

Stipulated Exhibit 31

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2/19/26 8:30 AM

THE COURT: All right. Good morning, everyone.

We left off that you all were going to discuss some, kind of, logistics about deposition designations and the close of the case.

MR. MULJI: Your Honor, I think our update on the progress on that is that it is still in progress but at least they're getting the deposition transcripts ready and we're gonna send those to Defendants as soon as we have them ready to review.

MS. HUNKER: Your Honor, we did consult along with the Intervenor and we decided not to proceed with the Rule 73.01B motion.

THE COURT: Okay.

MS. HUNKER: Since we do think the evidence needs to be closed and given the speed of the trial, based on when we expect the designations to be coming in, we're not anticipating that the motion would be able to be given before -- before it would make sense, basically.

THE COURT: Got it. Are you all ready to start calling witnesses?

MS. HUNKER: Yes, Your Honor.

THE COURT: Okay. Go ahead.

MS. HUNKER: State Defendants call Dr. Sean Trende to the stand.

1 THE COURT: Please, raise your right hand.

2 SEAN TRENDE,

3 having been sworn by the Court testifies as follows:

4 THE COURT: Thank you. Have a seat, please.

5 DIRECT EXAMINATION BY MS. HUNKER

6 Q. Good morning, Dr. Trende.

7 A. Good morning.

8 Q. Can you please state your name for the record?

9 A. Sean Trende; T-R-E-N-D-E.

10 Q. Thank you, Dr. Trende. Can you please tell us a
11 little bit about your early educational background?

12 A. I graduated from Yale University in 1995 with a degree
13 in history and political science. Oh.

14 THE COURT: Sorry. I tried to mute it so you
15 don't hit while you're movin' around, and then I forgot to
16 hit the live button. Go ahead.

17 A. Okay. Yeah. I graduated in 1995, with a degree in
18 history and political science. I went to law school at Duke,
19 where I graduated with a JD, and they have a program where if
20 you went for the summer you could get a Master's degree, as
21 well, and so I got a Masters in political science while I was
22 there.

23 Q. After you graduated from Duke, what did you do?

24 A. I clerked on the 10th circuit for Chief Judge Tacha
25 out in Lawrence, Kansas. After that I went to Kirkland & Ellis

1 in DC for a few years. Dan Nelson sends his regards. And then,
2 went to Hunton & Williams in Richmond.

3 Q. Did you change careers at some point?

4 A. Yes. So in 2010, my oldest son was diagnosed with
5 autism and we needed someone who could transfer him -- had the
6 flexibility to transfer him to various therapies, and so that
7 became me. And around the same time, the opportunity at
8 RealClearPolitics presented itself, and so I got hired by them
9 as their senior elections analysis.

10 Q. What is RealClearPolitics?

11 A. So RealClearPolitics is a company that produces a
12 website. It's sort of a one-stop shop for political
13 information. It -- it's, probably, most famous for aggregating
14 poll averages, but it also puts original content down as well as
15 news from a -- political news from across the spectrum.

16 Q. And how many employees does RealClearPolitics have?

17 A. It varies, but, around, 50.

18 Q. Does it have a physical office?

19 A. It does.

20 Q. What type of conduct does RealClearPolitics produce?

21 A. RealClearPolitics produces like I said, a variety of
22 content, but it's mostly related to politics and elections, in
23 particular.

24 Q. And what was your title at RealClearPolitics?

25 A. It is senior elections analysis.

1 Q. And what do you do as an senior elections analysis?

2 A. Well, what we're -- what mostly goes into it is
3 understanding and analyzing the congressional districts and
4 races across the country. There's also -- a lot of what we do
5 is rating the competitiveness of races and that is, kind of, my
6 main job. I also write and produce original content for them
7 regarding elections.

8 Q. Have you continued your education since joining
9 RealClearPolitics?

10 A. Yeah. So in 2016 I enrolled -- I do have to say it
11 this way -- the Ohio State University, their PhD program in
12 political science.

