Maptitude puts  
22 forth so people can, like, use it? Did I read that  
23 question correctly?

24 A. I think so.

25 Q. And the response, your response: Yeah. The

1 name of the company is Caliper. And so it is, I think by  
2 their own admission, a -- it's not intuitive in all the  
3 ways and so, you know, some -- some trial and error and  
4 on-the-job training is required.

5 A. Okay.

6 Q. Did I read that correctly?

7 A. I think so.

8 Q. And you didn't have anyone standing over your  
9 shoulder or guiding you when learning how to use Maptitude,  
10 right?

11 A. There were no humans standing behind my  
12 shoulder.

13 Q. And for Dave's Redistricting, you learned how to  
14 use via training by using the state website, right?

15 A. Those were some of the things I did.

16 Q. But you think in a similar fashion, Dave's was  
17 best learned by trial and error in figuring out how it  
18 works, right?

19 A. It is a different mindset to use software than  
20 other software so experience certainly helps, yeah.

21 Q. And by now you have a lot of experience in  
22 Dave's Redistricting, right?

23 A. Yes.

24 Q. And you started using the tool when?

25 A. It has been a long redistricting cycle. It

1 would have been shortly before the census data came out.

2 Q. So the latter half of 2022?

3 A. I don't recall the first day I started using it,  
4 but getting up to speed on the tool was something I did in  
5 advance of the census data coming out, yeah.

6 Q. You remember that we asked you for documents  
7 that you thought were important to your map drawing  
8 process, right?

9 A. Okay.

10 Q. And you remember giving us a couple of printouts  
11 from Dave's Redistricting, right?

12 A. Okay.

13 MR. HATFIELD: Thanks.

14 MR. JOHNSON: For you. If I may approach.

15 THE COURT: Okay.

16 (Defendants' Exhibit No. 11, DRA 2020 MO SLDU

17 CourtCase, was marked for identification.)

18 BY MR. JOHNSON:

19 Q. I've handed you a two page document that is  
20 marked DX11. Is that right?

21 A. Okay, yes.

22 Q. And you recognize this as one of the printouts  
23 that you gave us in discovery, correct?

24 A. Yeah. It looks like that, yeah.

25 Q. And it is for the MO SLDU Court Case Proposal.

1 Is that right?

2 Official Court A. Yeah. You can't see the full title at the top  
3 of the printout, but I believe that is what it is. I don't  
4 have any reason to think that it is not.

5 Q. And this is what happens when you get the  
6 ratings button on Dave's Redistricting, right?

7 A. That sounds right. I don't remember all of the  
8 exact words on the different buttons.

9 Q. Well, you gave us this document, right?

10 A. Okay.

11 Q. You would know best what it is?

12 A. There are a lot of documents that were produced.

13 Q. But you recognize it, right?

14 A. Yeah. It looks familiar, yep.

15 Q. And in the middle there is a, I don't know, a

16 target circle with some kind of shape with a bunch of

17 numbers on it, right?

18 A. There is a shape with numbers, yes.

19 Q. And in the top left quadrant it says minority

20 62.

21 A. Okay.

22 Q. Is that 62 percent of possible districts that  
23 are minority majority?

24 A. I would need to look at that documentation for

25 what that measurement is. That is not on this printout

1 that you provided.

2 Q. You created the map MO SLDU Court Case Proposal,  
3 right?

4 A. Uh-huh.

5 Q. So this is a Dave's Redistricting rating of that  
6 map, correct?

7 A. Okay.

8 Q. Is it?

9 A. It says -- Yeah, it looks like a printout from  
10 Dave's.

11 Q. With all your experience with Dave's  
12 Redistricting, what does the 62 mean?

13 A. I would need to look at the documentation for  
14 what that metric is.

15 Q. And standing here today, you don't know if this,  
16 if the 62 means it is compliant with the VRA, right?

17 A. I would look and see what the documentation for  
18 that particular number means.

19 Q. Right. But right now you don't know if the 62  
20 means it is compliant or not, correct?

21 A. I don't know that it has anything to do with VRA  
22 compliance.

23 Q. Okay. How about, it says compactness 58 in the  
24 bottom left quadrant, right?

25 A. Yes.



1 Q. So how did Dave's Redistricting calculate the  
2 compactness rating?

3 A. Evaluated the shapes that were put together in  
4 the draft plan in the same way that it evaluated the  
5 Judicial Redistricting Commission plan. My recollection is  
6 that the compactness score that Dave's produced for this  
7 proposal is functionally equivalent to what the Judicial  
8 Redistricting Commission put forward.

9 Q. What measurements goes in the compactness score  
10 that is here?

11 A. I think there was other documents that I  
12 provided that showed some of the underlying metrics.

13 Q. Okay. And you don't know if there is a Convex  
14 Hull score, right?

15 THE COURT: Are you whole?

16 MR. JOHNSON: Hull, h-u-l-l.

17 THE COURT: Okay.

18 THE WITNESS: So I would need to look at the  
19 documentation. This is just a single piece of paper and  
20 there is additional data that the tool provides.

21 BY MR. JOHNSON:

22 Q. Okay. But certainly considers a Reock score,  
23 right?

24 A. I would look at the documentation to see what  
25 the underlying data is. You provided a page and a half

1 printout and there was a lot of documents provided.

2 Q. To be clear, this is your document, right?

3 A. This is a document, yeah.

4 Q. No. This is what you gave us, right?

5 A. You told me. I don't have any reason to think  
6 that that isn't correct.

7 Q. And when it goes -- If you look at the mid line  
8 on the right it says 61 proportionality. Do you see that?

9 A. I do see that.

10 Q. You can't explain how you calculated that  
11 rating, can you?

12 A. I would look at the documentation to see what

13 matrixes were used for that.

14 Q. What proportionality measurements would they  
15 use?

16 A. I would look at the documentation in Dave's

17 Redistricting app to see what they use to create that

18 score.

19 Q. And what is an example of a proportionality  
20 measurement you could use?

21 A. So big picture, the goal in measuring

22 proportionality is whether the overall map produces

23 outcomes that approximate the overall partisan preferences

24 of the overall metric, but I would need to look and see

25 what scores were used in this. There are a number of

1 measurements that could be used calculating partisan  
2 fairness, so I need to look at what this tool is using for  
3 what it calls proportionality.

4 Q. And then what does -- If you look, I guess, at  
5 the top right quadrant, 20 competitiveness, correct?

6 A. That is what it says.

7 Q. And you don't -- Do you know how that is  
8 calculated?

9 A. I would be -- I would look at the documentation  
10 to see what underlying scores are used for them to come up  
11 with a competitiveness score.

12 Q. But looking at the rating button you don't know,  
13 right?

14 A. The documentation for what goes in to  
15 competitiveness is not articulated on this printout.

16 Q. All right.

17 MR. JOHNSON: If I may.

18 MR. HATFIELD: Thank you.

19 MR. JOHNSON: If I may approach, Your Honor.

20 THE COURT: You may.

21 (Defendant's Exhibit No. 15, DRA 2020 MO SLDU

22 Court Case Regarding Compactness, was marked for  
23 identification.)

24 BY MR. JOHNSON:

25 Q. All right. I've handed you a document that I

1 have self marked as Exhibit DX15.

2 A. Okay.

3 Q. Again, you see at the top left corner, it says  
4 DRA2020 MO\_SLDU\_CourtCase, right?

5 A. Yes.

6 Q. And in big letters at the top it says  
7 compactness, correct?

8 A. Correct.

9 Q. All right. So this is what happens when you  
10 press compactness on the Dave's Redistricting app for a  
11 particular map. Is that correct?

12 A. Right.

13 Q. Correct?

14 A. I believe so.

15 Q. Again, this is a document you provided us when  
16 we asked you about it, right?

17 A. Okay. I don't have any reason to think that is  
18 not the case.

19 Q. Well, it is map that you created, right?

20 A. Yes.

21 Q. And it says from Dave's Redistricting, correct?

22 A. It is.

23 Q. And unless I knew the number of the file or the  
24 name of the file, I wouldn't be able to do this, correct?

25 A. Yes.

1 Q. Because that is your map in Dave's

2 Redistricting, correct?

3 A. Yeah. It is publicly shareable and I have

4 shared versions -- I've shared links to the map. But,

5 yeah, I don't have any reason to disagree with your

6 characterization of this printout.

7 Q. Okay. And so for here, it tells you under the

8 metrics that this map has a Reock score of .3949, right?

9 A. Yes.

10 Q. It has a Polsby-Popper .3318?

11 A. Yes.

12 Q. And then it has a rating of -- Well, it's not

13 particularly clear, but I'm going to guess it is a 58. Is

14 that right?

15 A. That is what it said on the previous piece of

16 paper that you handed to me, yes.

17 Q. So when you look at the compactness, how does it

18 come to the compactness rating of 58?

19 A. I would need to look at the documentation to

20 understand what is happening under that.

21 Q. This is documentation for the compactness score

22 for your map MO SLDU CourtCase, right?

23 A. This is a printout from Dave's about this plan.

24 Q. And this is the underlying documentation for

25 what the rating is, right?

1 A. I don't know if this is comprehensive of the --  
2 if this is comprehensive documentation.

3 Q. But, again, you don't know what 58 means?

4 A. I would look at the documentation to see how  
5 that score was created.

6 Q. And then if you see below, there is another --  
7 At the bottom, at the bottom left side it says splitting?

8 A. It does say that.

9 Q. And this is where it gives a splitting metric,  
10 correct?

11 A. It does.

12 Q. And it says county-district splitting 1.14,  
13 right?

14 A. It does say that.

15 Q. And what does that mean?

16 A. I don't know. It says that that is a  
17 measurement of how counties are split across the districts,  
18 but it is not a useful metric for evaluating whether a plan  
19 complies with the Missouri constitution given Missouri's --  
20 the text of the constitution.

21 Q. So you can't just press a button that says  
22 splitting it out if it complies with the Missouri  
23 constitution, right?

24 A. If I was trying to decide whether or not a plan  
25 complied with the constitution, I would look at actual,



1 whether or not which counties were split, because it is  
2 totally fine and required to split some counties and other  
3 counties are not required to be split at all.

4 Q. The Dave's Redistricting tool gives you the  
5 splitting metric, right?

6 A. It does give the redistricting, yeah.

7 Q. That is not according to the Missouri  
8 constitution, right?

9 A. It is not -- I would not use this metric to  
10 evaluate whether a plan complied with keeping county and  
11 municipal communities together requirement, no.

12 Q. You don't know actually in fact what 1.14 means,  
13 right?

14 A. I have not -- I would need to look at the  
15 documentation to see what that number means. But I would  
16 also say it is not a particular relevant score for  
17 evaluating whether or not the county in Missouri needs to  
18 be split or not.

19 Q. This is like the third, probably the tenth time  
20 you've said you need to look at the documentation for a  
21 particular thing, right?

22 A. For giving you an answer as to what particular  
23 scores mean, yes.

24 Q. From Dave's Redistricting website, right?

25 A. From the Dave's Redistricting app, yes.

1 Q. Where would you go to look at those  
2 documentations?

3 A. I would look at Dave's Redistricting website.

4 Q. Where is it kept? What menu?

5 A. I don't know. I don't have their Sitemap  
6 memorized to know what sort of underlying documentation  
7 might be required or what might be available in different  
8 parts of the website.

9 Q. So you use the tool but you don't know what the  
10 scores mean, right?

11 A. I know what many of the metrics Dave's  
12 Redistricting app provided me.

13 Q. Well, you didn't know what the counties metric  
14 said, right?

15 A. I believe my answer was that it is not relevant  
16 for the analysis for Missouri's constitutional  
17 requirements.

18 Q. That is an objection that your counsel can make  
19 but I asked if you knew.

20 A. I believe I answered that.

21 Q. And, again, that is another objection counsel  
22 gets to make.

23 MR. HATFIELD: Object. It is not relevant.

24 MR. JOHNSON: It is a yes or no question.

25 MR. HATFIELD: Can I get a ruling, Judge?

1 THE COURT: Overruled.

2 THE WITNESS: I can't give you an answer off the top  
3 of my head of what these splitting metrics mean.

4 BY MR. JOHNSON:

5 Q. But you prepared for your deposition that we had  
6 a month ago, right?

7 A. I did.

8 Q. And have you prepared for today's testimony?

9 A. Yes.

10 Q. And you didn't bother to look at the  
11 documentation on Dave's Redistricting at any point?

12 A. I did not look at the documentation for  
13 splitting because I don't think that is relevant to whether  
14 or not counties ought to split.

15 Q. Did you look at the documentation for the 58  
16 rating for compactness?

17 A. I don't recall.

18 Q. And do you know where that is kept on the  
19 website?

20 A. I don't know where that is kept on the website.

21 Q. Sitting here today you couldn't find the  
22 documentation if you tried?

23 A. I don't believe I said that.

24 Q. Sitting here today you don't know where it is?

25 A. I don't know exactly the URL path or what links

1 I would click to get that documentation.

2 Q. And you don't even know if it exists?

3 A. I would need to look at the website.

4 Q. You stated -- I apologize. You stated that part  
5 of your experience in drawing maps came from the most  
6 recent House Independent Bipartisan Commission?

7 A. Can you ask that again.

8 Q. Sure. You stated that some of your experience  
9 and familiarity with map drawing and map drawing software  
10 came with or came from your familiarity with -- your  
11 experience with the Missouri Independent House Commission,  
12 correct?

13 A. Some of it, yeah.

14 Q. And, in fact, you stated that you drew some  
15 pieces that were enacted into law, correct?

16 A. Yeah.

17 Q. But you didn't draw 100 percent of the map,  
18 right?

19 A. No.

20 Q. And you don't remember the full set of districts  
21 you worked on?

22 A. I worked on 100 percent of the districts. I don't  
23 don't remember which districts, some districts shapes or  
24 where some of the district proposals came from. It was a  
25 long process with a lot of variations.

1 Q. And you gained a lot of experience in that  
2 process, right?

3 A. Yes.

4 Q. And so how many House districts are you talking  
5 about in the General Assembly?

6 A. 163.

7 Q. And what was the ideal population for Missouri  
8 House districts for this last cycle?

9 A. I don't remember the exact population number off  
10 the top of my head.

11 Q. But you gained so much experience from it,  
12 right?

13 A. I gained some experience, yeah.

14 Q. Did you draw 100 districts in the final House  
15 plan?

16 A. No. You had to draw all of the districts for a  
17 legal plan.

18 Q. No. Did you draw 100 districts in the final  
19 districts that became law?

20 A. I don't know the exact number. A full plan has  
21 to have all the districts and 100 would be too few.

22 Q. Let's see. You agree that a Reock score is a  
23 generally accepted measurement for ascertaining the  
24 relative compactness of the geographic shape, right?

25 A. It is a score, yes.

1 Q. It is a generally accepted measurement, right?

2 A. It is one of them.

3 Q. And do you know the equation for calculating a  
4 Reock score?

5 A. I don't. I think it would be more useful to be  
6 precise and look at the exact equation rather than me  
7 trying to speculate.

8 Q. You don't know how to calculate it, right?

9 A. I'm sure I could figure that out. If I needed  
10 to calculate it on my own, I could. In general practice,  
11 how it actually works, you rely on the tools to provide  
12 those scores for you. There is no map drawer that goes and  
13 creates individual scores every single time, that is why  
14 the tools are used to get to an answer.

15 Q. And the tools that you used for Dave's  
16 Redistricting, they only provide an overall assessment of  
17 the Reock score, right?

18 A. That is my understanding, yeah.

19 Q. So when you make changes to any particular  
20 district, you don't -- you didn't know what the Reock  
21 score, what the Reock score for that district was going to  
22 be, right?

23 A. That is not what is required by the constitution  
24 and so I didn't spend a lot of time calculating the Reock  
25 score for a particular district.



1 Q. So the map that you drew for the districts that  
2 you changed, you didn't bother to look up what the Reock  
3 score was for any particular district, right?

4 A. I think I reviewed an analysis that Mr. Trende  
5 provided.

6 Q. Prior to Mr. Trende you didn't do that, right?

7 A. I don't recall that I did.

8 Q. And you didn't draw the map in the last ten  
9 days, right?

10 A. No. This has been going on a long time.

11 Q. So when you drew the map you didn't know?

12 A. I knew that the overall plan was roughly as  
13 compact as what the Judicial Redistricting Commission  
14 provided and also an analysis of the compactness of a plan,  
15 the compactness requirements subordinate to following  
16 subdivision (1). Following subdivision (1) was a top  
17 priority and then the analysis of other factors came after  
18 that.

19 Q. But you didn't know how your changes impacted  
20 any particular district, correct?

21 A. I did know how my changes impacted other  
22 districts.

23 Q. Well, then what, what was the Reock score in the  
24 new Senate District 34 then?

25 A. I don't know that answer.

1 Q. You also don't know how Polsby-Popper score is  
2 calculated?

3 A. I would look at the documentation to give a  
4 precise answer if I needed to.

5 Q. I'm sorry, do you know how to calculate a  
6 Polsby-Popper score?

7 A. I would look at the formula if I needed to  
8 calculate a Polsby-Popper score.

9 Q. It is a yes or no question, do you know?

10 A. I don't know the formula off the top of my head,  
11 no.

12 Q. You also don't know the scale Polsby-Popper  
13 score is based on, right?

14 A. I believe it is zero to 1, but I would look at  
15 the documentation.

16 Q. At your deposition you didn't know, right?

17 A. Okay.

18 Q. No, yes, or no?

19 A. That is my recollection.

20 Q. And your deposition was after you drew the map,  
21 correct?

22 A. Yes.

23 Q. You don't know what a Convex Hull score tells  
24 you, right?

25 A. I don't. I couldn't give you a precise

1 definition off the top of my head.

2 Q. You don't know what a Convex Hull score does?

3 A. It is my understanding that it is one of the  
4 measurements of compactness.

5 Q. Right. But what measure of compactness does it  
6 give you?

7 A. How to compact it.

8 Q. No. That is access of a planned map, right? A  
9 Reock score measures something different than a Convex Hull  
10 score, right?

11 A. They do measure different. There are different  
12 measurements on compactness.

13 Q. You don't know what the difference is between  
14 those measurements, right?

15 A. I couldn't tell you off the top of my head.

16 Q. So it doesn't matter what the computer software  
17 says that pops out whatever number, you don't know what  
18 those scores mean?

19 A. I know that they mean that some maps are more  
20 compact than others.

21 Q. But you don't know why one score is higher than  
22 the other score, right?

23 A. Well, some metrics they would have a higher  
24 score because that plan is more compact.

25 Q. Well, would they both go up simultaneously?

1 A. Depends on the particulars of the different  
2 districts.

3 Q. Every time?

4 A. Depends on the choices that are made.

5 Q. So you don't know when you make a change whether  
6 or not the score will go up or down, correct?

7 A. That is a very broad question. I am not sure  
8 how to answer it.

9 Q. When you made a change to Senate District 34 and  
10 blocked off Buchanan County and added all the remaining  
11 portions of Clay County, you didn't know if there would be  
12 a difference in how the Reock score reacted or how the  
13 Convex Hull score reacted, right?

14 A. I knew that there could be some changes to any  
15 of the number, any of the metrics, but in drawing and  
16 evaluating plans the constitution is clear that you do  
17 subdivision (1) first, subdivision (2) second, subdivision  
18 (3) third. Subdivision (1) requires that you keep counties  
19 together if you can and if you want to have population  
20 deviation up to 3 percent.

21 Q. And you think it is consistent with the Missouri  
22 constitution to measure compactness based on the overall  
23 plan, right?

24 A. I don't think the Missouri constitution gives  
25 any sort of specific metrics for measuring compactness. It

1 gives specific requirements for how to comply with  
2 population, equalizing population across districts. It has  
3 specific metrics how to measure whether or not the partisan  
4 fairness standard is violated. But no specific metrics are  
5 outlined in the constitution. It is not -- It says -- It  
6 gives in general, there is in general language. It talks  
7 about following political and geographic boundaries. And  
8 there also has the as may be requirement, but I don't  
9 recall any sort of particular statistical metric outlined  
10 in the Missouri constitution.

11 MR. JOHNSON: Here we go.

12 MR. HATFIELD: Constitution?

13 MR. JOHNSON: I assume you know the constitution  
14 forward and backward.

15 MR. HATFIELD: Always useful to have when you draft  
16 the petition.

17 MR. JOHNSON: Only when you have it prepared.

18 BY MR. JOHNSON:

19 Q. All right. If we could flip down to (b)5. I'm  
20 sorry, do you recognize this, the document that I just  
21 handed you as Article III, Section 3 of the Missouri  
22 constitution, right?

23 A. Yes.

24 Q. And that is the section that generally outlines  
25 the criteria for redistricting legislative maps?

1 A. Yes.

2 Q. And that is both House and Senate maps, right?

3 A. Yes. Section on -- It is titled, it is titled  
4 that this is for the House, but the Senate refers back to  
5 these criteria.

6 Q. Okay. And then you see where (b) is. If you  
7 flip to the next page, it is (b)5 I want you to look at.

8 A. Uh-huh.

9 Q. Okay. So for partisan fairness, that's the (b)5  
10 section, right?

11 A. Partisan fairness is one of the aspects of  
12 subdivision (5).

13 Q. And also competitiveness, right; that's the  
14 other section of it?

15 A. That is what it says.

16 Q. Okay. And the section here says that you have  
17 to create an index for the various elections -- sorry, from  
18 various results from the general elections for governor,  
19 Senate and President, right?