13 Q. And did you pursue your PhD while writing for
14 RealClearPolitics?

15 A. I did.

16 Q. Did you pursue any other degrees while enrolled in the
17 PhD program?

18 A. So because I'd already done the statistics track at
19 Duke for my Master's degree, they suggested I go over to the
20 statistics department and do my theory work there. So I did and
21 I enjoyed it and so about 40 credit hours later I emerged with a
22 Master's degree in applied statistics.

23 Q. Did you take any polling course work in the statistics
24 department?

25 A. I did.

1 Q. Was that graduate-level courses?

2 A. It was graduate-level courses, yes.

3 Q. Was the interpretation of confidence intervals or
4 error margins part of that class?

5 A. Yeah. That was crucial -- not just in that class, but
6 classes, in general.

7 Q. We will come back to this one a bit later, but just as
8 a foundational question, what about courses relating to
9 statistical inference?

10 A. Right. So that's the interpretation and
11 appropriateness of confidence intervals or error margins, when
12 to use them and what they mean. We were required to take two
13 semesters of pure statistical theory classes that was the
14 foundation, the mathematical foundation, for that. And then,
15 pretty much every class in the stats Department deals with the
16 interpretation of confidence intervals.

17 Q. Okay. Dr. Trende, turning back to your PhD, what was
18 your area of concentration?

19 A. I was a double major. You major within the PhD
20 program and in the areas you're going to take comprehensive
21 exams in, and so I doubled in political methodology and American
22 politics.

23 Q. And what is methodology in this context?

24 A. It is just what we call statistics. Every discipline
25 has its own name for statistics. In economics is called

1 econometrics. In political science we call it methodology. So
2 it is statistics for political science.

3 Q. And so what does that mean?

4 A. So it was -- a lot of the stuff that I was learning in
5 the stats department but specifically as it applied to various
6 political science questions.

7 Q. Did your dissertation involve redistricting?

8 A. It did.

9 Q. When did you receive your PhD?

10 A. I received my PhD and in -- oh, gosh, now -- I want to
11 say 2023. And had a dissertation that involved -- it was about
12 spatial statistics and the application to political science
13 problems and one of the papers was on redistricting simulations.

14 Q. I'd like to shift back to your work experience. Have
15 you taught college level courses?

16 A. Yes.

17 Q. Did you cover redistricting and compactness methods in
18 those classes?

19 A. Yes. In most of the classes we spend at least some
20 time on redistricting but in particular in my voter

21 participation and turn out class, we spend probably two or three
22 weeks on political gerrymandering, compactness measures,
23 simulations, how the various simulation approaches work. We go
24 pretty deep into the weeds in that class.

25 Q. We've talked a lot about your education and career.

1 Changing gears slightly, have you ever drawn maps?

2 A. Yes.

3 Q. Have you testified as -- have you advised
4 redistricting committees?

5 A. Yes. So I was appointed by the Arizona Independent
6 Redistricting Commission to advise the compliance of their maps
7 with the voting rights act. That came after I had been
8 appointed to draw the probably soon to be defunct congressional
9 districts in Virginia along with Bernie Grofman after their
10 independent redistricting commission deadlock.

11 Q. Have you ever testified as an expert in redistricting
12 cases before?

13 A. Yes, many.

14 Q. Have you testified in a Missouri case before?

15 A. I was the expert for the State in the *Faatz v.*
16 *Ashcroft* case.

17 Q. And what was the *Faatz* case about?

18 A. It was a challenge to the State senate districts for
19 their compliance with various provisions of the redistricting
20 code.

21 Q. In that case, did the trial court cite your testimony
22 as part of its opinion?

23 A. Yes.

24 Q. Now, I will leave it to my friends on the other side
25 to rain on our parade but have you received criticism, as well?

1 A. Yes. I think if we do this long enough, you get
2 battle scars but there are definitely some negative opinions as
3 well to go with the good.

4 Q. Are the remainder of your qualifications listed in
5 your report?

6 A. They are.

7 MS. HUNKER: Your Honor, the parties have
8 stipulated to Dr. Trende's qualifications in the areas of
9 American politics, with an emphasis on elections,
10 redistricting, and political methodology as well as
11 redistricting simulations. Based on that stipulation and
12 based on the testimony that is experienced today and the
13 qualifications listed in his report, State Defendants would
14 offer him as an expert in those experts at this time.

15 MR. CHEUNG: Your Honor, no objection, except
16 that, as I was chatting with Ms. Hunker earlier this
17 morning, that Mr. Trende's report refers to his CV but the
18 CV is not attached to the report.

19 MS. HUNKER: We are working to correct that, Your
20 Honor, however, at the front of his report he does list a
21 number of his experience, qualifications, particularly with
22 respect to acting as an expert in redistricting cases.

23 THE COURT: You are not saying he hasn't
24 established a sufficient foundation to give an opinion,
25 correct?

1 MR. CHEUNG: That's right. We would just like to
2 receive the CV.

3 THE COURT: That's fine. I think, considering
4 the testimony I've heard about his background and the
5 stipulation, I'm with him proceeding to opinion testimony,
6 if you have any objection to that.

7 MR. CHEUNG: No, Your Honor.

8 THE COURT: Okay. Go ahead.

9 Q. Doctor Trendel, the first issue that I would like to
10 address is the plaintiffs continuity and equal population
11 claims.

12 A. Okay.

13 Q. At the outset, are you here to testify to legal
14 conclusions?

15 A. No. No.

16 Q. And you don't claim any particular knowledge about
17 Missouri canons of construction?

18 A. That's correct.

19 Q. Have you read the reports of Dr. Cervas?

20 A. I have.

21 Q. And have you reviewed his testimony about the alleged
22 noncontiguous and non equapopulace district in Johnson County?

23 A. Yes.

24 Q. Can you briefly describe the alleged issue in Jackson
25 County as you've identified?

1 A. Yeah. So there are often names that localities assign
 2 to precincts and in Jackson County there are two precincts that
 3 have the same name. So when the State was adopting the map and
 4 assigning the precincts, the name shows up in two districts.
 5 The same name shows up.

6 Q. To clarify, how many district precincts are there at
 7 issue?

8 A. So there are two distinct precincts.

9 Q. Are they labeled differently by the census?

10 A. Yeah. So the Census Bureau doesn't necessarily label
 11 things according to local practice. It assigns Geo IDs to them
 12 and the two precincts at issue have separate Geo IDs, which for
 13 me confirms that they are two separate precincts.

14 Q. And how does that manifest here?

15 A. Well, if you look at the Geo ID numbers, one of the
 16 precincts is in District 4 and one is in District 5.

17 Q. What happens if both are assigned to the same
 18 district?

19 A. As Dr. Cervas identifies, one district would be
 20 noncontiguous and another would have a hole in it and they would
 21 both be -- not be equapopulace.

22 Q. Okay. But, is there another option?

23 A. There is.

24 Q. And what is that option?

25 A. Well, one could be assigned to District 5, and one

1 could be assigned to District 4. Again, I don't know Missouri
 2 canons of construction on how you would work that out, but if
 3 you were to do that you would end up with two contiguous and
 4 equapopulace districts.

5 Q. Would the districts be contiguous?

6 A. Yes.

7 Q. Would the districts have equal population?

8 A. They would.

9 Q. Are you aware that Dr. Cervas testified earlier this
 10 trial?

11 A. Yes.

12 Q. Did you have a chance to review the transcript?

13 A. I did.

14 Q. In his testimony, Dr. Cervas stated that the shape
 15 files he downloaded from the office of administration, indicate
 16 that the two VTDs labeled 811 were separate VTD's; does this
 17 align with your findings?

18 A. It does.

19 Q. Doctor Cervas also stated that the VTDs labeled 811
 20 had separate Geo ID numbers; do you agree with them?

21 A. Yes.

22 Q. And I believe you discussed this just earlier, but
 23 what is the significance of them having two separate Geo IDs?

24 A. Well, again, it shows that when the Census Bureau
 25 looked at the -- sometimes you get noncontiguous VTD's -- but

1 for the -- Census Bureau does that, both polygons, both chunks
2 get the same Geo ID label. But the fact that they have separate
3 ones, one is 29095K16811, another is 29095084, they are
4 different precincts.