20 A. I think that is a fair summary.

21 Q. And then if you look with me, it is like six  
22 lines down in the paragraph that begins "to this end" --

23 A. Okay.

24 Q. -- and you cross over, do you see where it says  
25 "using this index."



1 A. Okay.

2 Q. This part of that provision says: Using this  
3 index, the total number of total votes cast -- Sorry.

4 Excuse me. Strike that.

5 Beginning at "using this index." Using this index,  
6 the total number of wasted votes for each party, summing  
7 across all of the districts in the plan shall be  
8 calculated. Did I read that correctly?

9 A. I think so.

10 Q. Lets flip to (b) (3), please.

11 A. (Witness complied). Okay.

12 Q. (B) (3) is the contiguous territory and the  
13 compactness requirements, right?

14 A. Yes. It starts with subject requirements of  
15 subdivision (1).

16 Q. And it doesn't say that you should sum all of  
17 the districts in the plan to calculate anything, correct?

18 A. Yeah. There is no formula in subdivision (3).

19 Q. It doesn't say you should sum all the districts  
20 and average them, right?

21 A. There is no formula in subdivision (3). There  
22 is no mention of sums.

23 Q. Or averaging, correct?

24 A. No averaging.

25 Q. (B) (1) --

1 A. Uh-huh.

2 Q. --It also doesn't have any sums or averaging,  
3 correct?

4 A. It has divisions and it has calculation of  
5 percentages.

6 Q. Right. But it doesn't say that you should  
7 average districts with each other, correct?

8 A. It doesn't use that word. It does ask you to  
9 calculate the ideal calculation of the district which would  
10 be the average.

11 Q. The average population of the state divided by  
12 34, right?

13 A. No. It is the total population of the state  
14 divided by 34.

15 Q. Is there a difference between population of the  
16 state and the total population of the state?

17 A. You said it is an average population of the  
18 state.

19 Q. Oh, excuse me. Okay. You don't have any  
20 personal knowledge of what the Judicial Redistricting  
21 Commission, what the deliberations were, right?

22 A. I don't.

23 Q. You didn't work for the Judicial Redistricting  
24 Commission, right?

25 A. I did not.

1 Q. They didn't ask you to consult for them?

2 A. They did not.

3 Q. And there were no direct advocacy opportunities  
4 with the Judicial Commission?

5 A. I feel like I submitted -- I can't remember when  
6 and how, but I submitted public testimony through a public  
7 testimony portal, I believe.

8 Q. But no direct advocacy with the Judicial  
9 Commission, correct?

10 A. I don't believe so, no.

11 Q. You didn't attend the Judicial Commission's  
12 public hearing, right?

13 A. I watched it on line. There was an on-line  
14 feedback, yeah.

15 Q. Let's turn to -- Go back to your deposition,  
16 please --

17 A. Okay.

18 Q. -- page 98.

19 A. Okay.

20 Q. I'm sorry, 99.

21 A. Okay.

22 Q. Line 2. Question: Did you attend the Judicial  
23 Redistricting Commission public hearing? Did I read that  
24 question correctly?

25 A. Yeah. I was not at --

1 Q. And answer: I don't think I was at that one,  
2 correct?

3 A. Right.

4 Q. All right. You've discussed a lot of maps by  
5 the Citizens Commission today, correct?

6 A. Yeah, we talked about that some.

7 Q. You talked a lot about various Montee maps,  
8 correct? I'm sorry, are they actually Nicholson maps?

9 A. No, they are Montee maps.

10 Q. Okay. And you remember that we discussed the  
11 Montee, at least Montee 6 of your deposition, right?

12 A. Yes.

13 Q. Was Montee 6 one that you drew?

14 A. I believe so, yeah.

15 Q. And you obviously drew the map before we had it  
16 at the deposition, right?

17 A. Yeah.

18 Q. And so you would be very familiar with the map  
19 that you drew, correct?

20 A. It has been awhile, but --

21 Q. Well, you've been testifying all day about maps,  
22 right?

23 A. Yeah.

24 Q. And you are familiar with those maps, the same  
25 as your Montee 6 map, right?

1 A. I have not spent as much time reviewing the  
2 Montee 6 map as I have with what the Judicial Redistricting  
3 Commission put forward.

4 Q. And when we talked about the Montee 6 map, you  
5 didn't know if it satisfied the Missouri constitution's  
6 contiguous requirement, right?

7 A. I don't have any reason to think it wouldn't.

8 Q. But you didn't know for sure, right?

9 A. What do you mean by "for sure"?

10 Q. Well, you are under oath. Presumably you are  
11 testifying about things you have personal knowledge of,  
12 right?

13 A. Yes.

14 Q. So under penalty of perjury --

15 A. Uh-huh.

16 Q. -- which is the same penalty of perjury you were  
17 under for your deposition --

18 A. Uh-huh.

19 Q. -- at that time you didn't know if it satisfied  
20 the contiguous requirement without looking at it in a tool,  
21 did you?

22 A. That is how you evaluate whether or not in any  
23 plan. There are a whole lot of census blocks in the state.  
24 With any plan, you would look to see is this -- are all the  
25 districts contiguous, a simple report to run. As a matter

1 of practice, as a matter of course, that is something I  
2 would do evaluating all the plans and before submitting a  
3 draft, so that is what I would do, yeah.

4 Q. And for Montee 6, at your deposition you didn't  
5 know by looking at the map whether or not it satisfied the  
6 political subdivision requirement in subdivision (b)(4),  
7 correct?

8 A. What I would have done is run a report to see if  
9 it broke up political subdivisions. I don't have any  
10 reason to think that it violated it, but that is how I  
11 would confirm.

12 Q. In your deposition you couldn't tell, right?

13 A. I think your summary was that -- was in line  
14 with what I just said.

15 Q. You couldn't tell in your deposition whether it  
16 satisfied the contiguous subdivision requirement, correct?

17 A. I said I would look and confirm. I don't have  
18 any reason to think that it violated it.

19 Q. And do you remember discussing the -- And from  
20 your experience with the Citizens Commission -- sorry --  
21 the Senate Citizens Commission --

22 A. Okay.

23 Q. -- no one did a VRA analysis of any of the  
24 plans, any of plans that would be thrown back and forth in  
25 the final days of the commission process, right?



1 A. My general understanding is that the  
2 commissioners had a pretty good sense of where the VRA  
3 concerns would be implicated in Jackson County and in St.  
4 Louis County. And I don't recall any commissioners having  
5 any concerns that people proposing maps or that the  
6 commission drafts were in a gray area where I needed to be  
7 concerned.

8 Q. Let's go to page 2 (sic) of your deposition.

9 MS. COSSETTE: What page?

10 MR. JOHNSON: 254.

11 BY MR. JOHNSON:

12 Q. Line 2. Let me know when you are there.

13 Question: Sitting here today, there is no analysis of  
14 this map that you can think of that says, This complies?  
15 Did I read that correctly?

16 A. Yeah. That is what you read, yeah.

17 Q. Answer: No one did a VRA analysis of any of the  
18 plans as they were being thrown back and forth in the final  
19 days of the commission process. A VRA analysis is  
20 laborious, but there are easy -- there are some early  
21 indicators of whether or not a plan has racial  
22 gerrymandering, and I do not believe that the Montee  
23 proposals have any of those markers. Did I read that  
24 correctly?

25 A. Yes. I think this is pretty similar to the

1 analysis that Mr. Trende provided.

2 Q. And you didn't know whether the Montee 6 map  
3 satisfied the VRA at your deposition, right?

4 A. Can you point me to what I said?

5 Q. I'm asking what you remember.

6 A. I don't remember the question or how it was  
7 phrased, so I would love to hear how you asked the  
8 question.

9 Q. Sitting here today, can you tell us the Montee 6  
10 map complies with the VRA?

11 A. I don't have any reason to think that it  
12 doesn't. I think my analysis is not all that different  
13 than what Mr. Lewis said earlier today or Mr. Trende said,  
14 that the proposals -- that these proposals are not in the  
15 gray area where we're talking about a racial  
16 gerrymandering.

17 Q. But you don't know whether the Montee 6 map  
18 satisfies all the constitutional requirements, right?

19 A. I don't have any reason to think that it  
20 doesn't. As I said before, when you asked about confirming  
21 for sure on contiguity, on subdividing political  
22 subdivisions, I would double check. It was a map that was  
23 drawn a year and a half, two years ago.

24 Q. But sitting here today in front of the court  
25 that is going to make a decision on maps, right --

1 A. Uh-huh.

2 Q. --you can't tell this court whether any of  
3 those maps that you were talking about for sure would be  
4 constitutionally complying, correct?

5 A. What I would say, I don't have any reason to  
6 think even the Ellinger plans are not constitutionally  
7 compliant. I think the choices in the arm wrestling was  
8 about political choices and subjective choices in the big  
9 counties. I don't recall any discussion in the late  
10 commission meetings on whether or not even the Ellinger  
11 proposals were in violation of the constitution.

12 Q. You were familiar with Ellinger 3 because it was  
13 filed with the Senate Independent Bipartisan Citizens  
14 Commission, right?

15 A. Yeah.

16 Q. And at your deposition you didn't know if  
17 Ellinger 3 satisfied the equal population requirement,  
18 right?

19 A. I would double check, but I don't have any  
20 reason to think that it doesn't.

21 Q. Go to page -- Actually, I don't have this. I  
22 think it is 246. I'm sorry, it is 247, starting at line 5,  
23 please.

24 A. Okay.

25 Q. Question: Okay. And looking at the map, do you

1 know if it satisfies equal -- the protection concern? Did

2 I read that correctly?

3 A. Sounds like you read that correctly, okay.

4 Q. Answer: I don't -- I don't know based on the  
5 data provided. Correct?

6 A. That is what it says, yeah.

7 Q. And you also don't know -- you didn't know if  
8 the Ellinger 3 map satisfied the prohibition on the racial  
9 gerrymandering, right?

10 A. My answer is, I don't based on the picture.

11 Q. And, again, for the contiguous requirement, you  
12 didn't know if Ellinger 3 satisfied that requirement  
13 either, right?

14 A. I said I don't have any reason to think that it  
15 doesn't based on the image I'm looking at.

16 Q. And today do you know?

17 A. I have not gone back and done an analysis of the  
18 Marc Ellinger map from December '21 since we talked, no.

19 Q. Because to know if a map or a plan that is  
20 submitted is constitutional in all aspects, you have to  
21 look at the entire plan, right?

22 A. Okay. Yeah.

23 Q. So when you are talking about a Citizens  
24 Commission, you just say, oh, no, I'm supposed to be in  
25 Camden County, you don't know if final choices were made

1 that made that map unconstitutional or unusable, right?

2 Q. Which map are we talking about?

3 Q. Any of them.

4 A. I think what I've said is that I would look at  
5 the details and the data.

6 Q. Right. But sitting here today on Montee 1,  
7 Montee 2, Montee 3, right, you don't know for certain if  
8 the entirety of the plan comports with the Missouri

9 constitution?

10 A. So Montee 3 that you mentioned, I think, is a  
11 different case. My recollection is that Marc Ellinger  
12 actually drew that map and then wouldn't claim credit for

13 it and then it got submitted in the public record, so that  
14 one is an outlier from the other ones that we've been  
15 talking about.

16 Q. Now you are saying that the Montee map that you  
17 said that you drew Marc Ellinger actually drew?

18 A. I'm saying that Montee 3 is the outlier. I  
19 believe I specified not all the Montee maps when we were  
20 talking earlier today.

21 Q. Ellinger 2 map, you've seen that map, right?

22 A. Yes.

23 Q. And you've testified that Ellinger 2 didn't  
24 split Buchanan County, right?

25 A. I believe that's the case.

1 Q. And you don't know, sitting here today, whether  
2 or not the whole of Ellinger 2 was constitutional, right?

3 A. My recollection is that came up in the context  
4 of, does it satisfy the requirement of split as few  
5 counties as possible, and I think that is what we were  
6 talking about. To answer whether or not all the other  
7 pieces were constitutional, I would look at the data to  
8 make an assessment.

9 Q. But sitting here today, right, for testimony  
10 that you prepared for, you don't know?

11 A. I didn't spend a ton of time worrying about  
12 Ellinger 2, of all of the details of Ellinger 2, because  
13 I'm prepared to talk about the map that was actually  
14 enacted.

15 Q. Didn't we talk about Ellinger 2 earlier today?  
16 Didn't you and counsel talk about Ellinger 2 earlier today?

17 A. We talked about how both Ellinger and Montee  
18 plans did not split Buchanan County and Hazelwood, that is  
19 my recollection of what we were talking about.

20 Q. Right. And so as to the entire rest of that  
21 map, you don't know if it was constitutional or not?

22 A. I don't have any reason to think that it isn't.  
23 As I've said a couple times now, I would go look at the  
24 data and look at the specifics.

25 Q. You've said a couple of times that you wanted to



1 make sure that we were drawing maps that were legal  
2 districts, right?

3 A. Right.

4 Q. But you are not a lawyer, correct?

5 A. I am not an attorney.

6 Q. And you didn't receive any legal training?

7 A. I've not gone to law school.

8 Q. Okay. Let's see. You've spent a lot of time  
9 studying the Judicial Redistricting Commission map that was  
10 enacted, right?

11 A. I've evaluated it, yeah.

12 Q. Enough to decide that you think it is  
13 unconstitutional, right?

14 A. Yeah. My recollection is that I thought the  
15 split of Buchanan was a rather obvious error and one that  
16 was relatively easy to fix.

17 Q. So you think that the challenged, the challenged  
18 districts in this case are District 34, District 12,  
19 District 13 and District 14, correct?

20 A. I think District 21 is also implicated.

21 Q. But there is no Plaintiff saying that District  
22 21's map is unconstitutional, correct?

23 A. I don't believe that is the case. I believe the  
24 claims are on keeping Buchanan whole and keeping Hazelwood  
25 whole.

1 Q. Right. So you would need a resident from

2 Buchanan and a resident from the City of Hazelwood, right?

3 A. Okay.

4 Q. Is Buchanan County in the enacted Judicial  
5 Commission -- Is Buchanan County in District 21?

6 A. I don't think so. I would have to take a look.

7 Q. Is the City of Hazelwood in the enacted version  
8 of District 21?

9 A. It is in Districts 13 and 14.

10 Q. So no one has challenged District 21, correct?

11 A. The constitution requires that to propose  
12 changes, the only adjusted districts that are required to

13 bring it in to compliance and the map that I put together  
14 was one way to bring it in to compliance.

15 Q. I promise we will get to your map, I do promise  
16 you that. The question was, right, is that no one has

17 challenged District 21, correct?

18 A. Not as far as I know.

19 Q. And not in this case?

20 MR. HATFIELD: I'm going to object. It calls for the  
21 witness to make a legal conclusion about this case, but --

22 MR. JOHNSON: I mean, Your Honor, he drew the map for  
23 the Plaintiff in this case. To bring the map in to  
24 compliance he had to know which ones were being challenged  
25 presumably or we would have more serious issues.

1 THE COURT: Well, I think the only challenge goes to  
2 Buchanan County and Hazelwood.

3 MR. HATFIELD: Stipulated.

4 THE COURT: Yeah.

5 MR. JOHNSON: Great.

6 BY MR. JOHNSON:

7 Q. Let's pull out Joint Exhibit 1, please.

8 A. Okay.

9 Q. You've seen this before, right?

10 A. There is 200 pages. Which page?

11 Q. Right. As before, if we can go to 15 of -- I  
12 think it is of 252.

13 A. Okay.

14 Q. District 12 -- You've seen the chart, right?

15 A. I've seen the chart.

16 Q. So District 12 in the enacted map has a

17 population deviation .49 percent, correct?

18 A. That is what it says, yes.

19 Q. So under the equal protection requirement,  
20 splitting a county is permissible if population deviation

21 is under 1 percent, right?

22 A. Yes. Subdivision (1) says, districts are equal  
23 in population if it is under 1 percent or you can go up to  
24 3 percent if you keep counties and municipalities together.

25 Q. But district -- So under the equal population

1 criteria for drawing a map, if you split a county like  
2 Buchanan County and District 12, you have a deviation of  
3 less than .49 percent, that is okay, at least as far as  
4 that criteria is involved, right?

5 A. Yeah. In so far as District 12 exists in a  
6 vacuum, sure.

7 Q. And you said that you reviewed some work product  
8 that our expert put together on compactness?

9 A. Yeah. I remember him -- I looked at a chart  
10 that was put together. If you could point me to that.

11 Q. Let's look at Joint Exhibit 27. It is in that  
12 larger binder for you.

13 THE COURT: We can break any time you find an  
14 convenient place in your examination.

15 MR. JOHNSON: Yes, Your Honor. I expect we can break  
16 shortly.

17 THE COURT: Okay.

18 BY MR. JOHNSON:

19 Q. District 12 -- I'm sorry. Excuse me.  
20 Compactness with a challenged district is better in the  
21 enacted plan than in Plaintiffs' proposed plan, correct?

22 A. Say that again?

23 Q. Compactness for District 12 is better in the  
24 enacted plan than in the proposed plan, correct?

25 A. I'm trying to remember exactly what Mr. Trende

1 said. I think he used the phrase mixed bag. As you will  
2 notice, if you look at the chart, the Reock score is higher  
3 and in the enacted plan there is marginal decreases on some  
4 of the other metrics.

5 Q. So the Reock -- I'm sorry. The Pulsby-Popper  
6 score is better for District 12?

7 A. In which?

8 Q. The enacted plan.

9 A. On that particular metric, sure.

10 Q. And the Convex Hull score is better in the  
11 enacted plan, correct?

12 A. It is a little better. But that isn't all the  
13 data that was evaluated.

14 Q. And District 12 was one of the challenged  
15 districts, right?

16 A. Yeah. The Reock score is better in the  
17 Plaintiffs' plan than the enacted plan.

18 Q. District 34 --

19 A. Okay.

20 Q. -- all of the measurements of compactness are  
21 better for the Plaintiffs' plan -- I'm sorry, for the  
22 enacted plan, incorrect?

23 A. It does appear to be that, yeah. Pretty small  
24 differences, but yeah.

25 Q. In District 13, the enacted plan --

1 A. Yeah.

2 Q. --the enacted plan Reock score begins -- Sorry.

3 The enacted plan's Reock score is .366 in the enacted plan.

4 Is that right?

5 A. That is what it says.

6 Q. And the Plaintiffs' plan Reock score for

7 District 14 is .291, right?

8 A. Yeah. I would think I would say again that this

9 is a mixed bag and this is why I mentioned earlier looking

10 at all of the different scores to make an overall judgment,

11 instead of relying on one specific one is how you get to a

12 better overall outcome. In this particular case the

13 compactness score is better on two of the metrics and worse

14 on one.

15 Q. So in District 14, the enacted plan compactness

16 scores are all better than the Plaintiffs' plan, correct?

17 A. Yes. Small differences, yeah.

18 Q. They are all better, correct?

19 A. Yes. Slightly better, yeah.

20 Q. And in making your remedy plan, the Plaintiffs'

21 plan, you didn't consider how your changes would affect

22 each district's compactness measures, right?

23 A. I considered how they would comply with the

24 constitution which does not require specific measurements.

25 Q. But you didn't consider how your changes would



1 affect each district's compact score or compactness, right?

2 Official Court A. Yeah. I focused on the constitution.

3 Q. It was more important to keep the counties  
4 together, right?

5 A. According to the constitution and requirement of  
6 subdivision (1), the constitution says to follow the rules  
7 in priority order.

8 Q. It was more important to you to keep the  
9 counties together, right?

10 A. I believe that is what the constitution  
11 requires.

12 MR. JOHNSON: We can take a break, Your Honor.

13 THE COURT: We will be back here at 1:15.

14 (A lunch recess was taken at this time.)

15 THE COURT: The court will remind you you are still  
16 under oath.

17 Additional examination, Mr. Johnson.

18 MR. JOHNSON: Thank you, Your Honor.

19 BY MR. JOHNSON:

20 Q. You remember testifying about Exhibit B, which  
21 is Plaintiff's Exhibit 1, right?

22 A. This is the map that we're talking about again?

23 Q. Yes.

24 A. Okay.

25 Q. And you refer to Exhibit B as the proposed

1 remedy plan, correct?

2 Official Court A. That sounds right, I think I would have said.

3 Q. And in making the remedy map, it is your  
4 understanding that you only adjusted districts that are  
5 required to bring a map into compliance, right?

6 A. Yes.

7 Q. So let's start with the changes that you did in  
8 the northwest quadrant, the northwest module we will call  
9 it.

10 A. Okay.

11 Q. You started with giving all of Buchanan County  
12 from District 34 to District 12, correct?

13 A. I started by combining the northern part of Clay  
14 County that is not in District 17 and combining that with  
15 Platte County. I knew from past experience that that was a  
16 district that fell within the population allowance. And  
17 then I worked from there to equalize the population for  
18 Districts 12 and 21 with a complete whole Buchanan County  
19 in District 12.

20 Q. So your first move was to take the remaining  
21 portions of Clay County from 21 and add it to Platte and  
22 the half portion of Buchanan County. Is that right?

23 A. I don't remember if I put all of Buchanan County  
24 in 12 first. But you get to the same spot one way or the  
25 other. I knew from experience and from drawing a lot of

1 maps that you had a very nice district to follow county  
2 lines as required if you did the remainder of Clay with  
3 Platte County.

4 Q. And then you moved some combination of rural  
5 counties between Districts 12 and 21 to equalize the  
6 population to satisfy the compactness requirement, right?

7 A. No. I did that to satisfy subdivision (1) which  
8 requires equal population within the 3 percent deviation.

9 Q. Let's look at your deposition again, please, at  
10 page 256.

11 Q. And we're going to start with -- at 25 where it  
12 is answer, I added all of Buchanan County to District 12.

13 A. Okay.

14 Q. It is one of the things that Dave's  
15 Redistricting app and Maptitude both do equally, is they'll  
16 allow you to select an entire political subdivision. Did I  
17 read that correctly so far?

18 A. Yes.

19 Q. So I selected the entire county. I added that  
20 to District 12. I then added all of Clay County that is  
21 not in District 17. Did I read that correctly?

22 A. Yeah.

23 Q. And then moving to the part we were talking  
24 about at 12, do you see the designation of line 12?

25 A. I do.

1 Q. Answer: I then moved some combination of rural  
2 counties between 12 and 21 to equalize the population and  
3 to satisfy the compactness requirement. Did I read that  
4 correctly?

5 A. Yes.

6 Q. So that was -- that's the fix in northwest  
7 Missouri. No other districts in the Kansas City area were  
8 modified, you know, as required by the constitution. Did I  
9 read that correctly?

10 A. Yes.

11 Q. Okay. So there was some counties that you  
12 moved --

13 A. Uh-huh.

14 Q. -- between Districts 12 and 21?

15 A. Uh-huh.

16 Q. You moved Caldwell, Daviess, Grundy, Livingston,  
17 Carroll, Chariton, Linn, and Sullivan from District 12 to  
18 District 21, correct?

19 A. I will take your word for it. I don't remember  
20 the exact names and the counties aren't labeled on the map  
21 I have in front of me, but I don't have any reason to  
22 disagree with you.

23 Q. Okay. Well -- Here you go, sir.

24 MR. HATFIELD: Thank you.

25 MR. JOHNSON: Your Honor, if I may approach.

1 THE COURT: You may.

2 BY MR. JOHNSON: an Official Court Document Not an Official Court Document

3 Q. For you, Sean. Official Court Document Not an Official Court Document

4 A. Okay. Document Not an Official Court Document Not an Official Court Document Not an Official

5 (Defendant's Exhibit No. 12, Nicholson E-Mail to al Court Document Not an Official Court Document Not an Official Court Document Not an

6 Hatfield and Cossette dated 5-24-2022, was marked for an Official Court Document Not an Official Court Document Not an Official Court Document

7 identification.)

8 BY MR. JOHNSON: Not an Official Court Document Not an Official Court Document Not an Official Court Document

9 Q. I just handed you what has been marked as DX12. Document Not an Official Court Document Not an Official Court Document Not an Official Court Document

10 You stated that this is an e-mail chain between you and cial Court Document Not an Official Court Document Not an Official Court Document Not an Official Court Document

11 Chuck Hatfield and Ms. Cossette on May 24th of 2022? Not an Official Court Document Not an Official Court Document Not an Official Court Document

12 A. Yeah. Not an Official Court Document Not an Official Court Document Not an Official Court Document

13 Q. And if you look at the third bullet point down, Not an Official Court Document Not an Official Court Document Not an Official Court Document

14 it states -- I'm sorry. Your e-mail starts, one way to fix ut Document Not an Official Court Document Not an Official Court Document Not an Official Court Document

15 it, and it links to a redistricting map, right? ficial Court Document Not an Official Court Document Not an Official Court Document Not an Official Court Document

16 A. Yeah. Not an Official Court Document Not an Official Court Document Not an Official Court Document

17 Q. Okay. And then to solve the Buchanan issue in Not an Official Court Document Not an Official Court Document Not an Official Court Document

18 the western part of the state, the third bullet point says, Not an Official Court Document Not an Official Court Document Not an Official Court Document

19 add Caldwell, Carroll, Chariton, Linn, Livingston, Daviess, Not an Official Court Document Not an Official Court Document Not an Official Court Document

20 Grundy and Sullivan counties to SD21? Official Court Document Not an Official Court Document Not an Official Court Document Not an Official Court Document

21 A. Yep. Not an Official Court Document Not an Official Court Document Not an Official Court Document

22 Q. And those were counties that were previously in Not an Official Court Document Not an Official Court Document Not an Official Court Document

23 Senate District 12, correct?

24 A. Okay.

25 Q. No. Is that right?

1 A. Probably. Yes, I believe. Yes, I believe that  
2 to be the case. I am not trying to be difficult. I just  
3 don't have any reason to think that is incorrect.

4 Q. Well, this is how you fixed the map, right?

5 A. This is one way to fix the map, yeah, what we're  
6 talking about here.

7 Q. And you consider your proposed map to have just  
8 modest changes. Is that right?

9 A. Yeah. It only adjusts three districts in  
10 accordance with the constitutional requirement.

11 Q. But those modest changes include moving eight  
12 counties into District 21, correct?

13 A. This is one way to bring the map into  
14 compliance.

15 Q. This is the way that your proposed Exhibit B  
16 does, correct?

17 A. Yeah. This is a way to bring the map into  
18 compliance.

19 Q. And then to create your remedial District 21 --  
20 I'm sorry. That's right. -- to create remedial District  
21 21, you both took part of a county -- I'm sorry. -- you  
22 took part of a county from 21 and gave it to 34, correct?

23 A. To satisfy the requirements of subdivision (1),  
24 yeah.

25 Q. But that is one of the moves you made, right?



1 A. Okay, yes.

2 Q. And then you took eight counties from 12 and  
3 pushed them into 21, right?

4 A. Okay.

5 Q. And in Districts 13 and 14 on the eastern side  
6 of the state --

7 A. Uh-huh.

8 Q. -- for your changes to make Hazelwood whole, you  
9 pushed all of it in to District 13, right?

10 A. I didn't push it so much as I kept contiguous as  
11 required by the constitution.

12 Q. Right. So you moved the line previously

13 dividing the City of Hazelwood and you changed the line

14 such that all of the City of Hazelwood was in District 13,  
15 right?

16 A. That is what the constitution requires.

17 Q. And then you took three municipalities of some  
18 unincorporated territory from 13 and moved it in to 14,  
19 right?

20 A. Yeah. And the goal there was to equalize the  
21 population.

22 Q. All right. All right. So you're getting paid  
23 for your participation in this case, right?

24 A. No. I'm not getting paid for being here today.  
25 I guess there was some discussion of like expert witness

1 fees. Beyond that, I'm not aware of any payments.

2 Q. When Plaintiffs disclosed to us you were going  
3 to be an expert and said you were going to be paid \$250 an  
4 hour for your deposition, was that incorrect on April 5th?

5 A. That is what I just clarified now, there was  
6 some discussion about expert witness fees.

7 Q. Right. So on April 5th though you were  
8 disclosed as an expert and your rate was \$250 an hour,  
9 correct?

10 A. That sounds right.

11 Q. And between -- When did that change?

12 A. I don't know that it has changed.

13 Q. So you are still expecting to get paid \$250 an  
14 hour for your time?

15 A. If that is what happens, sure.

16 Q. How much have you billed in this case generally?

17 A. I don't think I billed any for working on this  
18 case. As we talked about in the deposition, I worked for  
19 an organization called Fair Maps Missouri for a while.  
20 That contract ended awhile ago and this case continues, so  
21 I don't bill by the hour. It is not a thing that I do. It  
22 is not something that has happened in this case.

23 Q. So Plaintiffs aren't paying you for your  
24 participation in this case?

25 A. They are not, apart from the expert fees that we

1 just talked about.

2 Q. So the expert fees we're talking about, they are  
3 paying you for the expert fees, correct?

4 A. If that happens. I've not received a dime. If  
5 that happens, then that will have happened.

6 Q. Have you sent a bill for it?

7 A. No.

8 Q. Do you expect to send a bill for it?

9 A. If I figure out how many hours have been spent  
10 doing expert witnessing, then if that is the next step,  
11 then that is what I'll do.

12 Q. Okay. So in your past work history, your past  
13 work history involves working for progressive causes?

14 A. In general, yes.

15 Q. And that includes your work at Progressive  
16 Missouri, is that right? I'm sorry, Progress Missouri.

17 A. That is the name of the organization.

18 Q. And currently you're at GPS Impact, correct?

19 A. Yes.

20 Q. And the GPS Impact works for a mix of  
21 progressive democratic and non-partisan campaigns, right?

22 A. Yes.

23 Q. That doesn't include any Republican campaigns?

24 A. I don't know that definitively. It is a big  
25 firm.

1 Q. As of today, are you aware of any Republican  
2 campaigns GPS Impact works for?

3 A. I'm not aware of any, but it is a big firm.

4 Q. Another political shop you worked at -- this is  
5 back in the day -- Kennedy Communications?

6 A. Uh-huh.

7 Q. You worked there, right?

8 A. I did.

9 Q. And you didn't do any work for Republicans at  
10 that shop either, right?

11 A. I don't recall that we did, but it is possible  
12 that we did.

13 Q. You've been heavily involved in getting this  
14 case off the ground, right?

15 A. I think that is fair.

16 Q. More than a year before Plaintiffs disclosed you  
17 as an expert, you e-mailed counsel saying that the split of

18 Buchanan County just seems wrong. It is an unnecessary  
19 county split that doesn't accomplish anything. Right?

20 A. If that is the e-mail -- Is that the e-mail we  
21 are talking about here?

22 Q. We can move to Joint Exhibit No. 23.

23 A. Okay. Let me look that up.

24 Q. Is this an e-mail chain -- Top e-mail chain is  
25 dated July 11th of 2023.

1 A. Okay.

2 Q. Is that correct?

3 A. That is what it says.

4 Q. And then if you skip down to the last e-mail in  
5 the chain, it is on page 2.

6 A. The one that begins with Ratliff.

7 Q. Not sure what Ratliff mentioned to you, do you  
8 see that?

9 A. Okay, yeah.

10 Q. And that was sent by you on March 31st of 2022,  
11 right?

12 A. That is what it says.

13 Q. And that is before the case had been filed?

14 A. Okay.

15 Q. Is that correct?

16 A. It probably is. I can't speak to the dates that  
17 are in the docket of the case. It has been a long time.

18 Q. And in that e-mail you also expressed the  
19 opinion that there are unnecessary municipal line crossings  
20 -- Hazelwood is the most obvious, correct?

21 A. Yes.

22 Q. By May 24th you had drawn a proposed remedy map,  
23 right?

24 A. Okay.

25 Q. Is that correct?

1 A. That is the date on this other e-mail thread we  
2 talked about, okay?

3 Q. And that's in Joint Exhibit 24, right?

4 A. I think it says DX12 on the copy I have.

5 Q. You can also turn to JX24.

6 A. Okay. Okay.

7 Q. You recognize this document as an e-mail chain  
8 between you, Ms. Cossette and Mr. Hatfield, right?

9 A. My name is at the top of it, right.

10 Q. And then in that same May 24th e-mail it says  
11 one way to fix it --

12 A. Okay.

13 Q. -- at the bottom of the page, right?

14 A. Okay.

15 Q. And that's the proposed remedy map?

16 A. Yeah.

17 Q. Also by May 24th you had recruited a plaintiff  
18 for Buchanan County, right?

19 A. Yeah. I think my recollection of events was, I  
20 contacted Chuck and Alix. I said, hey, this is a problem.

21 They said you need a plaintiff, so I got to work trying to  
22 recruit plaintiffs.

23 Q. And you called Bill Caldwell in your personal  
24 capacity. Is that right?

25 A. Yeah, I called Bill.



1 Q. Because for you, there isn't a bright line  
2 between business hours and personal hours for this case?

3 A. Correct.

4 Q. And your involvement included providing comments  
5 on the draft petition?

6 A. Sounds like something I would have done.

7 Q. And you were consulted on the approach to handle  
8 the discovery requests?

9 A. Yeah. I provided -- Yeah, I worked to comply  
10 with the requests that were made.

11 Q. And this was in September of 2022, right?

12 A. I honestly don't remember. It has been a long,  
13 it has been a long journey to today.

14 Q. And you've also edited Plaintiffs' discovery  
15 responses, isn't that right?

16 A. Could be. I don't remember one way or the  
17 other.

18 MR. HATFIELD: Thanks.

19 MR. JOHNSON: For you, sir. If I may, Your Honor.

20 THE COURT: Okay.

21 BY MR. JOHNSON:

22 Q. And this is an e-mail chain that Ms. Cossette  
23 sent to you on October 13th of 2022?

24 A. That is what it says.

25 Q. And in the next e-mail down it says external

1 e-mail - use caution. Do you see that?

2 A. I do.

3 Q. It says a few small notes in track changes here.

4 Do you see that?

5 A. Right.

6 Q. And if you go down to the next e-mail chain,

7 October 11th, Ms. Cossette to you --

8 A. Okay.

9 Q. -- it states: Sean, attached are draft

10 discovery responses. Take a look and see if there is

11 anything we should add or edit out. Did I read that

12 correctly?

13 A. Yeah. And you see how I responded on

14 October 13th with some of the false choices that I thought

15 was trying to be set up.

16 Q. And, again, you edited those discovery

17 responses, right?

18 A. I don't remember if I provided any lines in it.

19 You can see pretty clearly right here what my thoughts

20 were.

21 Q. Sorry. Going back to the first page,

22 October 13th, it says a few small notes in track changes

23 here.

24 A. Okay. That is probably what that means.

25 MR. JOHNSON: Your Honor, nothing further for this

1 witness, Your Honor.

2 THE COURT: Okay.

3 MR. HATFIELD: Just a little bit of redirect, Judge.

4 (Defendants' Exhibit No. 17, E-Mail Exchange Between  
5 Hatfield and Cossette dated 10-13-2022, was marked for  
6 identification.)

7 REDIRECT EXAMINATION BY MR. HATFIELD:

8 Q. Let's start on DX17 that Mr. Johnson just showed  
9 to you. Do you still have that there?

10 A. I do.

11 Q. You reference -- We can see your thoughts there.

12 And I don't believe we put the document actually into

13 evidence. Just go ahead and tell us what your thoughts

14 were there. Why don't you just read those points for us.

15 A. So it says, I think they are trying to set a BS

16 argument on compactness measurements that isn't grounded in

17 the law. If I am them, I want to produce a statistic that

18 says Judicial Plan is X% more compact than Plaintiff's

19 plan, so courts don't have to care.

20 2. Nothing in the constitution specifies which

21 measures of compactness are best (and the different

22 statistical measurements can produce contradictory answers

23 -- you can shop around for numbers if you like).

24 3. The language in constitution is an "IN GENERAL"

25 standard, not a compactness-is-the-only-thing-that-matters

1 standard.

2 The sentence on compactness literally references  
3 the political boundaries we are asking to be followed:

4 Quote, In general, compact districts are those which are  
5 square, rectangular, or hexagonal in shape to the extent  
6 permitted by natural or political boundaries.

7 5. Subsection 1 only allows population deviation of  
8 3% if you follow subsection 4 -- and they're trying to get  
9 judge to prioritize Subsection 3 over others, out of order.

10 Q. And then I think you summarized your points?

11 A. Yeah. This is -- That is a long way of saying  
12 that I think we should do something in the compactness

13 measurement question like you do in communities of interest  
14 -- this is a red herring, constitution doesn't require or  
15 contemplate any of those statistical measurements.

16 We would be happy to run the numbers for them, but

17 they are irrelevant to the matter at hand.

18 Q. And is that still the case today, you think that  
19 the statistical -- I can't say --

20 MR. JOHNSON: Objection. Beyond the scope.

21 THE COURT: Overruled.

22 BY MR. HATFIELD: Not an Official Court Document Not an Official Court Docu

23 Q. The statistical measurements -- I'm not sure

24 I'll get them all right -- the Popper, the Hull, whatever,

25 that they're not relevant in your mind?

1 A. I think they are relevant in the most general  
2 terms of does this map comply with all the requirements,  
3 but the first and most relevant question is, is subdivision  
4 (1) followed, is the map in compliance. It is not. And  
5 then compactness follows from there. I don't think it is  
6 relevant to whether or not Buchanan County should be kept  
7 whole.

8 Q. Well, let me make sure I understand what you are  
9 saying in DX17 here in number 4.

10 A. Okay.

11 Q. You say: The sentence on compactness literally  
12 references the political boundaries we are asking to be  
13 followed. And there is a quotation. Do you recall what  
14 that quotation is?

15 A. That quotation, as I recall, is the final  
16 sentence of subdivision (3) and those natural political  
17 boundaries are also referenced in subdivision (1) and (4),  
18 yeah.

19 Q. So just focusing on (3) for a minute --

20 A. Yeah.

21 Q. -- when you were drawing your map, how did you  
22 think about it? Maybe just use that hexagonal. Hexagonal  
23 in shape to the extent permitted by natural or political  
24 boundaries. How did you approach that in drawing your map?

25 A. So the language in the constitution is a

1 general -- is this generally compact, but that is  
2 subordinate to, are you keeping counties whole, so you will  
3 see in the larger judicial redistricting plan that there  
4 are districts, some of which we talked about earlier today,  
5 which, if compactness was the only thing that mattered,  
6 they would not look like they do, but you keep counties  
7 whole whenever you can and even the compactness standard  
8 says, hey, make it look like a shape but keep those  
9 counties whole, if you can. There is a reason that the  
10 political boundaries is included in that sentence.

11 Q. In drawing your map which is Plaintiffs'  
12 Exhibit 1, did you endeavor to make it look like a shape?

13 A. Yeah. I think District 12 is more of a diamond  
14 looking shape than it was before and in my judgment they  
15 are just as compact, if not more so, than what the Judicial  
16 District Commission put forward.

17 Q. All right. So earlier on, right before lunch,  
18 you were having a conversation with Mr. Johnson about  
19 District 12.

20 A. Yeah.

21 Q. You looked at the population deviation on the  
22 as-enacted District 12 which was less than 1 percent. And  
23 I think -- And I am not sure what the record says so I want  
24 to make sure it is really clear. It sounded like you were  
25 saying that you think it is okay to go across county lines



1 as long as the population size is under 1 percent. Is that  
2 what you meant to say?

3 A. No. What I meant to say, there is two different  
4 ways to comply with subdivision (1).

5 Q. Okay.

6 A. One way is, if all the districts deviation is  
7 under 1 percent, that complies with the equal population  
8 standard, you then still have to follow everything that  
9 comes after that.

10 Q. Got you.

11 A. And then the second way to comply with  
12 subdivision (1) is, if you're following the subdivision  
13 rules that are in subsection (4), county lines and  
14 municipal lines, you may deviate by up to 3 percent. And  
15 there is a subordinate requirement to have as few as county  
16 splits as possible, so those are read together.

17 Q. All right. And then I guess just one last  
18 question. When Mr. Johnson asked you about your review of  
19 the Citizens Commission maps, you talked a little bit about  
20 the Ellinger map, and Mr. Johnson asked you if you had done  
21 any analysis of, you know, whether the Ellinger map  
22 strictly complies with the criteria, and I assume we know  
23 the answer. But just to be clear, when Mr. Ellinger  
24 submitted his map, did you assume he was acting in good  
25 faith in proposing maps that he believed were

1 constitutional?

2 MR. JOHNSON: Objection. Calls for speculation for  
3 someone who is not in the proceeding. There is no way of  
4 knowing what Ellinger meant.

5 MR. HATFIELD: True. I'm asking the witness what he  
6 assumed.

7 THE COURT: The question is what did you assume. The  
8 objection is overruled.

9 THE WITNESS: I think Marc Ellinger proposed that  
10 plan, a legal plan because he wanted everyone to adopt it,  
11 so I believe he thought it was legal.

12 BY MR. HATFIELD:

13 Q. Well, yeah. You assumed that he was operating  
14 in good faith?

15 A. Correct, yes.

16 MR. HATFIELD: I don't have any other questions,  
17 Judge.

18 THE COURT: Anything else, Mr. Johnson?

19 MR. JOHNSON: No, Your Honor. We are going to ask the  
20 court to reconsider the motion in limine for the reasons  
21 stated in the motion in limine as demonstrated by the cross  
22 today. Mr. Nicholson at best has the last half of 2021  
23 where he may -- where he claims to have worked on maps and  
24 that is really about it. He doesn't know whether any of  
25 the maps are necessarily constitutional. He can only tell

1 you what the maps say on top of it. And when we're talking  
2 about Dave's Redistricting, he doesn't know what any of the  
3 ratings, when he presses the button, means, so we think  
4 under -- And also he testified a moment ago that at least  
5 through his deposition he was getting paid \$250 an hour for  
6 his expert fees and he still continues to expect to get  
7 paid for expert fees, so it seems like he is here as a  
8 camouflage expert. And we sort of need a clear ruling as to  
9 to whether he is an expert, qualified, based on his very  
10 limited experience, or not.

11 THE COURT: I think he is qualified to give the  
12 testimony he gave.

13 MR. JOHNSON: Okay.

14 THE COURT: So --

15 MR. JOHNSON: Just for purposes of appeal, Your Honor.

16 THE COURT: I'm denying your motion.

17 MR. JOHNSON: And I think I have to also just object  
18 and ask to preserve on the record.

19 THE COURT: Sure.

20 MR. JOHNSON: Thank you.

21 MR. HATFIELD: Plaintiffs rest.

22 THE COURT: Thank you. You may have a seat.

23 THE WITNESS: Thank you.

24 MR. LEWIS: Your Honor, before Defendant, Defendants  
25 rather, presents its case, we would like to move for a

1 directed verdict under Rule 67.02 and I would like to

2 present brief argument.