5 Q. Let's turn to plaintiffs compactness claim. Before we
6 get started, you spent some time in your report, Defense Exhibit
7 101, explaining the various compactness metrics and measures. I
8 would like to go through this topic only briefly since some of
9 the other experts that testified earlier in the case touched
10 upon it in their testimony.

11 A. Okay.

12 Q. What is the reock score, generally?

13 A. Yeah. I find when experts talk about these things we,
14 kind of, through the names around and just assume a level of
15 familiarity, so try to drill down and get a fuller explanation
16 in the report. So the reock score, the idea is that you take
17 the district and you calculate the -- well, the computer
18 calculates the area of the district. And the idea behind it is
19 you then drop a circle, the smallest circle you can draw around
20 the district without cutting the district. The reock score then
21 asks, what percentage of that circle does the district fill.

22 Q. Is so a reock score of .23 means what exactly?

23 A. A reock score of .23 would mean that the district
24 fills 23% of that, what we call the minimum bounding circle.

25 Q. What aspect of compactness does reock measure?

1 A. So the reock score basically measures how distended a
2 district is. And you can kind of think about it as the district
3 gets longer and longer but not fatter and fatter, it's going to
4 expand that minimum bounding circle, but it's not going to fill
5 much more of it. So the percent that it fills is going to drop,
6 the reock score will drop.

7 Q. Let's pull up the Figure 1 from your report, Pg. 7.
8 What does this show?

9 A. So these are the least and most compact districts in
10 the -- I picked state house since there is a large number of
11 districts there -- these are the least and most compact
12 districts according to reock score. So you can see the district
13 down the left is sort of long and distended, it fill very little
14 of that minimum bounding circle, so it gets a poor reock score.
15 The district on the right is a square, it is pretty compact, and
16 it fills -- well, since it is a square -- it would be around 66%
17 of that circle and have a reock score of around .66.

18 Q. What about Polsby-Popper?

19 A. So Polsby-Popper has a different idea. So what the
20 Polsby-Popper score says it is, Okay. You can have a district
21 that is, kind of, stocky, fat, but if it had, you know, a big
22 event inlet carved into it, it might still fill a good amount of
23 that minimum bounding circle, but we wouldn't consider it
24 compact because it would have a really weird boundary line to
25 it.

1 And so what the Polsby-Popper score does, is it takes a
2 district and kinda stretches it out without breaking it until it
3 is a circle. It gives you a circle with the same perimeter as
4 the district and asks, okay. What percentage of that circle
5 with the same perimeter of the district would the district fill?
6 And so the -- well, that's what it does.

7 Q. What aspect of compactness does the Polsby-Popper
8 score measure?

9 A. So the Polsby-Popper score, you ask yourself, Well,
10 what would increase the perimeter of a district? Well, having
11 lots of arms that reach out or inlets get into the district
12 would give the district a larger perimeter. And so the circle
13 would get bigger, the district wouldn't fill as much of it. So
14 as Districts get arms and inlets, basically, the Polsby-Popper
15 Score gets worse. So it is a different aspect of compactness.

16 Q. I'm going to bring up Figure 3 from your report, it's
17 on Pg. 10. What does this show?

18 A. So this is the same idea. You have, on the left a
19 district, lots of arms and inlets, very irregular boundary, it's
20 the district in the State house with the lowest Polsby-Popper
21 Scores. You can see, it's not the same as the one with the
22 lowest reock score. That reock score district actually had
23 fairly normal boundaries. It didn't have a lot of arms and
24 inlets, and it does okay on Polsby-Popper. That is a district
25 with lots of arms and inlets and it doesn't fill much of the

1 circle with the same perimeter. Now, on the right, once again,
2 we see a square, no arms and inlets on the district so
3 unsurprisingly it scores very well on the Polsby-Popper.