3 THE COURT: Sure.

4 MR. LEWIS: Your Honor, we move for directed verdict

5 under Rule 67.02 based on the evidence that the court has

6 heard today from Plaintiffs' case. We don't believe the

7 court has heard any evidence that entitles Plaintiffs to a

8 favorable judgment.

9 So what evidence did we hear today? We heard, as a

10 matter of fact, stipulations that Buchanan County and

11 Hazelwood were split. And we heard that Plaintiffs have a

12 map that they think is better, said there are no splits to

13 those two particular jurisdictions. I think that is all

14 we've really heard, Your Honor, certainly all we've heard

15 as far as what Mr. Nicholson would be qualified to testify

16 about.

17 But what did Plaintiffs need to prove, and I think

18 there we need to look to see what Section (3) says, as well

19 as the Missouri Supreme Court's most recent redistricting

20 decision, *Johnson* in 2012. So we think that Plaintiff

21 needed to prove at a minimum that the current enacted

22 boundary lines were not a result of recognized factors or

23 that it goes beyond a minimal and practical deviation .

24 They have not demonstrated evidence that they meet either

25 of those prongs. What we do know is that 1 percent up to

1 the 3 percent deviation is okay. I don't think there is  
2 any dispute that that is permissible; it comes from the  
3 plain text of the constitution. We know that population  
4 deviations are okay, and there is nothing that certainly  
5 exceeds 3 percent. And there was no evidence that was  
6 presented that the current enacted boundary lines were not  
7 a result of recognized factors. I'm thinking geographical  
8 factors, topographic factors. This could be rivers, roads,  
9 political subdivisions, voting rights compliance, voting  
10 age topography. There is no evidence that the Plaintiffs  
11 demonstrated current boundary lines in Buchanan or  
12 Hazelwood were not the result of the recognized factors.

13 So what did *Johnson* say? *Johnson* had some  
14 discussion -- And I want to read, Your Honor, just a brief  
15 passage from *Johnson*. So in *Johnson*, the Missouri Supreme  
16 Court spent some time talking about what the evidence in  
17 the record actually was. And the Supreme Court also held  
18 that the plaintiffs in that case challenge was unsuccessful  
19 because their expert, which I don't think there was a  
20 dispute about the expert in that case, but the plaintiff's  
21 expert in *Johnson* did not take into account consideration  
22 of federal law and other recognized factors when drawing  
23 the proposed map, end quote. Similarly here, I don't think  
24 there has been any testimony that Mr. Nicholson did  
25 actually take into account the federal law and other

1 recognized factors when drawing the proposed map.

2 Also in *Johnson*, the State Defendants introduced

3 records from the redistricting commission at the time.

4 There was substantial pages of supporting documents and

5 maps, including, quote, data about and statistical analysis

6 of Missouri's population figures, voting age topography,

7 racial demographics, other factors, things like census

8 blocks, block groups, census tracts, counties, that is all

9 in defendant's case. Actually, it was in the Joint

10 stipulations as well.

11 But looking to see what the *Johnson* plaintiffs had and

12 did not have, it is uncandidly similar to what Plaintiffs

13 have and do not have in this case. They have not met their

14 burden under the plain text of Article III, Section 3, as

15 well as *Johnson*. We don't think the court has any evidence

16 to conclude that they have demonstrated evidence supporting

17 their challenge to the map under the provisions that they

18 are challenging and that is subdivision (b)(4) of Article

19 III, Section 3.

20 THE COURT: Mr. Hatfield.

21 MR. HATFIELD: Thank you, Judge. We agree that

22 *Johnson* is helpful. By the way, *Johnson* was decided under

23 a different version of the constitution. Some of the words

24 are the same. *Johnson* had to do, of course, with

25 population and with, I believe, contiguousness, did not



1 have to do with political subdivisions.

2 On page 32 of *Johnson* -- and I think you'll find

3 everything you need on this particular issue -- the court

4 writes, plaintiff's proposed map and other evidence fails

5 to prove that the reapportion commission map is

6 unconstitutional because the creator of the proposed

7 alternative map did not take into consideration federal law

8 and other recognized factors when drawing the map. Mr.

9 Gerard used only three factors in creating his proposed

10 map.

11 Skipping a paragraph. They say in contrast, the plan

12 developed by the reapportion commission considered numerous

13 factors in creating this map. Mr. Nicholson said he

14 testified considering all the factors in considering his

15 map. I asked about each one of those and he said he had

16 considered all of those at various levels. They were

17 allowed to cross-examine him on that, and the evidence will

18 be what it will be, but it may go to the creditability, but

19 the testimony is he considered all the factors.

20 More importantly, the issue here is -- I mean, I think

21 in the opening statement Mr. Lewis said we don't have an

22 issue on, this is not about the racial components, it is

23 not about any of the factors except number (4). I

24 understand we have the burden of evidence, which I think

25 we've covered. The issue here is, is it possible to

1 draw -- By the way, Johnson said -- Johnson says on that  
2 same page, none of the plaintiff's evidence addresses --  
3 Sorry. Plaintiff's evidence fails to address whether the  
4 higher population and compactness map is possible when  
5 considering the other recognized factors, a little bit  
6 different issue. The issue is, is it possible.

7 We've got in evidence now, not only Mr. Nicholson's  
8 testimony, but Exhibit P4, which is Mr. Trende's testimony,  
9 on pages, deposition pages 16 and 31, we walked through all  
10 of the factors. So this map we're looking at, it is a map  
11 that Mr. Trende drew, does not divide the municipality of  
12 Hazelwood. This map you drew complies with the Voting  
13 Rights Act, correct? Answer: Yes. Both of these  
14 districts, I believe, are 50 percent black, so it would  
15 likely be that the black candidate for choice would emerge.  
16 Next question: This map complies with the compactness  
17 criteria in Missouri? I believe so, yes.

18 This map complies with equal population requirements?  
19 Yes. This is just under 3 percent. That was a pain, he  
20 says.

21 Trende 5, no problems with partisan fairness? I would  
22 not change the partisan fairness.

23 So their map for Hazelwood shows that it is possible  
24 to comply with all of the factors and leave Hazelwood  
25 intact.

1 Here on page 104 of that deposition at line 12:

2 Question, to the state's expert, which is now in evidence:

3 In fact, it would have been possible to draw a different

4 map that did not split Buchanan County but complied with

5 all of the requirements that we just talked about, correct?

6 Answer: Yes. Again, it depends on what, quote, as

7 possible, end quote, means.

8 Is it what the legislature came up with at the time or

9 is it what is absolutely possible? Yeah. If we're going

10 to say, quote, absolutely possible, that sounds to me like

11 there are more. But I suppose that is a legal fight for

12 you all.

13 Yes, Your Honor is going to have to think about what

14 is possible means, but the evidence before you does not --

15 I'm sorry, does meet Plaintiffs' burden of a prima facia

16 case.

17 Thank you.

18 THE COURT: What were the changes that they made in

19 the last Amendment 3, Section 3.

20 MR. HATFIELD: I was afraid you were going to ask

21 that.

22 MR. LEWIS: Your Honor, I have one copy unfortunately.

23 MR. HATFIELD: Yeah.

24 MR. JOHNSON: I have four copies.

25 MR. LEWIS: We have five copies, Judge.

1 MR. HATFIELD: Sure.

2 THE COURT: This is what I wanted to know what it was.  
3 The argument is, *Johnson* was under a different provision.

4 MR. JOHNSON: *Johnson* was 2012.

5 MR. HATFIELD: Judge, to be clear. *Johnson* was under  
6 the constitution in 2012. The constitution has been  
7 amended twice since then. I was not arguing that these are  
8 extremely significant changes for purposes of this case.

9 They do discuss what the word as possible means in previous  
10 versions of the constitution which I think is relevant, but  
11 *Johnson* does not answer what you are dealing with today.

12 THE COURT: Okay.

13 MR. HATFIELD: My belief, and maybe Mr. Johnson, maybe

14 Mr. Johnson has another chart that would show us, but I  
15 believe that the political subdivision requirements are  
16 more clear. We should call Mr. Keller because he has

17 actually done this whole analysis. I believe that the

18 subdivision requirements are a little more clear than they  
19 used to be when it says, you know, here is how you do it,  
20 first this county, second that county. I don't believe

21 municipalities was in there in the past. It just talked

22 about political lines. I'm not testifying, Judge. I'm  
23 going from memory. I think those are the main things.

24 And then I do know, because you can read *Johnson* and  
25 tell this, and I'm sure Mr. Lewis will correct me, the 1

1 percent and 3 percent was not that specific. The  
2 constitution used to say proportionate as near as possible,  
3 which is why as possible is discussed, because the Supreme  
4 Court was like, what do we do with that? Does that mean  
5 one person? What does that mean? And so after *Johnson* in,  
6 I believe, both Clean 1 and Clean 2, there was some clean  
7 up and some specificity applied to the population  
8 requirements. That is the best I can do on your question.

9 THE COURT: Okay.

10 MR. LEWIS: Your Honor, if I can briefly respond to  
11 that.

12 THE COURT: Sure.

13 MR. LEWIS: I think *Johnson* provides the most useful  
14 framework in this case. Under *Johnson* there was Sunshine  
15 motions, a lot of issues, but a relevant issue here begins  
16 on page 32, 32, 31, 32 of the opinion, and the court talks  
17 about what does nearly equal and practical mean, the  
18 interrelation between compactness and population  
19 requirements, and I think that is the same framework we  
20 have now, even though the text has changed perhaps more  
21 specific in some areas. We're still looking at the  
22 interrelatedness of certain provisions and that is  
23 subdivision (b) (1) of the constitution but, again, here we  
24 only have a subdivision (b) (4), and we don't think that  
25 there has been frankly any sufficient evidence under

1 (b)(4), if there is a violation to that. As anything  
2 interrelated with subdivision (b)(1), we think *Johnson*  
3 provides a helpful framework to understand what working out  
4 should be and what Plaintiffs' burden is, and they have not  
5 met the burden here today.

6 THE COURT: I'm going to deny the motion. The last  
7 thing I want do is come back for the second half of this on  
8 a different day.

9 MR. LEWIS: Thank you, Judge.

10 THE COURT: At some point -- So I've got a version of  
11 the constitution from *Johnson*. I've got the '18 amendments  
12 and then I've got the 2020 amendments.

13 MR. HATFIELD: Right.

14 THE COURT: I can look it up.

15 MR. JOHNSON: I don't think anybody today has provided  
16 2012.

17 THE COURT: No. I can look it up.

18 MR. JOHNSON: Okay. I'm just checking.

19 THE COURT: I can look it up. I'm just trying to  
20 figure it out. I knew *Johnson* was older, so -- And *Johnson*

21 may give us some guidance on what we do, and this is why I  
22 can write a better ballot summary than you can. The real

23 question of it is, is there anything wrong, and I think

24 that, in this particular situation, it may well come down

25 to that and how much I think Mr. Johnson -- Mr. Lewis



1 talked about it -- what difference we give.

2 MR. HATFIELD: That's right.

3 MR. LEWIS: Thank you, Your Honor.

4 MR. JOHNSON: Okay. Thank you, Your Honor.

5 The Secretary of State is ready to proceed. We would  
6 call Mr. Sean Trende to the stand.

7 THE COURT: Thank you, sir. Raise your right hand.

8 (Witness sworn)

9 SEAN PATRICK TRENDE,

10 having been duly sworn or affirmed by the Court, was  
11 examined and testified as follows:

12 DIRECT EXAMINATION BY MR. JOHNSON:

13 Q. Mr. Trende, please tell us your full name for  
14 the record.

15 A. Sean Patrick Trende. That is T-r-e-n-d-e.

16 Q. What is your educational, what is your  
17 educational background, sir?

18 A. I graduated from Yale in 1995 with a double

19 degree in political science and history. I then graduated  
20 from Duke University Law School in 2001 with a JD. And

21 while I was there, I also earned a masters in political

22 science with an emphasis in American politics. In 2016, I

23 enrolled -- I apologize, I have to say the school name this

24 way. I enrolled in a doctoral program at the Ohio State

25 University with an emphasis in American politics and

1 methodology. And when I arrived there, the faculty looked  
2 at my statistical background from my earlier masters work  
3 and suggested that I go take additional courses in the  
4 stats department instead of retaining the stats sequence.

5 When I was done with that, I earned a masters in applied  
6 statistics from the statistics department. I passed my  
7 qualifying exams in American politics and methodology. And  
8 last week I finally got the welcome news that my  
9 dissertation has been approved by my committee and so it  
10 has been submitted to formatting review, which is the last  
11 step before the defense.

12 Q. What does methodology mean in your expected

13 Ph.D.?

14 A. So political science is divided up into five  
15 fields, and one of those fields is American Politics. When  
16 they say methodology, they mean statistics for social  
17 sciences. So it is a specific application of statistics  
18 work to political science.

19 Q. And just to back you up I think about two  
20 decades. After you graduated from Duke law school, where  
21 did you work?

22 A. So my first job out of law school, I was a law  
23 clerk for Chief Judge Tacha on the Tenth Circuit. After I  
24 completed that clerkship, I went to work at Kirkland &  
25 Ellis in Washington, D.C. for three years. I got married

1 and my wife and I decided to start raising a family in  
2 Richmond instead of D.C., so we moved to Richmond and I  
3 worked at Hunton and Williams there before I became a  
4 full-time political writer and analyst.

5 Q. And you provided a curriculum vitae with  
6 relevant redistricting work to us. Is that correct?

7 A. Yes.

8 Q. All right. And I'm not entirely certain  
9 everyone has this. If we can turn to JX22.

10 MS. COSSETTE: Everyone should have it.

11 MR. JOHNSON: Everyone should have it?

12 MS. COSSETTE: Yes.

13 BY MR. JOHNSON:

14 Q. Okay. So in addition to pursuing your master's  
15 degree and now your doctorate degree, what other  
16 educational opportunities do you engage in?

17 A. Well, I, you know, keep up with all the work in  
18 redistricting. Every year I author a book chapter or every  
19 other year I author a book chapter for Dr. Larry Sabato,  
20 sequence of books analyzing a previous selection. And I  
21 also teach at Ohio State.

22 Q. And what classes do you teach at Ohio State?

23 A. I teach -- I have taught the intro to American  
24 Politics class for kind of the incoming freshman. And then  
25 I also have a class that I developed on my own which covers

1 voter participation and turnout.

2 Q. Does your teaching include any redistricting  
3 work?

4 A. Yes. So we briefly cover redistricting in the  
5 Political Science 1100, but that is just a survey class so  
6 not a lot of depth. The voter participation and turnout  
7 class is different. In that class it is for upper classmen  
8 and so we spend a lot of time on redistricting and voting  
9 rights issues, talking about compactness, metrics, how to  
10 calculate them, talking about redistricting simulations and  
11 qualitative analysis of redistricting. In fact, the  
12 students final project is to produce a map of a state with  
13 30 districts, just to give them the experience of seeing  
14 what goes in to actually drawing a map.

15 Q. Roughly how many of those do you grade?

16 A. Well, I used to do a paper and that ended up  
17 being prohibitive because there were 60 students in the  
18 class, so we do a group project which reduces it to about  
19 15.

20 Q. And what, if any, expert testimony have you  
21 provided in voting and redistricting cases?

22 A. So I guess the highlights, I was the expert  
23 witness for the state in *League of Women Voters versus*  
24 *Rucho* and *Gill v Whitford*, which is the two cases that went  
25 up to the Supreme Court in the United States. I was the

1 expert for the plaintiffs in the New York litigation where  
2 the state-- well, the Supreme Court, but they call it the  
3 Court of Appeals, struck down the State House and Senate  
4 maps as unconstitutional gerrymanders. I was the witness  
5 for the plaintiffs in the Maryland case where the judge  
6 struck down that state's map as an unconstitutional  
7 gerrymander. And I testified in a variety of other cases  
8 which are listed on pages 4 and 5 of the CV. But those are  
9 the highlights.

10 Q. Where have you served as court appointed master  
11 for redistricting purposes?

12 A. So my first experience with that, I actually was  
13 appointed by the Supreme Court of the country of Belize to  
14 advise that court on -- it was their version of *Baker v*  
15 *Carr* -- to advise that court on whether their maps complied  
16 with international standards of fairness in redistricting;  
17 and if not, which it did not, to fashion remedial  
18 districts, three sets of remedial districts for the court  
19 to look at.

20 The second time that I was appointed as special master  
21 was by -- I was a co-special master with Dr. Bernie Grofman  
22 by the Supreme Court of Virginia where we drew their  
23 official State House, State Senate and congressional  
24 delegation lines.

25 Q. And is that Virginia map still in place today?

1 A. It is. It is one of the -- Yes.

2 Q. Where have you served as a voting rights expert  
3 for redistricting?

4 A. For redistricting, I've been -- Well, most of  
5 the cases haven't gone to trial yet, but I've been deposed  
6 in *LULAC v Abbott*. And I suppose now I was recently  
7 deposed in a case in Michigan, which I haven't testified  
8 yet, but it is not on the CV. And then I was also an  
9 expert in *NAACP versus McMaster*, which is a South Carolina  
10 gerrymander case.

11 I was also appointed by the Arizona Independent  
12 Redistricting Commission as one of two consultants to the  
13 attorneys for the Voting Rights Act, so I served with Steve  
14 Ansolabehere from Harvard as the consultants for the  
15 attorneys.

16 Q. In these cases or appointments, does your  
17 testimony also include proposed remedial maps?

18 A. Oh, yeah. It is very common to draw proposed  
19 remedial maps. Like I said in the Belize case, we had to  
20 draw that. And when you are working as a plaintiff in a  
21 VRA case, you typically have to propose a map to

22 demonstrate under general's Prong One that there can be a  
23 remedy.

24 Q. And in these cases or appointments, what kind of  
25 redistricting criteria do you opine on or apply?



1 A. So routinely, you know, especially when you are  
2 a plaintiff, the compactness is a big one, contiguity,  
3 number of splits of counties. The case -- The last one on  
4 page 5, *Moore v Lee* in Tennessee, is particularly  
5 interesting because that is a state constitutional  
6 challenge under their state constitution which limits the  
7 number of splits that a legislature can do, and it also has  
8 a similar wholly within provision requiring you to draw  
9 districts wholly within a county if the population is  
10 sufficient to support it.

11 Q. And you've been called to testify here as an  
12 expert in legislative redistricting, right?

13 A. That's correct.

14 Q. What, if anything, have you done to become  
15 familiar with the redistricting requirements for the  
16 legislative map drawing requirements in Missouri?

17 A. I reviewed the Missouri constitution, focusing  
18 mostly on the actual, you know, Section 3(b) requirements.

19 Q. What materials did you review for this?

20 A. I reviewed mostly the state constitution, that  
21 was kind of my analysis. I also reviewed the maps that  
22 were submitted by Mr. Nicholson and the enacted maps.

23 Q. Have you used your knowledge, education and  
24 practical experience gained for redistricting cases to  
25 generally accepted method in the field of legislative

1 redistricting to your work here?

2 A. Yes.

3 MR. JOHNSON: Your Honor, I move to qualify Mr. Sean  
4 Trende as an expert in legislative redistricting for  
5 purposes of this case.

6 MR. HATFIELD: I don't know. I don't think he is  
7 qualified. I'm reminded of Byron Kinder, right? What do  
8 you want me to do about it?

9 THE COURT: Well, the law is a little different so,  
10 yes, you may proceed in that direction.

11 MR. JOHNSON: Thank you, Your Honor.

12 BY MR. JOHNSON:

13 Q. All right. So you've done some work to help in  
14 forming your opinions today, correct?

15 A. That is correct, yes.

16 Q. What kinds of analyses have you done to reach  
17 your opinions today?

18 A. So most of my work was done in R. It is a  
19 statistical program software package. It sounds kind of  
20 esoteric but it is something that we start teaching to the  
21 undergrads right away and they use in my class. It is a  
22 way to -- It is more flexible than something like Dave's  
23 Redistricting app. You can program in specific functions  
24 to do things, measure what Dave's Redistricting won't  
25 measure. Instead of going through and count splits or

1 something like that and miss something, it automatically  
2 does something for you. That was the main thing that I did  
3 to look at the shape files, which I can explain what those  
4 are, the shape files that were produced for purposes of  
5 this case.

6 Q. What are the shape files?

7 A. Okay. So when you look at an Excel spreadsheet  
8 it has columns and rows that have the data. And really all  
9 a shape file is, it will have -- Each row will be a  
10 precinct or a block or a county, depending which level you  
11 are looking at, and the columns will be the data. Each  
12 column -- Let's say you have population and so it will say  
13 Atchison County, row A1, it will have the population of  
14 Atchison County, and then it goes down, just like a  
15 spreadsheet would. What makes the shape file special is  
16 that the last column is labeled geometry, and the geometry  
17 column contains a series of points that mark the vertexes,  
18 give you the shape of the actual geographic feature, and so  
19 all of -- Dave's Redistricting works off of a shape file,  
20 that is how it produces the maps that you program in. It  
21 will remember where the lines are for every little thing  
22 that you click. As it produces a shape file, it just  
23 remembers where the boundary is in that column called  
24 geometry; otherwise, it is just a spreadsheet that has the  
25 geometry of the district or county or precinct or whatever

1 you are interested in keyed in.

2 So what you can do, when you get -- These things are

3 all publically available. There is something called the

4 Redistricting Data Hub that has shape files for the entire

5 country. The census on something called Tiger Line

6 produces boundary lines for the entire country. You can

7 get political election results from the entire country and

8 so you just have to know where you go and you download the

9 data and you can proceed from there. You can make -- You

10 can take any map that has been created and break it down to

11 the block level, look at the data. It is an amazingly

12 powerful tool.

13 Q. What kind of analysis did you do as to the

14 enacted map?

15 A. Well, the two main things that I did was, I

16 looked at the compactness of all of the districts. And we

17 can talk about the compactness measures. But the three

18 main ones I looked at have these mouthful of names...the

19 Reock score, the Polsby-Popper score -- P-o-l-s-p-y hyphen

20 P-o-p-p-e-r -- and then the Convex Hull, H-u-l-l, score,

21 and I was able to calculate that using R for each one of

22 the districts at issue in this case. I also generated some

23 simulated districts to get a sense of how common or typical

24 the county breaks and the city breaks that we see in these

25 maps are. Those are big headlines. There is a lot

1 underneath each of the headlines.

2 Q. Okay. And did you prepare like a proposed  
3 summary document of the analysis that you have done?

4 A. I did.

5 MR. JOHNSON: If I may approach.

6 THE COURT: You may.

7 MR. JOHNSON: For you, sir. Your Honor.

8 (Defendants' Exhibit No. 1, Defendants' Proposed  
9 Remedial Map, was marked for identification.)

10 BY MR. JOHNSON:

11 Q. Okay. Mr. Trende, do you recognize the document  
12 that I passed to you that is marked as DX1. It starts on  
13 Bates MOREdist, R-e-d-i-s-t, 63.

14 A. Yes.

15 Q. And then it goes through MOREdist71.

16 A. That's right.

17 Q. And what is it?

18 A. So these are a series of maps that I produced in  
19 R based off of the shape files that we were just  
20 discussing, and then some kind of summary statistics on the  
21 last two pages describing three maps that were evaluated.

22 MR. JOHNSON: I move to admit Defendants' Exhibit 1  
23 for the record.

24 MR. HATFIELD: Maybe three voir dire questions, Judge.

25 THE COURT: Sure.

1 VOIR DIRE EXAMINATION BY MR. HATFIELD:

2 Q. It says Defendants' Proposed Remedial Map. So  
3 is this something you created that is not the Judicial  
4 Commission's enacted map, right?

5 A. Yes, I believe that is right.

6 Q. And it is not Mr. Nicholson's map?

7 A. That is right.

8 Q. This is one that you made that is different than  
9 the Judicial and different than Nicholson?

10 A. Yes.

11 MR. HATFIELD: I am not sure that is what Mr. Johnson  
12 said it was, but I don't object to its admission.

13 THE COURT: Okay. DX1 is admitted.

14 (Defendants' Exhibit No. 1, Defendants' Proposed  
15 Remedial Map, was received into evidence.)

16 CONTINUED DIRECT EXAMINATION BY MR. JOHNSON:

17 Q. You talked a moment ago about doing simulations  
18 to help understand different redistricting choices that  
19 were made in various maps. Is that right?

20 A. That's correct.

21 Q. And did you produce those, those files as a part  
22 of this case?

23 A. I did.

24 Q. And what kind of data or what kind of files is  
25 it called?



1 A. Well, the files that we produced -- First, I  
2 think we produced the underlying shape files. They are  
3 publicly available, but I think we produced these. And  
4 then you can take the programming notes, if you will, that  
5 you write in R and produce them as a separate document. It  
6 is called an R script. You'll hear about people writing  
7 JavaScript or C++ script. These are just a sequence of  
8 commands written in R that you can provide to a different R  
9 user and they can replicate your work through it.

10 Q. And did you use generally accepted methods in  
11 the field to run those simulations?

12 A. Yes.

13 Q. And how many simulations does R files represent?

14 A. They represent a lot. Anywhere, depending on  
15 the circumstances, between 5,000 and 50,000.

16 (Defendants' Exhibit No. 10, Trende Simulations from  
17 the R Files, was marked for identification.)

18 BY MR. JOHNSON:

19 Q. Okay. And then I have, I have marked as Exhibit  
20 DX10?

21 MR. JOHNSON: For you.

22 MR. HATFIELD: Thank you, sir.

23 MR. JOHNSON: I don't know if you necessarily need  
24 this. There you are, sir.

25 THE COURT: Okay.

1 BY MR. JOHNSON:

2 Q. And I just handed you DX10. And what do you  
3 know to be on this exhibit?

4 A. The "sims" that I produced.

5 Q. Those are all the R files that you used?

6 A. Yes.

7 MR. JOHNSON: I move to, I move to admit DX10 into  
8 the record.

9 MR. HATFIELD: Accepting counsel's representation that  
10 DX10 includes the R files that we did receive in discovery,  
11 I have no objection. I don't know how to use a CD-Rom.

12 THE COURT: If I were to look at this, what would I  
13 see?

14 MR. JOHNSON: You would see --

15 BY MR. JOHNSON:

16 Q. Well, how many R files did you put on there?

17 A. I believe I produced seven R scripts. What you  
18 do to see it, I don't know how helpful it would be unless  
19 you were in R, but for the record, if you right click on it  
20 and click open with and then select note pad, it will open  
21 the script in note pad for you and you can read it.

22 MR. JOHNSON: We just want to make sure that the court  
23 has access to the full methodology that the expert used  
24 here.

25 THE COURT: Is this like the raw data?

1 THE WITNESS: It is the -- So when you use  
2 spreadsheet -- Well, you can think of it -- This is  
3 actually what it is. When you use a spreadsheet and you  
4 have like three lines and you write sum and it goes through  
5 and adds it up --

6 THE COURT: Right.

7 THE WITNESS: -- you are actually looking at what is  
8 called the front end. The back end is actually a series of  
9 commands that Excel interprets to do what you put in.

10 THE COURT: Right.

11 THE WITNESS: What the R script is -- In R you don't  
12 have the front end, you are doing all your work in the back  
13 end. I'm giving you the back end. I'm giving you the  
14 series of commands that would allow, or someone, to  
15 re-produce fully the work that I've done in this case. It  
16 is replication files.

17 THE COURT: No objection.

18 MR. HATFIELD: No. Well, voir dire question. Let  
19 me -- If that is all right, Judge.

20 THE COURT: Sure.

21 VOIR DIRE EXAMINATION BY MR. HATFIELD:

22 Q. I'm going to say what you said. I'm trying to  
23 say the same thing in laymen's language to make sure I'm  
24 right. These are the instructions you gave R on how to  
25 draw DX1?

1 A. That's correct.

2 MR. HATFIELD: No objection.

3 THE WITNESS: And the simulations that we will be  
4 talking about later that we discussed in the deposition.

5 BY MR. HATFIELD:

6 Q. This is like the instructions, like keep the  
7 county whole?

8 A. Right. If I had done it in Excel, you might  
9 narrate. I had these three cells and I clicked in sum and  
10 it added the cells up, okay? For R, one of the nice things  
11 is, you have to manually enter all of those commands and so  
12 you don't have to just kind of describe it, you have a full  
13 list of the commands that anyone who takes that and can run  
14 the script will replicate exactly what you did.

15 Q. So like in this, somewhere the Judge would see  
16 that you told R it was okay to cross at least one county  
17 line?

18 A. Yes.

19 MR. HATFIELD: All right. Thanks. No objection.

20 THE COURT: DX10 to be admitted.

21 MR. JOHNSON: Thank you, Your Honor.

22 (Defendants' Exhibit No. 10, Trende Simulations from  
23 the R Files, was received into evidence.)

24 CONTINUED DIRECT EXAMINATION BY MR. JOHNSON:

25 Q. So, Mr. Trende, what are the opinions that

1 you've been asked to testify to today?

2 A. So there is five opinions. The first -- And I

3 don't know if they are in the exact same order I gave at

4 the deposition. The first opinion is that, if the

5 legislature has discretion to split a county or a city, it

6 is not unusual or atypical to split Buchanan County or the

7 City of Hazelwood.

8 The second opinion is that the Plaintiffs' map is less

9 compact in the challenged districts than the enacted map.

10 The third opinion is that the compactness criteria,

11 the communities interest criteria supported the compactness

12 criteria when you look at these matters.

13 And the last opinion is kind of like an overall

14 summary opinion that the map appears to be constitutional.

15 MR. HATFIELD: Judge, to the extent that the witness

16 has just offered the opinions, I move to strike opinions 1

17 and 3. Opinion 1 is a legal conclusion about the

18 legislature's discretion. And opinion 3 is definitely a

19 legal conclusion on whether compactness three is

20 subordinate or, sorry, factor 3 --

21 THE COURT: I'm still going to ask what 3 was because

22 I had trouble understanding.

23 MR. HATFIELD: That is a good point. Perhaps we could

24 get some clarification on what 3 is.

25 THE COURT: What 3 is.

1 MR. HATFIELD: We objected to a legal opinion. I  
2 don't think Your Honor needs any expert opinions by the  
3 way, but I object to the way I understood 3 to be worded.

4 THE COURT: Well, let's start with what was 3.

5 MR. JOHNSON: May I ask, can we address the objection  
6 to the first opinion about legislative discretion?

7 THE COURT: Sure.

8 MR. JOHNSON: I believe Mr. Hatfield said that he  
9 objected to it for a legal opinion, and what Mr. Trende is  
10 testifying as to, should the court decide how that  
11 legislative discretion is enacted, that if there is  
12 discretion then the choices for Buchanan County and City of  
13 Hazelwood are reasonable.

14 THE COURT: As I understood it, he said if the  
15 legislature has discretion -- Of course, legislature is not  
16 doing this. At this point it is the Judicial Redistricting  
17 Commission. -- if they have the discretion to split  
18 counties or split municipalities, then, as I understood it,  
19 that would not be uncommon --

20 MR. JOHNSON: Yes.

21 THE COURT: -- that that would do that. So it is  
22 almost like, if the court were to find that you could  
23 produce a map with a county split or municipality split,  
24 that would not be unusual, that is all I got from opinion  
25 number 1. I don't know that he is making a legal opinion



1 of what legislative discretion is because legislature is  
2 not a part of this.

3 MR. HATFIELD: I guess for the record, I would object  
4 to that opinion, you are probably right, it is irrelevant  
5 and not helpful to the court which is the ultimate standard  
6 because, if they have discretion, it doesn't matter whether  
7 it is usual or unusual. The question is, did they exercise  
8 the discretion appropriately. It is an irrelevant  
9 objection. It is a judge-tryed case.

10 THE COURT: Yeah. Apparently he does a lot of this  
11 and it is not uncommon for it to happen and that is what I  
12 got to opinion number 1. Can we go to 3.

13 MR. JOHNSON: I believe you had a question on 3?

14 THE COURT: Let's figure out what 3 says first.

15 THE WITNESS: My understanding was that communities  
16 of interest are subordinated to the compactness  
17 requirement.

18 MR. HATFIELD: Certainly as framed, I think the  
19 witness is offering a legal opinion to the court and I  
20 would object.

21 MR. JOHNSON: I think we can lay a little foundation  
22 for the court, but I think this is going to his  
23 understanding in applying the criteria for a legislative  
24 map for this morning.

25 MR. HATFIELD: I think what criteria did he use is a

1 different question than which criteria are subordinate to  
2 which other criteria generally, I think that is part of  
3 what Your Honor is going to have decide.

4 THE COURT: It is this theory that compactness is more  
5 important than community interests and that is what he  
6 relied upon.

7 MR. HATFIELD: A slightly different question but you  
8 are right. You are right.

9 THE COURT: Okay. I'm not going to strike it. It is  
10 a bench-tryed case.

11 MR. HATFIELD: That's fine.

12 THE COURT: Okay. You had five opinions and I've got  
13 three.

14 THE WITNESS: Well, the fourth was an overall, just  
15 kind of an overall conclusion that the map appears to be  
16 constitutional based on my --

17 THE COURT: This is the Joint Redistricting Commission  
18 map?

19 THE WITNESS: Yes.

20 THE COURT: Okay.

21 MR. HATFIELD: Appears to be constitutional?

22 THE WITNESS: Yes.

23 MR. HATFIELD: So I object to that one.

24 THE COURT: Okay. It is a judge-tryed case.

25 MR. HATFIELD: Yeah.

1 THE WITNESS: And then the fifth opinion would be  
2 that, in my experience drawing maps and using simulations,  
3 failure to afford any discretion on these would lead to an  
4 infinite regress given the vast number of -- an infinite  
5 number of challenges given the vast number of maps that are  
6 out there, or potential maps.

7 THE COURT: I think that is what we talked about  
8 earlier, how you figure this case out. It is what it is.  
9 All right.

10 BY MR. JOHNSON:

11 Q. In coming to your opinions, does the body that  
12 draws the maps, does that play any role in the validity of  
13 your opinions?

14 A. No. No. If I must speak on the process, it  
15 doesn't change my opinion on whose drawing the map.

16 Q. Right. Your opinions go toward the actual act  
17 of drawing the maps, right?

18 A. Correct. The output, yeah. It is not a process  
19 opinion.

20 Q. And you heard testimony -- You were here for Mr.  
21 Nicholson's testimony. Is that right?

22 A. That's right.

23 Q. And you heard him refer numerous times to the  
24 documentation for Dave's Redistricting related to the  
25 ratings that Dave's Redistricting provides?

1 A. That's right.

2 Q. And he couldn't tell us where that documentation  
3 is located?

4 A. Yeah. I heard him say he doesn't have the site  
5 memorized and doesn't know where it is.

6 Q. And from your experience working with Dave's  
7 Redistricting, you know, where is the underlying  
8 documentation?

9 A. It doesn't have any documentation on the site.  
10 There is an about that explains where the data comes from,  
11 but there is nothing on the site -- there is no official  
12 documentation on the site explaining how he used it or what  
13 the metrics mean.

14 Q. You also heard testimony from Mr. Nicholson  
15 about how the efficiency gap is a proportionality measure  
16 used by Dave's Redistricting?

17 A. That is what I heard, yes.

18 Q. And what is your opinion on that?

19 A. That is not true. The efficiency gap is not a  
20 proportionality measure. As a matter of fact, the  
21 efficiency gap penalizes proportionality because the  
22 efficiency gap theory says that you should get 2 percent of  
23 the seats for every 1 percent of the vote you get, so as  
24 opposed to proportionality, which is -- Proportionality,  
25 you get an additional 1 percent of the seats for every 1

1 percent of the vote you get and the efficiency gap, like I  
2 said, if you have a map that does 1 for 1, the efficiency  
3 gap says at a certain point you were a gerrymander, which  
4 is one of the reasons why I think it is a flawed metric,  
5 but that is another discussion.

6 Q. So just to clarify, the efficiency gap is not a  
7 measure of proportionality, or isn't one at all?

8 A. No. None of the partisan fairness metrics are  
9 proportionality metrics. They all punish you for trying to  
10 keep districts proportional because they all operate under  
11 this theory that in a district based system you should get  
12 more seats than proportionality would provide as your vote  
13 share improves.

14 Q. So the efficiency gap measures something  
15 different than what you would expect the proportionality  
16 measure to measure, correct?

17 A. Right. The efficiency gap says that if you get  
18 52 percent of the vote you should get 54 percent of the  
19 seats. So if you've got 52 percent of the vote and  
20 52 percent of the seats, which is proportionality, the  
21 efficiency gap would actually say, no, you actually are  
22 deviating from what partisan fairness would demand by 2  
23 percent of the seats, you didn't get what you deserved, so  
24 they are really distinct concepts.

25 Q. Let's begin with the enacted maps

1 constitutional. When you say the enacted map is more  
2 compact than the Plaintiffs' proposed map, what do you  
3 mean?

4 A. Well, I think I said the Plaintiffs' proposed  
5 map with respect to challenged districts. What I mean is  
6 what is summarized on the last page of the DX1. So I gave  
7 data on every district that was changed in the various  
8 maps. But what I provided is the actual Reock,  
9 Polsby-Popper and Convex Hull scores for the enacted plan,  
10 the Plaintiffs' plan, and then a remedial plan that was put  
11 together.

12 Q. Why are you using those measures?

13 A. So they are the three -- First, just as a  
14 practical expert matter, there is four that I always use in  
15 cases. It turns out that one of those four is actually the  
16 square root of the Polsby-Popper metrics so it doesn't  
17 provide additional information. There is actually really  
18 cool proof of that. Now I just use these three; so if I  
19 would change, I would get questions on that.

20 From a relevant to this case matter, each one of these  
21 scores -- It is real easy as a practitioner or someone who  
22 looks at these to look at these numbers and start seeing  
23 them as ends in themselves. Even people who have been  
24 doing this a long time, I do that sometimes. Each of these  
25 scores though represents an aspect of compactness. They



1 measure different ways that something is compact or not.

2 And I can go into that for each one.

3 Q. So what does the Convex Hull score convey?

4 A. So it turns, so it turns out that the Convex

5 Hull score is actually very relevant to what is written in

6 the Missouri constitution because the Missouri constitution

7 says, generally speaking -- it has been read into

8 evidence -- generally speaking, compactness -- a compact

9 district is one that is a square, a hexagon, et cetera.

10 Well, what the Convex Hull metric does, is it takes a

11 district and essentially snaps a rubber band around it so

12 you end up with a polygon, kind of a square or hexagonal

13 shape around the district, and it looks at how much that

14 district that you drew fills up. That polygon is actually

15 the percentage of the area of that polygon that is filled

16 up by the district you draw. So if you were to draw a

17 perfect square you would be filling up 100 percent of that

18 polygon and you would have a Convex Hull score of 1. A

19 Convex Hull score of 1 means that you are filling up 100

20 percent of a polygon around that district.

21 If you draw up a district that is really bizarrely

22 shaped and has a lot of inlets, there is going to be a lot

23 of empty area in that rubber banded shape around the

24 district and so you're going to have a very low Convex Hull

25 score. A Convex Hull score of .5 would mean that you are

1 only filling up 50 percent of the area of that district.

2 Long story short, it turns out that the more your  
3 district resembles a square or a rectangle or a hexagon the  
4 higher your Convex Hull score is going to be, so in this  
5 instance there is a metric that lines up with what the  
6 Missouri constitution requires.

7 Q. And what does a Reock score measure?

8 A. So the Reock score was actually the first  
9 mathematical attempt to measure compactness. So while the  
10 Convex Hull looks at a polygon that encloses it, the Reock  
11 score looks at a circle, then closes it. So the more you  
12 fill up that circle that would enclose your district the  
13 higher your Reock score. A Reock score of 1 means you've  
14 actually drawn a circular district. You can do that  
15 actually some places in the south where they have cities  
16 that are perfect circles, as it turns out.

17 But as a general matter, because the circle is the  
18 most compact shape, it is how much you are filling that  
19 circle. And the more you distend the district the less of  
20 that circle you are going to be filling up. So if you have  
21 a big oblong district, there is going to be a really big  
22 circle enclosing it and you are not going to fill much of  
23 it at all. So a Reock score of .1 means you are filling in  
24 10 percent of that district.

25 Q. And what about -- What does the Polsby-Popper

1 score tell you about the district?

2 Official Court IA. So the Polsby-Popper score kind of gets that

3 compactness in a different way. It looks at how many arms

4 a district has. Like if you have a district that reaches

5 out to get different populations, you can think of the

6 districts that the court has ruled were racial

7 gerrymanders. You have a district that goes along an arm

8 that gets a population here and an arm that sticks out to

9 get a population here. The Polsby-Popper score takes the

10 district and stretches it into a circle with the same

11 perimeter as your district has. So the larger your

12 district's perimeter gets the larger that circle is going

13 to be, and it looks like basically how much of that circle

14 with the same perimeter as your district the district fills

15 up. So it turns out --

16 Again, if you have a perfect circle district, your,

17 with no arms or inlets, your Polsby-Popper score would be 1

18 because you filled up 100 percent of that district with the

19 same perimeter. But as you start to kind of meander around

20 and increase the perimeter of your district, it is going to

21 increase the size of the circle and the circle is going to

22 fill in less and less and less of it.

23 Q. And MO Redist 71, just to help the court out, it

24 says enacted plan, right? What districts -- I guess, what

25 are those three columns representing to the court?

1 A. Right. So the first column is -- The first  
2 column, first row, is the Reock score of the enacted plan  
3 for District 12, so District 12, the enacted plan would  
4 fill in 31.8 percent of that enclosing circle. And then it  
5 does that for Districts 18, 21, 34, 13 and 4 (sic).

6 The Polsby-Popper score is .329, means that District  
7 12 actually does okay. It doesn't have a whole lot of arms  
8 and inlets, and it fills in 39 percent of the district with  
9 a similar perimeter.

10 The Convex Hull score is 85.8, which means when you  
11 make a polygon around it, it fills in 85.8 percent of that  
12 polygon which is, again, the closest to like a square,  
13 hexagon, square, or something of that nature, and I do that  
14 for each of the districts.

15 Q. So that is the base line and the accurate  
16 information from what the Judicial Redistricting  
17 Commission scores on these measurements on compactness,  
18 correct?

19 A. Correct.

20 Q. Now -- And then you also did it for the  
21 Plaintiffs' plan. Is that right?

22 A. That's correct.

23 Q. And that is represented in the next three  
24 columns over?

25 A. That is right.

1 Q. So in comparing the enacted map to the  
2 Plaintiffs' proposed map, how does District 12 bear for the  
3 Convex Hull score?

4 A. It fills in about 10 percent less of that  
5 enclosing polygon. It is less of a square or a hexagon  
6 than the enacted plan, so it is less compact.

7 Q. And then in comparing the enacted plan to  
8 Plaintiffs' proposed map, how does district 34 bear on all  
9 measures?

10 A. On all measures, well, the Reock score is like  
11 15.15 lower, so 15 percent less of that enclosing circle.  
12 The Polsby-Popper score is .06 of a point lower. And then  
13 the Convex Hull score is point, I guess .037, so about .37  
14 percent less of that enclosing polygon is filled in by the  
15 Plaintiffs' plan, so it is less of a hexagon, square or  
16 rectangle, et cetera.

17 Q. And then comparing the enacted map to  
18 Plaintiffs' proposed map, how does District 14 fair?

19 A. So District 14 is about .08 of a point, so 8  
20 percentage points less of that enclosing polygon is filled  
21 in by their District 14 than the enacted plan, so it is  
22 less compact using the polygon definition of compactness.

23 Q. Do you find it helpful to compare District 18  
24 between the enacted map and Plaintiffs' proposed map?

25 A. No.

1 Q. Why not?

2 A. Because they don't change District 18.

3 Q. What does your analysis of the compactness tell  
4 you about District 21 in Plaintiffs' proposed map?

5 A. So District 21 is made a lot more compact than  
6 in the enacted plan, and you can see that just by looking  
7 at the map, Mr. Nicholson drew basically a square in the  
8 middle of the state, but it comes at the expense of making  
9 the actual challenged districts less compact because they  
10 kind of work around that new District 12.

11 Q. And district --

12 A. I'm sorry, District 21.

13 Q. Oh! And is District 21 a challenged district in  
14 this case?

15 A. That is not my understanding.

16 Q. What about the population deviations between the  
17 enacted map and the Plaintiffs' proposed map?

18 A. So if you turn to the preceding plan, I've gone  
19 ahead just to have something -- have a reference point for  
20 discussion of what the enacted deviations are for all the  
21 districts, for the challenged districts and the districts  
22 that are changed in the enacted Plaintiffs and then enacted  
23 and remedial map.

24 Q. How does the enacted map compare to the  
25 Plaintiffs' proposed map?



1 A. Well, there is a much larger deviation in  
2 District 12 in the Plaintiffs' map. It goes from a  
3 deviation of .49 percent up to 2.6 percent. And then in  
4 District 34 it is reduced, it is reduced by a little more  
5 than a percentage point, so on an average the deviations  
6 are larger between the challenged map, challenged  
7 districts.

8 Q. And as to Districts 13 and 14, which map has a  
9 lower population deviation?

10 A. Well, on average, it is going to be the same  
11 because you are only talking about two districts. But for  
12 the Plaintiffs or the enacted map, the district populations  
13 are almost identical in 13 and 14, whereas in the  
14 Plaintiffs' map, he's introduced or I guess the Plaintiffs  
15 have introduced a larger deviation, about .02 of a percent.

16 Q. Overall in Plaintiffs', overall in Plaintiffs'  
17 proposed map that does not include any counties or cities,  
18 what happens to that?

19 A. It becomes less compact and the deviations --  
20 The challenged districts becomes less compact and the  
21 population deviations increase.

22 Q. One of your other opinions is about whether  
23 there is any legislative discretion, the choices are made  
24 in the map. Is that right?

25 A. I'm sorry, what?

1 Q. About whether the choices made in a Judicial  
2 Commission's map are reasonable, right?

3 A. That is right.

4 Q. So do you believe that Judicial Redistricting  
5 Commission ignores all the rules they should get a pass?

6 A. No, no, that is not what I mean at all. I think  
7 those are checks you can set up. First, I think one of the

8 contexts -- This is from my experience from drawing in

9 Virginia. Because of how late the census data arrived, I

10 mean, it was a sprint to -- Dr. Grofman was actually the

11 expert witness in the *Gingles* case, so he has been doing it

12 a really long time. And between the two of us to draw

13 those three maps, we billed 400 hours in a month between

14 the two of us, not individually.

15 It is one thing -- I've drawn a lot of maps just for

16 entertainment in Dave's Redistricting, and I can draw one

17 very fast in that. But to actually sit down and draw a map

18 that is meant to be implemented by -- implemented for the

19 state and actually represent the people of the state, it

20 takes a really long time to do a good job of it and no one

21 had a lot of time this time around.

22 But beyond that, one thing that I did was, I say, okay,

23 among the districts that are moved around, let's just look

24 at the precincts -- I'll use the city, what I call the St.

25 Louis cluster as an example. You've got two districts

1 there and they incorporate without having to redo other  
2 areas of the map. They incorporate a certain number of  
3 precincts and so what you can do in R using a method that  
4 has been peer reviewed, been used in multiple court cases,  
5 developed by Dr. Coskueimia, at Harvard, is, okay, we have  
6 this collection of districts, we want two districts drawn  
7 out of it, we don't want to run across city boundaries more  
8 than once, so one split between the two districts, draw me  
9 maps 5,000 times, let's see what you come up with. And  
10 then you look at it and you say, okay, this computer is  
11 drawing it blind. It doesn't have any, any agenda. It is  
12 not trying to hurt one party or the other. It is not  
13 trying to play any games. It is just drawing maps. How  
14 often is it just going to split the City of Hazelwood by  
15 chance, and it turns out the answer is 23 percent of the  
16 time. A quarter of all the maps that it has drawn drawing  
17 blind out of all the municipalities in northern St. Louis  
18 County it splits the City of Hazelwood a quarter of the  
19 time. So there is nothing unusual if you are in a hurry  
20 drawing a map and split the city.

21 I can say from having to draw those two districts a  
22 lot, it is tricky because if you look, the population  
23 deviations-- the populations for these two, the population  
24 for those two districts is right up at the very top of what  
25 is allowable. You have a plus or minus of about 1,000

1 people that you are allowed, and if you are trying to keep  
2 these cities with 16,000 or 30,000 people intact, you are  
3 limited to what you can do. If you are going to split a  
4 city, what is going to end up getting split, it is the City  
5 of Hazelwood.

6 No, the legislature doesn't have unlimited discretion.  
7 If they split a city that never gets split by chance, you  
8 say, okay, there had to be something up with them choosing  
9 it. If they were to split Atchison County, never gets  
10 split because it is a slightly populated county in the  
11 northwest part of the state, you would look at that and say  
12 there is something weird going on there, but there is  
13 nothing weird about splitting Hazelwood. It is a heavily  
14 populated city in St. Louis County.

15 Q. I want to go back and have you explain what the  
16 parameters for your simulation for the St. Louis cluster  
17 was in this particular one. And we're going to call this  
18 simulation one.

19 A. Right.

20 Q. Right. So you've asked I guess -- So what  
21 district, what Senate district was the simulation allowed  
22 to change?

23 A. It was only provided with the precincts for  
24 Districts 13 and 14 to do challenged districts; everything  
25 else in the map was to be kept the same.

1 Q. And how does, how does the simulation go about  
2 deciding how to draw the map?

3 A. So this goes in to -- To really know what it is  
4 doing, goes in to graph theory and spanning trees and  
5 things like that. The basic idea is, you can think of a  
6 tree with leaves on it and to get from one leaf to another,  
7 staying on the tree, there is actually one path you can  
8 take. You have to go down the twig to the branch, to the  
9 trunk and then up another branch and root. And so what the  
10 computer does, it randomly generates a tree that connects  
11 the precincts but only one path leads increasing to another  
12 precinct. And then the computer will say, okay, I have  
13 this tree, let me look at all the points on that graph that  
14 I can remove that will result in the two remaining bodies,  
15 chunks, having population discrepancies that fit within the  
16 allowable tolerance, and then it will remove that, and  
17 you'll have your two districts drawn, and it just does that  
18 repeatedly. You can make it do it 5,000 times, 50,000  
19 times, 5 million times. And it builds what we call an  
20 ensemble of maps.

21 Now, here the constraints that I placed upon it were  
22 that the population of the highest most populated district  
23 couldn't go over 3 percent because that would be  
24 unconstitutional. You are only allowed to cross one city  
25 line because you only have two districts, so you can split

1 one city, because we want to know what you would split if  
2 you couldn't come up with something that didn't split any.

3 And then, of course, the districts had to be contiguous.

4 Q. And in designing how the path for each of the  
5 simulations would work, what, what bearing did it give to  
6 compactness?

7 A. It would prefer more compact districts. You can  
8 set the parameters so it doesn't care about compactness but  
9 we wanted it to, so it tends to draw more compact  
10 districts.

11 Q. And how many splits did you allow for simulation  
12 to do total?

13 A. One city split in here.

14 Q. And so what does that mean in reference to when  
15 it is choosing between a path for whether it is compact or  
16 whether it is crossing a line?

17 A. So it will not cross more than one line. For  
18 compactness, it is a probabilistic thing. So it will  
19 prefer a more compact district than a less compact one,  
20 because there is still a chance, if you don't allow for  
21 some randomness, you are not going to test everything. It  
22 is going to prefer the more compact district but a smaller  
23 chance it will be a less compact split because, again, you  
24 are trying to see what the universe of available maps are.  
25 And there is proof that goes well beyond -- It is like



1 pages on the chalkboard that says you are actually sampling  
2 maps from the entire universe of maps. You are basically  
3 doing a poll of maps to see what they look like.

4 Q. And so you told us about the City of Hazelwood.  
5 When you looked at the whole -- I think you called it an  
6 ensemble?

7 A. Yes.

8 Q. -- what did you find?

9 A. I found at about 23 percent of the time the City  
10 of Hazelwood was split.

11 Q. What other municipalities was split under the  
12 one split rule?

13 A. I didn't enumerate every city that was split  
14 because we weren't focused on it. The tendency is to  
15 split the more populated cities because if you are trying  
16 to make things overall populous that is where you want to  
17 balance out.

18 And I think a piece of background that is important  
19 here is that -- You know, in the deposition we talked about  
20 dividing up a checkerboard and someone has done the work to  
21 prove that there are more ways to divide up a checkerboard,  
22 to divide up a checkerboard than there are atoms in the  
23 earth. We just cannot comprehend the number of maps you  
24 could draw from a checkerboard. And here you have many  
25 more precincts than you have squares on the checkerboard.

1 It is not possible to fully enumerate, which is why they  
2 develop these sampling techniques, to try to figure out  
3 what is possible. If I ran it for 500,000, perhaps I would  
4 get other plans I've never seen before. If I ran it for 5  
5 million, I would even get more.

6 Q. And so you also ran a similar simulation on the  
7 northwest module, right?

8 A. Right.

9 Q. And what difference between the parameters did  
10 you change between simulation one in St. Louis County and  
11 simulation two on the northwestern side?

12 A. Well, we are looking at counties rather than  
13 cities, so our analysis changes from county splits, city  
14 splits to county splits, and we are not looking at -- it is  
15 not Districts 13 and 14 that was provided to the computer.  
16 It is Districts 12, 21 and 34, the ones that Mr. Nicholson  
17 changes in his map.

18 Q. And so what were the results for simulation one?  
19 Excuse me, for simulation two.

20 A. That is right. We want to know Buchanan County.  
21 And, again, if the simulations had never split Buchanan  
22 County, I would report we have a problem here because there  
23 is something really weird about splitting Buchanan County.  
24 And it gets split in about 11 percent of the maps. We have  
25 a big universe of maps that can be drawn from, lots of

1 counties that can be changed and about 11 percent of the  
2 time Buchanan is picked to split.

3 Q. And that is off of running it 5,000 times. Is  
4 that right?

5 A. That is right.

6 Q. That is roughly 550 times that Buchanan County  
7 gets split?

8 A. Yes.

9 Q. And so what does running that simulation tell  
10 you overall?

11 A. Again, if you have some discretion to split,  
12 then there is nothing that kind of jumps out from the  
13 simulations about, in and of itself about Buchanan County  
14 being split.

15 Q. When you say "some discretion," what do you  
16 mean?

17 A. Again, if you were to split Atchison County,  
18 which is quite a populated county in the northeast, you  
19 know, then you say, okay, it is not just that they couldn't  
20 find a perfect map and just decided to make Atchison the  
21 one to split, because that is a weird county to split given  
22 its population and geography. Buchanan County, not so  
23 much. It gets split regularly.

24 Q. And what does this tell you about the discretion  
25 used for splitting, you know, more than one?

1 A. There is nothing that jumps out about it as  
2 untoward. If you are going to split a county, it is a  
3 typical county to split.

4 Q. And this is -- How would you describe the level  
5 of legislative discretion that these simulations employ?

6 A. It is similar to what the Judicial Commission  
7 ended up doing, because you are allowing it to do a split.

8 Again, my experience drawing these maps, trying to draw it  
9 myself, especially in St. Louis, it is really hard to draw  
10 within those boundaries. So if you couldn't do it and you  
11 come up with a city to split, these are the ones you would  
12 tend to split or among the ones you would tend to split.

13 Q. And in your work for this case, what were you  
14 asked to do in drawing a remedial map?

15 A. So I was -- I, I don't know exactly what you all  
16 were planning to do with it. I took it as if you are going  
17 to lose, you care about how you lose, so I was asked to  
18 draw a map that performed better than Plaintiffs' plan.

19 But it also informs the last, as we do simulations, it  
20 informs my last opinion, if there is no discretion, this

21 just goes on and on in check, because there is an infinite  
22 number of maps. Once a map gets passed and put into law, I

23 can run my simulations longer and eventually I'll find a  
24 more compact map and eventually it will be substantially  
25 more so. And so I just kind of worked and worked and as it

1 turns out, I was able to produce a map that was better than  
2 Plaintiffs' map.

3 Q. So what parameters were set in drawing  
4 Defendants' remedial map?

5 A. For the, for the kind of northwest quadrant, for  
6 the challenged districts, I allowed the split in Buchanan  
7 County to stay, but I wanted to see if I could get the  
8 population deviations under 1 percent so it would be  
9 allowable under Section (1). And it turns out that if you  
10 put Sullivan County into District 18 -- sorry -- take it  
11 out of District 18 and then move a handful of precincts in  
12 Buchanan County, you can get those population deviations  
13 under 1 percent, which for my reading falls under --  
14 qualifies under Section (1).

15 Q. And so your map, Defendants' remedial map is  
16 located at MOREdist 63. Is that right?

17 A. That's right. Okay. So Sullivan County goes in  
18 to 18.

19 Q. And so you are just clarifying into the  
20 northwestern module, what again?

21 A. Right. So in the northwestern module, contrary  
22 to the Plaintiffs' approach, I kept District 21 the same as  
23 it is. It is not challenged. It remains in place. What I  
24 do is, I take Sullivan County in the kind of northeast of  
25 District 12 and I move it in to District 18. And District

1 18 stays within population tolerances doing that. And then  
2 at that point just have to move a handful of precincts in  
3 Buchanan County around to get the two challenged districts  
4 under 1 percent population deviation, which is the  
5 population deviation that is allowed with the split. You  
6 can go above if you are trying to keep units intact, but  
7 for purposes of Section (1), you can have a split if it is  
8 below the 1 percent deviation.

9 Q. And this assumes strict compliance with  
10 Plaintiffs' proposed, correct?

11 A. That is my understanding. You can have a 1  
12 percent deviation. You are allowed to go up to 3 percent,  
13 if you are going up to 3 percent. Assuming legislature has  
14 the discretion, you can go up to 3 percent, assuming you  
15 are going up to 3 percent deviation in order to keep a  
16 county intact.

17 Q. So what does MORedist 65 tell the court?

18 A. So MORedist 65 takes the Defendants' proposed  
19 remedial map and lays it over the enacted map boundaries so  
20 you can see exactly what is changed. So you can see the  
21 red line is the enacted map boundaries and so you can see  
22 the county that was shifted between 12 and 18, or just one  
23 county. And then you have to have kind of squint to see it  
24 because there is so few changes, but on the boundary  
25 between 12 and 34 there are just a handful of precincts



1 that are moved.

2 Q. And if we can go to -- And what did you do on  
3 the eastern side of the map in the St. Louis County area?

4 A. So that is shown on page 67.

5 Q. And what did you do?

6 A. It was the same exercise, trying to find a  
7 combination that made, I think, two very nice looking

8 districts, if you are looking for I know it when I see it  
9 approach to compactness and that comply otherwise with

10 constitutional provisions, don't split any city lines.

11 Q. And what does, what does MOREdist 68 show?

12 A. MOREdist 68 is the Defendants' proposed map

13 compared to the enacted map boundaries so you can see  
14 exactly what gets changed there.

15 Q. All right. And you also analyzed whether or not  
16 Plaintiffs' proposed map was the least changes map, right?

17 A. That's correct.

18 Q. So in comparing the Plaintiffs' proposed map  
19 deviations and the defense's remedial map population  
20 deviations, which is better?

21 A. In the northwest, definitely -- in the northwest  
22 quadrant, definitely this defense map. I mean, the

23 Plaintiff s' map, you discussed on direct, moves a bunch of  
24 counties around in Districts 21 and 12, one of which isn't  
25 challenged. The map that we produced moves one county and

1 a handful of precincts.

2 Q. And what does MoRedist 66 represent?

3 A. So this is supposed to be, and it still works,

4 but this is supposed to be Plaintiffs' proposed remedial

5 map compared to the enacted plan. Instead, it looks like

6 it got compared to the plan that we introduced, that is my

7 fault. Fortunately because the plan that Defendants drew

8 has very few changes from the enacted plan, all you have to

9 do to see how Plaintiffs' map changes things around is to

10 ignore that red line in the upper right, which is from the

11 other map.

12 So you can see inside the boundaries of 12 and 21, all

13 those counties get changed from District 12 into 21. You

14 can see a large population in Clay County shifts over to

15 34, so it really is much more disruptive than the map that

16 Defendants suggest is a remedial map were they to lose.

17 Q. And when you said that this is supposed to

18 represent, are you talking about the title that is listed

19 on MORedist 66?

20 A. Yes.

21 Q. So what should the title appropriately be named?

22 A. Well, the title-- What we were shooting for--

23 This is actually compared to Defendants' maps boundaries,

24 but if you remove that red line demarcating Sullivan

25 County, it would compare the Plaintiffs' map to the enacted

1 map.

2 Q. And you also analyzed the compactness of

3 Plaintiffs' map and the remedial defense map. Is that

4 right?

5 A. Right.

6 Q. And how does the remedial defense map stack up

7 for compactness purposes?

8 A. So certainly for the northwestern quadrant the

9 Convex Hull scores of challenged districts are higher, both

10 if you look at it as an average or if you look at them

11 individually for the challenged districts. The

12 Polsby-Popper scores are a little worse but are comparable.

13 The Reock scores, the Reock for District 12 is lower in the

14 remedial defense plan but it's higher on the 34. The

15 average between the two is higher. Again, the Convex that

16 represents the polygon you are filling in, both of the

17 districts are higher combined than both of the districts in

18 the Plaintiffs' map.

19 Q. And notably on MOREdist 71, when the court looks

20 at District 21 between the enacted plan on the far

21 left-hand side and the remedial defense plan on the far

22 right side, what is important about that?

23 A. So the Convex Hull score for District 12 of the

24 enacted plan is higher than the remedial plan. The Convex

25 Hull score for the defense plan for District 34 is a little

1 bit higher. The Convex Hull scores for Districts 13 and 14  
2 for the enacted plan are higher but, again, if this is how  
3 things are going to shake out, this is what is preferred.

4 Q. I'm sorry, my dyslexia got ahold of me. As to  
5 District 21 in the enacted plan and District 21 in the  
6 remedial defense plan, what is important about those  
7 numbers?

8 A. They are identical because District 21 isn't  
9 changed in the remedial defense plan.

10 Q. So between the proposed map and the remedial  
11 Defendants' map, which one represents better when you,  
12 quote, change maps?

13 A. The remedial defense.

14 Q. I believe another one of your -- I think you  
15 discussed was about how we can always find a better, more  
16 superior map if we have more time and more resources?

17 A. That is right, because there are for all intents  
18 and purposes in the infinite number of maps that can be  
19 drawn. If you run a simulation longer, you'll find other  
20 maps and eventually find something better which, with  
21 modern technology, if you are looking for an absolute  
22 optimized map under the constitution, someone with enough  
23 resources will find something better.

24 Q. And after you evaluated the maps, did you do any  
25 exercises to show this?

1 A. Yeah. I ran some simulations especially for the  
2 St. Louis region, some additional simulations to see what  
3 the computer would do.

4 Q. Okay.

5 MR. HATFIELD: Wait! Wait! What is this?

6 MR. JOHNSON: I'll tell you.

7 BY MR. JOHNSON:

8 Q. So what simulations did you run in the St. Louis  
9 area to demonstrate this point?

10 MR. HATFIELD: Judge -- Well, no. I'm sorry.  
11 Nothing. I apologize.

12 THE WITNESS: It was the same simulation just

13 increasing the number of repetitions.

14 BY MR. JOHNSON:

15 Q. And you did this -- When did you run these  
16 simulations?

17 A. I think the first set was last week. The second  
18 set might have been as well. I don't remember the exact  
19 dates.

20 Q. Was it before your deposition?

21 A. The first set was.

22 Q. And --

23 A. The night before, yeah.

24 (Defendants' Exhibit No. 14, Compactness Measures and  
25 Population Deviations in Defendants' Proposed Remedial Map

1 3A and 3B, was marked for identification.)

2 BY MR. JOHNSON:

3 Q. And what is the -- And on this map -- I've  
4 handed you a document that is labeled DX14. Do you  
5 recognize this document?

6 A. I do.

7 Q. What is it?

8 A. This is -- I looked at a set of 5,000 simulated  
9 maps and found the most compact map that the computer drew.

10 Q. And which map -- What column does that column  
11 correspond to?

12 A. That is map 3A.

13 Q. And what else?

14 A. And it turns out to be more compact than any of  
15 the maps drawn so far. And then map 3B is letting it run  
16 for 50,000. And finding the most compact map, which

17 doesn't appear until map 8,500. So if you only run 5,000

18 sims, you wouldn't have found this more compact map. So

19 the next plaintiff who comes along and runs the sims for  
20 50,000 is going to find a map that is substantially more

21 compact than the court adopted for 5,000 sims. If I run

22 for 500,000, I would find something even more. You can't

23 optimize these maps. At a certain point there has to be

24 discretion.

25 Q. What do these simulations allow, just to be



1 clear?

2 A. These didn't allow any splits.

3 Q. And what districts, what districts did they  
4 solely work on?

5 A. 13 and 14.

6 Q. And at what point do you think this simulation  
7 would stop finding unique maps?

8 A. Never.

9 Q. Does the same kind of analysis apply to the  
10 western module as well?

11 A. Yeah. It is a broad point, because there is an  
12 unfathomable number of maps. With an infinite amount of

13 time and resources you would enumerate all the maps but we  
14 would be in the full heat death of the universe before that  
15 happened, so for practical purposes we would never get  
16 there.

17 Q. Do you remember discussions in your deposition  
18 about racial gerrymandering and the Voting Rights Act?

19 A. I mostly remember conversations about the Voting  
20 Rights Act. I don't think I did any racial gerrymandering  
21 analysis. They are very distinct causes of action.

22 Q. And in particular, when you were talking  
23 about -- Did you perform an analysis, a Voting Rights Act  
24 analysis on Plaintiffs' proposed remedial map?

25 A. I did not.

1 Q. What did you do when you looked at it?

2 A. I just kind of looked at the data. I looked at  
3 the precincts that are available in northwestern Missouri  
4 and said, well, it doesn't look like you can probably draw  
5 a compact district at 50 percent plus one to satisfy  
6 *Gingles* Prong One there, just eyeballing it. And in the  
7 St. Louis module, I just kind of looked at it and said,  
8 well, you know, my experience is that any more in the  
9 suburbs, because white suburbs are voting democratic, you  
10 don't get the same degree of racial polarization, so I  
11 would be surprised if there was racial polarization here.

12 And in any event you would probably get the black candidate  
13 of choice through the primary even at 44 percent, that was  
14 eyeballing it.

15 Q. And as far as the enacted map, what was the  
16 extent of your analysis for the subsection (b)(2) for the  
17 Missouri constitution?

18 A. That was it.

19 Q. All right. But you're qualified to do a full  
20 analysis of these maps, correct?

21 A. Yeah. If I were actually hired to do a full  
22 Voting Rights Act analysis, I would probably first look and  
23 see if I could draw the district at 50 percent plus one in  
24 the northwestern quadrant and then run some simulations to  
25 check myself and see if the computer sees something I don't

1 see. If I were to find 50 percent plus one like I would in  
2 St. Louis, in St. Louis County, you would have to do an  
3 ecological inference analysis, which I have done and can  
4 do, it is not easy, but you can figure out what percentage  
5 of black voters in primaries choose which candidates and if  
6 they are different from what white candidates are voting in  
7 democratic primaries choose, then you can look at the  
8 general election and see if there is polarization there and  
9 see who would win the districts.

10 Q. You remember discussions or you remember Mr.  
11 Nicholson giving testimony about, I guess, his experience  
12 with the Map Ellinger 2. Is that right?

13 A. Yes, I believe so.

14 Q. Would you turn to Joint Exhibit 8, please. And  
15 you observed Ellinger 2 during the testimony today. Is  
16 that right?

17 A. That's right.

18 Q. And what observations do you have about this  
19 map, if any at all?

20 A. Well, that District 34 looks an awful lot like  
21 what was wrong by Mr. Nicholson, but 21 and particularly 12  
22 is very different, in that District 12 actually stretches  
23 from up in Atchison County. It actually wraps around out  
24 to Sullivan County and then goes down below the Missouri  
25 River. So if you were trying to make sure that your

1 districts were compact, I don't know what redistricting  
2 metric you would look like. It certainly doesn't look like  
3 a square or hexagon to me.

4 Q. Okay. And if we can go to Joint Exhibit 7,  
5 please. This is, this the one marked Ellinger 1, 12-20-21.

6 A. Uh-huh.

7 Q. What does District 12 look like on this map?

8 A. It is the same issue, starting with Atchison and  
9 going down. I didn't have my readers so I can't read that  
10 county name southwest of Columbia, but it goes south of the  
11 Missouri River. You can even see that this program is  
12 trying to place the district numbers in the center of the  
13 district, and District 12 center isn't even within District  
14 12 because that district number is actually half in  
15 District 21.

16 Q. And then if you also go to Joint Exhibit 9,  
17 please. And this is marked as Ellinger 3, 12-23-21. Is  
18 that right?

19 A. That is right.

20 Q. What can you tell the court about District 12?

21 A. It looks to be -- It is either the exact same or  
22 substantially similar to the other two iterations of  
23 District 12 we've seen. You might with the map like this  
24 avoid a challenge to Buchanan County like we have here, but  
25 you would open yourself up with that District 12 which just

1 snakes from the northwest corner of the state almost to  
2 Columbia.

3 Q. And what forms your analysis of your  
4 compactness?

5 A. Well, we talked about what these compactness --  
6 Well, first, we're going to do I know it when I see it  
7 approach, where I just kind of look at it, that is not very  
8 compact. It doesn't look like a square or hexagon to me.

9 We've talked about what these various redistricting metrics  
10 actually mean and realize. So if you are going to take a  
11 metric based approach, you can see -- if you were to snap  
12 the rubber band around this district there would be a huge  
13 gaping hole in the middle where Districts 12 and 34 are  
14 carved out.

15 Q. And is that based on your years of experience?

16 A. Yes.

17 Q. So the fact that those three maps may or may not  
18 have split Buchanan County doesn't necessarily prevent that  
19 map from beginning or doesn't necessarily mean that map is  
20 constitutional, right?

21 A. Yeah. It doesn't mean that this map is  
22 constitutional and it doesn't mean that someone looking at  
23 this will say, oh, I don't need to, you know, it turns out  
24 I don't have to split Buchanan County because you would  
25 probably spot that issue with District 12, say this doesn't

1 work.

2 Q. So does it matter what software you use when you  
3 draw maps?

4 A. I've used Dave's Redistricting app. I used it  
5 to teach my students. I do think Maptitude is the old  
6 standard. It has a lot more functionality than Dave's has.  
7 I know Dave's so I can get it to upload some stuff for me.  
8 But generally speaking, Maptitude is better.

9 When Bernie and I drew, Dr. Grofman and I drew  
10 Virginia, because he was in California and I was in Ohio,  
11 you can actually share maps easier with it, so we did use  
12 it for that. But then the State of Virginia took our block  
13 assignment file and loaded it to their proprietary  
14 software to make sure it was okay, to double check it. I  
15 use Maptitude by myself.

16 Q. What role does experience play in using these  
17 kind of computer softwares?

18 A. Oh, a lot. A lot. The more -- I still learn  
19 things about Maptitude and Dave's when I use them, and it  
20 helps you understand, you know, the shortcomings. There is  
21 multiple ways, for example, there is multiple ways to  
22 measure -- Sorry. There is multiple ways to measure an  
23 efficiency gap and you have to know which version Dave's  
24 uses. When you are looking at overall compactness metrics,  
25 Dave's is looking at a statewide average. So if you are



1 just changing three or four districts around, you can't  
2 look at the Dave's summary statistics to calculate it  
3 because he's not looking at how you change the individual  
4 districts, he is looking at how you are changing the map as  
5 a whole. And since 95 percent of the maps are kept the  
6 same, the average compactness -- it is going to give an  
7 illusion that very little was changed when, in fact,  
8 individual districts -- So you wouldn't want to use that  
9 metric when you are drawing maps in Dave's.

10 THE COURT: Which metric?

11 THE WITNESS: So Dave's Redistricting gives a number  
12 for compactness. I think it was 58 for the maps. Because  
13 you are only changing the lines on four districts here,  
14 those remaining -- I guess five districts, those remaining  
15 29 districts are going to stay the same. The overall  
16 compactness can't change that much because you are keeping  
17 the map overall identical. That will cover up the fact  
18 that you might be making substantial changes in drawing  
19 less compact districts of those five that you choose to  
20 change, so you don't want -- you want to look at individual  
21 district changes in a context like this. Dave's just  
22 doesn't give the right answer.

23 MR. JOHNSON: Thank you, Mr. Trende. I have no  
24 further questions for you.

25 THE COURT: Take a break?

1 MR. HATFIELD: Yes.

2 THE COURT: Take about ten minutes. Official Court Document

3 (At this time a recess was taken.) Not an Official Court Document

4 THE COURT: All right. We're back on the record. The  
5 court reminds you you are still under oath.

6 THE WITNESS: Yes, Your Honor.

7 THE COURT: Cross-examination, Mr. Hatfield.

8 CROSS-EXAMINATION BY MR. HATFIELD: Not an Official Court Document

9 Q. Mr. Trende, as of last week you didn't know  
10 which party you were testifying on behalf of today,  
11 correct?

12 A. That's correct. Not an Official Court Document

13 Q. And do you know today who is the Defendant in  
14 this case? Not an Official Court Document

15 A. The Defendant appears to be the Secretary of  
16 State. Not an Official Court Document

17 Q. Do you know who that is? Not an Official Court Document

18 A. No. Not an Official Court Document

19 Q. Okay. And so you prepared a remedial map on  
20 behalf of the Defendant, Secretary of State, correct?

21 A. I was asked to do it by counsel and if counsel  
22 is offering it as a remedial map, yes, it would have been.

23 Q. Are you recommending that the court adopt your  
24 remedial map or not?

25 A. No. I think the Defendants would win on merits.

1 Q. Okay. And that is again because, if the  
2 legislature has discretion, the political subdivision  
3 divisions were, your word, reasonable?

4 A. That's correct.

5 Q. And at least as of last week you believed that  
6 the Missouri legislature enacted these maps, correct?

7 A. That's correct.

8 Q. And do you still believe that the Missouri  
9 legislature enacted these maps?

10 A. No.

11 Q. Okay. Who did enact these maps?

12 A. Apparently the Missouri Judicial Commission.

13 Neither commissions are involved but I thought the  
14 legislature had the final say, I guess not.

15 Q. Now, related to that. You talked a little bit  
16 about how hard it was to draw maps in compressed periods of  
17 time and you told us that you and Dr. Grofman, I believe,  
18 spent 400 hours doing it?

19 A. Between the two of us.

20 Q. Yeah. So, you know, here in Missouri we  
21 actually had citizens doing it. Are you saying they can't  
22 do it, it is not possible?

23 A. I'm saying that I have drawn maps myself and I  
24 can do that very quickly. When it comes time to draw it  
25 with responsibility that these are actually going to be

1 maps that elect members to the legislature and you start  
2 paying close attention to, you know, the extent to which  
3 cities and towns and boundaries are followed and all those  
4 other things, it takes a lot of time to do it well.

5 Q. Well, that is what I'm getting at. Are you  
6 saying that the way Missouri has got it set up they really  
7 can't draw compliant maps because they don't have time or  
8 expertise?

9 A. Well, it depends where compliant ends up. I am  
10 saying that you might not find in a short amount of time  
11 having to draw multiple maps the map that doesn't split any  
12 counties or doesn't split any political subdivisions.

13 Q. Okay. You don't know how much time the Judicial  
14 Redistricting Commission had to draw these maps, correct?

15 A. No. No. I'm testifying to my experience  
16 drawing maps.

17 Q. You don't know whether they had to draw it  
18 quickly or had plenty of time to draw it, right?

19 A. I don't know how much time they used at all.

20 Q. All right. And you don't know what resources  
21 they had available to them, correct?

22 A. No.

23 Q. You don't know whether they had experts, right?

24 A. I mean, no. We didn't either. We had ourselves  
25 in Virginia as experts.

1 Q. Well, you and Dr. Grofman, right?

2 A. Right.

3 Q. But for this map, for the Judicial Redistricting  
4 Commission, you don't know how big their staff was or who  
5 assisted them or anything like that?

6 A. No. No. I'm just saying that when we were  
7 drawing in Virginia it took us 400 hours. We had access,  
8 we had access to, you know, the judicial section that could

9 crunch numbers for us. We had each hired an assistant for  
10 ourselves --

11 Q. Right.

12 A. -- so it is not like we didn't have that. And

13 we had extensive expertise drawing maps ourselves.

14 Q. And just to cut to the chase, that is what I'm  
15 getting at, so what? Why is that relevant to the Judge

16 that you and Dr. Grofman had all this expertise and it was  
17 hard?

18 A. Well, it gets to the point of whether there is  
19 any discretion because, if not, someone with more time and  
20 resources is always going to be able to find a map that

21 either has fewer splits, unless you have it down to zero,  
22 or something that is more compact and so forth and it is

23 the realities of drawing maps. If there is no discretion,  
24 then there is no discretion, I suppose.

25 Q. Right. And we will come back to that in a

1 minute. In terms of the Missouri maps then, when you  
2 talked about an infinite number of maps, you agree that you  
3 can only put one Senate district in Boone County, Missouri,  
4 right?

5 A. Correct.

6 Q. That's the only possibility, right?

7 A. That's my understanding, yeah.

8 Q. So one out of 34, check mark, we're done, right?

9 A. Right.

10 Q. All right. You agree that you can put four  
11 State Senate districts in Jackson County, right?

12 A. That's correct.

13 Q. So when we do Jackson County and Boone County,  
14 five out of 34, check mark, we're done?

15 A. No. You have to draw those four in Jackson

16 County and there is going to probably be billions of

17 different ways you can configure those districts.

18 Q. Within Jackson?

19 A. Right.

20 Q. But you are going to have to have four there?

21 A. There will have to be four, correct.

22 Q. All right. And there has got to be one in  
23 Greene County?

24 A. Yes. I don't remember. One wholly within, I

25 think that is right.



1 Q. That is a better -- Right. That is what I meant  
2 to say.

3 A. Yeah. One and then change.

4 Q. And where is Jefferson County?

5 A. Jefferson County is to the north of -- No. I  
6 don't remember.

7 Q. All right. But in Jefferson County, there has  
8 got to be one wholly within Jefferson County?

9 A. Right.

10 Q. It is not infinite? We know that we've got  
11 certain things we have to do for State Senate maps, right?

12 A. That doesn't mean -- Even with the relatively  
13 small number of precincts to work around with, you get, for  
14 all intents and purposes, an infinite number of  
15 combinations.

16 Q. Right. Okay.

17 A. So like when you have a statewide map with -- we  
18 will call it 6,000 precincts, call it 500 precincts out of  
19 Jefferson County or out of Jackson County doesn't change  
20 the math that much because it is a sterling number of a  
21 second degree which exponentiates very, very fast.

22 Q. With respect to your opinion about the  
23 discretion of the legislature, you said you did review the  
24 Missouri constitution, correct?

25 A. Correct.

1 Q. Are you getting that opinion from the text of  
2 the Missouri constitution somewhere?

3 A. I said if the legislature has discretion --

4 Q. Right.

5 A. -- then this is reasonable.

6 Q. Okay.

7 A. Ultimately I'll leave the discretion for you all  
8 to fight about and the Judge to decide because that is the  
9 proper role.

10 Q. Okay.

11 A. The only thing about that question, in and of  
12 itself I have to add, is the point about, because there are  
13 so many maps. If there is no discretion, if you are trying  
14 to optimize these provisions, someone will always be able  
15 to find something better.

16 Q. Right.

17 A. If I had an infinite amount of resources, I  
18 wouldn't run the simulation on precincts, I would run them  
19 on census blocks, and I would get something even more  
20 compacting than we've seen so far.

21 Q. So you've got some experience. There may be  
22 discretion on some factors but not on others, right?

23 A. That is possible.

24 Q. You agree that in Missouri, at least under our  
25 standards, there is no discretion to have a district exceed

1 3 percent of population deviation, right?

2 A. I assume that if there were not a way -- for  
3 some reason not a way to get it under 3 percent, which I  
4 can't imagine but you never know, maybe there would be that  
5 discretion.

6 Q. Oh!

7 A. But it does seem to be 3 percent.

8 Q. So you think that it might be that there is

9 discretion to go above 3 percent under the Missouri  
10 constitution?

11 A. Because we've all found maps in all these places  
12 that are at 3 percent. I think at least for this

13 redistricting cycle it is not. I'm not going to cabin

14 myself in because this transcript is going to follow me

15 around for the rest of my life. There may be a situation

16 where it is impossible to do that because of other

17 strictures. I'm just leaving that as a hypothetical.

18 Q. All right. Fair enough. I guess my point is

19 this. When you, when you ran your remedial map, you

20 assumed certain rules to follow, right?

21 A. Correct.

22 Q. And you assumed, for example, that there was  
23 some discretion to cross at least one county line, correct?

24 A. Well, sort of. It is run as if there were that

25 discretion. It is not like I answered the question of

1 whether there was. I said if we were operating in a

2 universe where there was discretion --

3 Q. Okay.

4 A. -- to split a county or city, what would you

5 tend to split without really paying attention to where the

6 split occurs. But I am not trying to answer that ultimate

7 legal question.

8 Q. Well, do you agree in this contract or context

9 of Missouri discretion is limited by the mandatory

10 constitutional requirements?

11 A. As they are interpreted by this court, yeah.

12 Q. Okay. And in doing your map drawing, did you

13 assume that Missouri has any mandatory constitutional

14 requirements?

15 A. When I went through and drew the maps, I said

16 constraints -- When I was drawing them myself, I operated

17 under certain constraints to see how those constraints

18 would behave. When I ran simulations, simulations were run

19 under certain constraints. If this court were not to

20 accept those constraints, because of the fights you all

21 have, that would put us in a different universe than some

22 of these maps that were generated.

23 Q. So I am not sure if I follow you here. In

24 making the assumptions that you made in analyzing the map

25 Mr. Nicholson drew and in doing your remedial map, did you

1 assume that there are any mandatory requirements at all?

2 A. Well, no.

3 Q. No?

4 A. I was looking at the compactness scores --

5 Q. Okay.

6 A. -- because I was asked to look at compactness

7 scores. I don't typically know how this court is going to

8 rule on it. I do note that the Convex Hull score seems to

9 pretty closely emulate what the Missouri constitutional

10 requirements are.

11 Q. I understand you're not saying what the court

12 will rule. I'm asking what you were assuming in giving

13 your opinions on the Nicholson map, on your map, on the

14 JRC. I think what you just told me, you assumed all the

15 criteria in Missouri is discretionary. Is that right?

16 A. No. No. No.

17 Q. Which ones are mandatory?

18 A. I wasn't picking ones that were mandatory and

19 which were not. So when I was asked to look at this, are

20 they compact, the approach that I took was to use the three

21 typical compactness metrics that I used. I didn't make any

22 assumption about what this court would ultimately do. I

23 also knew that the Convex Hull metric is very close to what

24 the constitutional language in Missouri is, so to me, to me

25 it seems like that would be what would guide but I am not

1 going to assume one way or the other. These are just the  
2 metrics, these are what they measure, these are how the  
3 maps compare under them.

4 Q. You have said before when you see the word shall  
5 in criteria you consider that to be mandatory, correct?

6 A. That is mandatory language, yes.

7 Q. Okay. And in reviewing, as you did, the  
8 Missouri criteria, you didn't find any criteria that are  
9 mandatory?

10 A. I didn't -- There is the word shall at places in  
11 the state constitution. Whether there can still be  
12 discretion afforded in those circumstances, I don't know.

13 Q. Okay. You mentioned just a minute ago your  
14 compactness and you talked to -- Well, you testified about  
15 the Reock score, the Polsby-Popper score and the Convex  
16 Hull, right?

17 A. Correct.

18 Q. And did you find those three measurements in the  
19 text of the Missouri constitution somewhere?

20 A. Those are the three -- No.

21 Q. No.

22 A. Those are the three that I typically use. And  
23 as it happens, one of those metrics lines up with the state  
24 constitutional requirement.

25 Q. The other two do not line up with the state



1 constitutional requirement, correct?

2 Official Court Document I believe there is an et cetera in the Missouri  
3 state constitution of what the shapes are supposed to look  
4 like, but the Convex -- Or something to that effect.

5 Q. Okay. Did you find --

6 A. In general. In general, compact districts are  
7 those which are square, rectangular or hexagonal. That in  
8 general -- I mean, I read it, I could say it matters to  
9 circle. But the Convex Hull score seems very similar to  
10 what the text of the constitution requires.

11 Q. Got it. Did you find Reock, Polsby-Popper,  
12 Convex Hull in any Missouri case law or treatises about how  
13 Missouri approaches compactness?

14 A. No.

15 Q. All right. So let me ask you about Convex Hull  
16 for a minute, which you say is the closest. If we look at  
17 Defendants' 1, which I think you still have up there  
18 somewhere, that is your remedial map. On the very last  
19 page at 71, you have this chart with the various  
20 compactness measurements and Convex Hull is here. Is that  
21 right?

22 A. Right.

23 Q. I went to law school so I didn't have to do  
24 math, but I think I've got this. Just looking at this  
25 chart, the enacted map District 12 .858 on Convex Hull

1 means it is 85 percent like a polygon?

2 A. 85.8 -- it fills in 85.8 percent of the area of  
3 the polygon enclosing the district.

4 Q. Okay. 18 is 80 percent like a polygon. 21 is  
5 70 percent, et cetera?

6 A. Rounding, yeah.

7 Q. Okay. And so when we're talking about sort of  
8 layman's terms, where is the number where it becomes not  
9 compact?

10 A. Oh, I think in absolute terms it is difficult,  
11 but when you are comparing plans to each other --

12 Q. No. No.

13 A. -- it is very easy.

14 Q. Well, I understand comparing to each other. But  
15 looking at a map on its own -- I don't have another map to  
16 compare it to. I'm going to look at Convex Hull and tell  
17 whether or not it is compact, what is my number?

18 A. Oh, I don't think there is a magic number.

19 Q. All right.

20 A. But when you come into a court and plaintiffs  
21 offer a map, it is really easy to see whether their map is  
22 more compact than yours.

23 Q. Sure. Before we get to that, which we will, 50  
24 percent and above it looks, in layman's terms, kind of  
25 looks like a polygon, right?

1 A. I don't know about that.

2 Q. Okay. (80 percent) it looks like a polygon?

3 A. There is no magic number. As the Convex Hull  
4 score gradually improves, it gradually resembles a polygon  
5 more and more.

6 Q. 20 percent doesn't look like a polygon?

7 A. I would be surprised down at 20 percent if you  
8 had something even resembled a polygon.

9 Q. All right. 75 percent Convex Hull, it looks  
10 75 percent like a polygon?

11 A. It fills in 75 percent of the area.

12 Q. Looks quite a bit like a polygon, right?

13 A. It looks more like a polygon at 50 than 20.

14 Q. I just want to make sure I understand you. Your  
15 analysis of Plaintiffs' plan, in other words, the  
16 Nicholson, is that it looks like 76 percent of a polygon in  
17 District 12, right?

18 A. Come again?

19 Q. No, maybe I'm reading it wrong. District 12 of  
20 Plaintiffs' plan looks 76 percent like a polygon?

21 A. Oh, I'm sorry. I thought you said 70. 76.

22 Q. 18 looks like 80 percent, et cetera, right?

23 A. Fills in 81 percent of the area of the enclosing  
24 polygon. 84 percent, et cetera. If it were at 1, it would  
25 be a polygon.

1 Q. Right. And of all of these maps, none of them  
2 were that?

3 A. Right.

4 Q. Okay. And then -- Okay. Let's come back to  
5 that. You agree that compactness is a wishy-washy  
6 standard, don't you?

7 A. It generally is. Most state constitutions don't  
8 have the provision that Missouri has that specifies what  
9 compactness is and just happens to line up with one of it.  
10 If you just have a general description of compactness,  
11 yeah, it is pretty wishy-washy.

12 Q. Prior to this case you had not encountered a  
13 compactness standard as compact as may be, correct?

14 A. That is true.

15 Q. You didn't have an opinion what compact as may  
16 be means in the Missouri constitution?

17 A. That is correct.

18 Q. And you did not analyze compactness on a compact  
19 as may be standard?

20 A. Well, you explained what it meant to me and I  
21 think I might have fallen backwards into doing it right  
22 since it is as compact -- as I understand your explanation,  
23 it is compact as can be subject to the other provisions.

24 Q. That is mine.

25 A. Okay. I just wanted to make sure I understood

1 you right.

2 Q. Here, as we talked about, the beginning of Section

3 (3), which specifies the provisions that compactness prong

4 is subject to, so looks -- Like I said, I didn't mean to

5 but I think I ended up analyzing it as compact as may be.

6 Q. And Section (3) also says at the end, following

7 political subdivision lines, right?

8 A. Right.

9 Q. In analyzing compactness you have looked at

10 whether deviation is following political subdivision lines?

11 A. Right.

12 Q. You did not do that when you did the analysis of

13 Plaintiffs' plan, right? You didn't take into account the

14 Plaintiffs' plan follows the Buchanan County line?

15 A. No.

16 Q. Okay. A minor point on this but just to make

17 sure our record is clear. And I hope you remember this.

18 In talking earlier you said that you didn't find District

19 18's analysis helpful. Is that what you said or is that

20 what you meant, maybe that is a better question?

21 A. Yeah. I don't remember the exact word. But I

22 can say what I meant is that, because the enacted plan in

23 Plaintiffs' plan don't choose District 18 as a district to

24 be changed, the numbers are going to be identical.

25 Q. Okay.

1 A. And so --

2 Q. Looking at this, you did change District 18, ent  
3 right?

4 A. Well, that's right.

5 Q. And District 18 was not a challenged district,  
6 right?

7 A. That's right.

8 Q. So when you were talking about which districts  
9 we change, it sound like you agree that it is, what, okay  
10 to change a district that is not challenged in order to  
11 come up with a remedial plan, right?

12 A. I operated under that assumption drawing it. I  
13 don't know what your all's legal fights about are but, yes,  
14 that is an assumption under which I operated.

15 Q. Let's go to the front of Defendants' Exhibit 1.  
16 So this is the Secretary of State's proposed remedial plan.  
17 This plan does keep the municipality of Hazelwood intact,  
18 correct?

19 A. Yes.

20 Q. It crosses fewer municipal lines than the  
21 enacted plan?

22 A. Correct.

23 Q. And you had the ability to cross fewer municipal  
24 lines than the enacted plan, correct?

25 A. Correct.



1 Q. This plan though does not keep Buchanan County  
2 intact, right?

3 A. Correct.

4 Q. But you still moved the lines, right?

5 A. I did move the lines, yeah.

6 Q. What criteria did you use to decide to move the  
7 lines if not following the political subdivision?

8 A. Well, here I was trying to get the population  
9 deviations for the two challenged districts, 12 and 34,  
10 under 1 percent because the goal for the remedial maps, as  
11 I understood it, is to create -- I don't remember the exact  
12 verbiage in the constitution, what I would call at least  
13 changes district, at least changes map, at least disruptive  
14 to the plan that is enacted and so rather than completely  
15 refiguring the three districts, you can draw what I read as  
16 a constitutionally compliant map by moving one county and a  
17 handful of precincts.

18 Q. I notice you are sort of glancing over the  
19 constitutional provision. Where did you find the at least  
20 standard in the constitution provision?

21 A. That is what I was asked to change.

22 Q. At least to changes?

23 A. That is what I was asked to draw. I believe in  
24 the deposition we walked through to provision 9 and talked  
25 about it and I read that and I thought, okay, that actually

1 does sound quite a bit like a least changes provision.

2 Q. And since you mentioned the deposition, the

3 Missouri constitution talks about changes to the least

4 number of districts, right?

5 A. I don't remember that.

6 Q. Regardless, you did not use that standard in

7 drawing your map, changes to the least number of districts?

8 A. I changed as few as the Plaintiffs did. Whether

9 you could do it changing just two, I don't know.

10 Q. You changed three districts, right?

11 A. That's right.

12 Q. Plaintiffs changed three districts, right?

13 A. That's right.

14 Q. All right. Okay. Let's flip -- Staying in this

15 same exhibit, Exhibit 1, D1, page 70. These are population

16 deviations in the enacted joint map compared to the

17 Plaintiffs' proposed map, compared to the Secretary of

18 State's proposed map, right?

19 A. Correct.

20 Q. And I've just got to make sure I understand

21 this. The largest deviation on here is the Secretary of

22 State's changes to District 14, right?

23 A. That's right.

24 Q. And the smallest deviation on here then is the

25 enacted District 12?

1 A. Yes.

2 Q. Okay. Everything is --

3 A. In absolute terms.

4 Q. What does that mean?

5 A. Well, technically the smallest deviation is --

6 Q. Oh!

7 A. -- is District 18, negative 1.8 is the smallest,

8 the absolute value of the number.

9 Q. Yeah. The negative versus positive deviation

10 thing?

11 A. This transcript follows me the rest of my life.

12 I'm sorry if I'm deeply antic.

13 Q. All right. So you ran simulations, right?

14 A. Yes.

15 Q. And in the simulations you told the computer

16 to -- tell me if I have this right -- follow all the

17 criteria in the Missouri constitution except the one that

18 says keep all counties or keep as few counties split as

19 possible, right?

20 A. That's right.

21 Q. You allowed one county split?

22 A. Right.

23 Q. And when you ran the simulation, 89 percent of

24 the time the computer did not split Buchanan County?

25 A. That's right.

1 Q. And 11 percent of the time it did and you  
2 referred to that as a typical outcome?

3 A. Yes.

4 Q. 11 percent is typical in your view?

5 A. Yes.

6 Q. Okay. And did you run any simulations that said  
7 as few as county splits as possible?

8 A. Well, I certainly did for the City of Hazelwood.

9 Or for the 13, 14 combo. I can't remember if I did it for  
10 the northwest quadrant or not. I know I did some -- Before  
11 I really understood the scope of this, I did some statewide  
12 analyses that were kind -- had to be kind of clunky because

13 of the wholly within provision and I might have kept  
14 everything intact for that. I don't remember if I did it  
15 just for the northwest quadrant.

16 Q. You agree that it is within the ability of a map  
17 drawer to draw a map that complies with all the Missouri  
18 requirements and also does not split Buchanan County,  
19 right?

20 A. That's possible to do so, yes.

21 Q. And it is possible with regard to Hazelwood  
22 because you did it, right?

23 A. Yes.

24 Q. And it looks like you did it at least three  
25 times. Is that -- You did it before the deposition and

1 you've done it two times after the deposition?

2 Official Court Document I did it two times before the deposition and  
3 once after.

4 Q. Okay. All right.

5 A. I did it myself once and then the other two  
6 times were computer assisted.

7 Q. Okay. And on the computer assisted simulations,  
8 we talked about Buchanan County, 89 percent of the time the  
9 computer did not split Buchanan County?

10 A. Correct.

11 Q. And with Hazelwood, when you ran the  
12 simulations -- I told you I'm bad at math -- 70 --

13 A. 75 percent.

14 Q. -- 75 percent of the time the computer did not  
15 split Hazelwood?

16 A. 77 percent, that is right.

17 Q. I think I heard you say in some other  
18 simulations you would split the City of St. Louis maybe?

19 A. No. No. I only ran it in Districts 13 and 14.

20 Q. Oh!

21 A. I think you have to split the City of St. Louis.

22 Q. Do you?

23 A. I would have to look at the enacted plan.

24 Q. Okay. I'm sorry, I wrote down that it would

25 split more populated cities, for example, like the City of

1 Springfield.

2 Official Court Document If I did, I grossly misspoke. I don't think  
3 that is what I said.

4 Q. Okay.

5 A. I think I might have said Florissant. But the  
6 heavy populated ones are in St. Louis County.

7 Q. Okay.

8 A. There is a lot of cities in St. Louis County and  
9 so if it is picking one to split, it is going to choose  
10 from a variety of the cities. And the reason that I think  
11 23 percent or even 11 percent is typical, because you are  
12 trying to do these under the typical standards for your  
13 discipline and typically if you are talking about the  
14 chances of something happening, you don't really pay  
15 attention until you get below 5 percent, that is the  
16 standard cutoff for getting anything published in peer  
17 review journals or having anything to report that is not  
18 just random chance.

19 Q. All right. And then during your direct  
20 testimony you talked a little bit about the Ellinger maps,  
21 which you know what those are?

22 A. The three that I looked at, yeah.

23 Q. The three that you looked at. And I guess it  
24 sounds like you think the chair of the Citizens Committee  
25 didn't either care much about compactness or didn't



1 understand it, is that fair?

2 MR. JOHNSON: Objection. It misstates his testimony.

3 THE WITNESS: I don't know what was in the chair of  
4 the Citizens Redistricting Committee's mind. I do know  
5 that I looked at that District 12 and it sure doesn't  
6 pass -- I kind of look and see if it looked like a square  
7 or polygon test and I can guarantee from my experience  
8 using these redistricting metrics over and over again it is  
9 going to perform poorly on them.

10 BY MR. HATFIELD:

11 Q. You can look at a district, because of your  
12 experience, and see that is going to perform poorly on a  
13 compactness measurement, right?

14 A. There are certainly districts I can look at and  
15 say it performs poorly, yeah.

16 Q. In trying to understand how to apply a  
17 compactness criteria here in Missouri with the compact as  
18 may be standard, did you look at the judicially enacted --  
19 that is probably a bad word -- the map enacted by the  
20 judges, the Judicial Commission map to try to get some  
21 sense of what they were doing with compactness?

22 A. No.

23 Q. Okay. Did you notice in Joint Exhibit 1 that  
24 they have no compactness measurements, no metrics at all?

25 A. Well, I assume they are trying to draw squares

1 and hexagons and rectangles, and what the Convex Hull score  
2 allows us to do is say they did a pretty good job of it or  
3 sometimes they didn't.

4 Q. All right. Let's look at page 12 of Joint  
5 Exhibit 1 which is Jackson County.

6 A. I'm sorry, Joint Exhibit 1?

7 Q. Yes, sir. It is that big book in front of you.

8 A. Yes.

9 Q. You can go all the way to the front of it and  
10 you have to work your way in to page 12. Tell me if you  
11 have trouble --

12 A. This is the giant --

13 Q. Yes, sir. Tell me if you have trouble with the  
14 page numbers. You are about there.

15 A. All right.

16 Q. So page 12 here, we're looking at Jackson  
17 County. We have four districts, 8, 11, 9 and 7. Could you

18 take a look at 7 and tell me whether that is compact?

19 A. It would probably do poorly on Reock.

20 Q. What about Convex Hull?

21 A. I'm getting there.

22 Q. Oh, I'm sorry. I didn't mean to interrupt. Docu

23 A. The perimeter doesn't have a lot of zigs and  
24 zags, so Polsby-Popper is probably going to be surprising  
25 decent. Convex Hull, that is not going to be great.

1 Q. Yeah. Let's go to the next page, page 13. This  
2 is kind of the St. Louis region; you've probably seen this.  
3 District 24, not going to be great on Convex Hull, right?

4 A. That is not going to do so well in  
5 Palsby-Popper. That is one where I would actually have to  
6 look at the Convex Hull. I would eyeball it at .7, but I  
7 would just have to check that.

8 Q. By the way, if you kind of drop down to District  
9 26, frankly, and we did this thing over here, what happens  
10 on your metrics when you do that? How is that going to  
11 affect the Convex Hull score?

12 A. That is not going to help it.

13 Q. Well, it is going to look a lot less like a  
14 hexagon, I guess, when you do that, right?

15 A. Actually, a hexagon -- It is going to look a lot  
16 less like a rectangle which is what it would look like with  
17 a 26. That would actually give it a point and make it look  
18 more. Yeah, it is not helpful overall. Certainly make the  
19 Palsby-Popper worse.

20 Q. Let's go back to page 10. I'm sorry. This is  
21 Greene County. We've looked at this a couple of times.  
22 Senate District 30, which the appellate judges appointed by  
23 the Missouri Supreme Court drew the presumably knowledge of  
24 Missouri compactness standards, how does that do?

25 A. Terrible on Palsby-Popper. It has the arms,

1 inlets and zags. You can kind of see the rectangle that  
2 goes around it. It actually does a decent job. That  
3 southwestern quadrant isn't terribly well filled in but  
4 that is probably .7 or so.

5 Q. Okay.

6 A. I think you would be surprised with that on the  
7 Convex Hull.

8 Q. So the ones we looked at here, they are kind of  
9 in that .7 range, right, somewhere between .8 and .65?

10 A. It just depends. I don't know what that seventh  
11 district in St. Louis is going to do. That is not as good.

12 Q. Fair enough. Okay.

13 MR. HATFIELD: That's all I have, Judge.

14 THE COURT: Okay. Anything else?

15 MR. JOHNSON: Very, very brief redirect.

16 REDIRECT EXAMINATION BY MR. JOHNSON:

17 Q. I want to make sure the record is crystal clear  
18 on like what Defendants' remedial map and what constraints  
19 you used on this. Do you remember testimony about or  
20 questions from Mr. Hatfield about what constraints you used  
21 or what were mandatory things when you were drawing the  
22 Defendants' remedial map?

23 A. Yes. For the remedial map, yeah.

24 Q. And when you, when you were tasked with creating  
25 the remedial map, that was -- one of your constraints was

1 to follow the 1 percent and the 3 percent as strictly as  
2 possible in subsection (b)(1), correct?

3 A. Oh, yeah. Yeah. If -- Again, if the Defendants  
4 were to lose, how would they prefer to lose and so I wanted  
5 to see, making minimal changes, you could do it by  
6 having -- by getting both districts, both challenged  
7 districts under 1 percent which would make the split  
8 allowable. In the St. Louis area, you can't get it under 1  
9 percent and so it was just looking to see if there was a  
10 better way to do it, keeping cities intact.

11 Q. The limitations on Defendants' remedial map are  
12 the same as Plaintiffs' proposed remedial map, correct?

13 A. My understanding, yeah.

14 MR. JOHNSON: Okay. Nothing further, Your Honor.

15 RE-CROSS-EXAMINATION BY MR. HATFIELD:

16 Q. Except for dividing Buchanan County?

17 A. My understanding is that, of Section (1), that  
18 that is allowable if you get the deviation under 1 percent.

19 Q. I understand.

20 A. But ultimately not my call, just my  
21 understanding.

22 MR. HATFIELD: Thank you.

23 THE COURT: You may have a seat.

24 THE WITNESS: Thank you, Your Honor.

25 THE COURT: Further evidence for the State?

1 MR. JOHNSON: No, Your Honor. State rests. Thank

2 you.

3 THE COURT: Anything else, Mr. Hatfield?

4 MR. HATFIELD: No, Your Honor.

5 THE COURT: All right. Are there any senatorial

6 elections in '23?

7 MR. HATFIELD: There are not, Your Honor.

8 THE COURT: This is not the giant time crisis as some

9 of our --

10 MR. LEWIS: Judge, I will say that candidate for '24

11 will be February.

12 THE COURT: We're not talking about --

13 MR. LEWIS: Correct. There is no election in November

14 for this map to be at issue.

15 MR. HATFIELD: Your Honor, if I can jump in here.

16 Subject to your schedule, we did have a conversation.

17 Ms. Cossette and I are supposed to try a case with Judge

18 Green the end of August --

19 MS. COSSETTE: The beginning of August.

20 MR. HATFIELD: -- the beginning of August, sorry, and

21 we would like to submit a proposed judgment, Findings of

22 Fact and Conclusions of Law after that. I believe we

23 talked about August.

24 MS. COSSETTE: The 10th.

25 MR. LEWIS: Early to mid-August.



1 MR. HATFIELD: Is that okay with you?

2 THE COURT: That is fine. 8-15.

3 MR. HATFIELD: Plaintiff does request Findings of Fact  
4 and Conclusions of Law, Judge.

5 THE COURT: Don't miss that opportunity.

6 MR. JOHNSON: Your Honor, one last thing for you. I  
7 know Mr. Hatfield spoke in the beginning about how, you  
8 know, the Plaintiffs think at the moment that the court is

9 only required to issue a judgment and then later the court  
10 can do a map or something like that. The Defendants --

11 THE COURT: I don't think it comes out that way.

12 MR. JOHNSON: The Defendants have not agreed to  
13 bifurcate, which we have a judgment and remedy on this one,  
14 so I think the evidence is closed, the evidence is closed.

15 MR. HATFIELD: I'm fine with that, Judge. I just  
16 meant, if you don't like -- if you get a violation, you've  
17 got to craft a remedy. If you don't like either remedy, I  
18 think you always have the right to ask for more

19 suggestions, but I am okay with the evidence being closed.  
20 If they want to go with a binary choice, right, that is  
21 good with us.

22 MR. JOHNSON: It is not a binary choice. The choice  
23 is between 2 and 3. And the first choice is whether or not  
24 the map is constitutional.

25 MR. HATFIELD: That's true.

1 THE COURT: And that's the logic that you think that  
2 the Secretary of State gets to put his own map into  
3 evidence?

4 MR. JOHNSON: No, Your Honor. I think it is that, you  
5 know, the court is asked to draw a map if it finds a  
6 violation, so I think for completeness purposes, I think  
7 that people should offer evidence on both the merits and  
8 also the remedy.

9 THE COURT: Okay. All right. Well, thank you very  
10 much. Thank all our visitors. Sorry it is so hot up here.  
11 That is just how it worked out today.

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1 REPORTER'S CERTIFICATE

2 I, Kaye F. Asel, Certified Court Reporter, hereby

3 certify that I was the official court reporter for Division

4 I of the 19th County Circuit Court; that on July 12, 2023,

5 I was present and reported all the proceedings had in

6 CLARA FAATZ, et al., Plaintiffs, vs. JOHN R. ASHCROFT, et

7 al., Defendants, Case No. 22AC-CC03185. I further certify

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16 Official Court Reporter

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18 Transcript completed: November 8, 2023

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