4 Q. The third metric in your report is convex hull; can
5 you explain what that means?

6 A. So what the convex hull score says is, Well what's so
7 great about circles? And in fact we noted earlier that a square
8 district, which I think a lot of people would intuit it as
9 extremely compact, doesn't have a perfect reock score, it's .65
10 or so, .66. And so with the convex hull says is, Okay. Let's
11 imagine we snap a rubber band around the district. How much of
12 that rubber band would the district fill?

13 And so the square, the rubber band would fit around it
14 perfectly. And so a square gets a convex hull score of 1, it's
15 a perfect District. Whereas the District either becomes a
16 little bit distended or it gets arms and inlets or both its,
17 kind of, a combo of reock and Polsby-Popper, the score falls.

18 Q. Let's bring up Figure 4. What does this figure show?

19 A. So these again are examples of a District with a poor
20 convex hull score. We see it's the same as the one with the
21 poor reock score and we can see that the district, you know,
22 there's lots of areas that the rubber band doesn't cover. The
23 square, the rubber band snaps around it perfectly and it has a
24 reock score -- a perfect reock score.

25 Q. Finally, you have the I Know It When I See It score.

1 Can you please explain the I Know It When I See It Score?

2 A. Yeah. You can tell that was named by a political
3 scientist and not a lawyer. The idea behind the I Know It When
4 I See It when I see it score is, Well, these are fine as
5 mathematical abstractions. It's not necessarily how real people
6 think about compactness. And so what they did was they went and
7 -- a couple of political scientists -- went and showed pictures
8 of districts to lawyers, judges, lay people, experts in the
9 field of redistricting, and asked them what they thought were
10 compact districts. And then they ran a machine learning
11 algorithm on it to determine like what people actually think is
12 important in compactness and rate the scores that way. So it is
13 more reflective of, kind of, common parlance compactness.

14 Q. What is the benefit of using multiple compactness
15 metrics?

16 A. Well, as we've seen, you know, there are dozens of
17 compactness measures but as we've seen they all measure
18 different aspects of compactness. So you know there is no, kind
19 of, agreed-upon canonical, this is what you have to look at, but
20 multiple measures will give you different looks or different
21 aspects of a plans or districts compactness.

22 Q. Thank you, Dr. Trende. Let's move on to your general
23 testimony. You start your report with some insights from the
24 Faatz case; what were those?

25 A. Yeah so with the Faatz case, one of the things we were

1 confronted with was this idea of what a most compact district
2 would be. And so one of the things that we did -- we actually
3 ran simulations and sort of illustrated what I think is an
4 important point, which is there are -- there are quadrillions of
5 maps out there, I mean, literally number we can't wrap our mind
6 around.

7 And as we ran the simulation longer and longer and longer,
8 we kept identifying the next most compact. And so it, kind of,
9 illustrates the purpose for human purposes there isn't a most
10 compact map. It probably exists out there but in the real world
11 of computer technologies, you can just run the stimulation
12 longer and longer and the chances are you're going to identify
13 an even more compact map.

14 Q. And how does that relate to what you did in the case,
15 Faatz?

16 A. Yeah. So the idea then becomes, well what does -- and
17 I'm not here to do legal analysis, but just from a common sense
18 perspective -- what does as may be mean? Is it maximal? Like,
19 the literal most you can get, and I understand there's some
20 dispute about whether that's really the case being made here,
21 but it just illustrates that it can't be as may be because -- or
22 maximally compact as the standard, because that is a recipe for
23 endless litigation. You'll always be able to find something a
24 little bit more compact.

25 Q. What is the upshot here?

1 A. Well, again so if this -- if this case is about just
 2 whether you draw a more compact map than an enacted map, that is
 3 not a case that is ever going to end because an expert can just
 4 run the simulation chain a little longer and discover a more
 5 compact map.

6 Q. Doctor Stern calls that a straw man, what's your
 7 response?

8 A. I mean, it may be. The experts know -- the plaintiffs
 9 experts know what their argument is better than mine. I thought
 10 there were times when, you know, the standard suggested by
 11 plaintiffs brushed against that. This idea that you were only
 12 allowed to deviate from compactness to the extent that it
 13 complies with some other criteria. Well, that says within the
 14 bounds of certain criteria, it a -- to me, it is a maximal test
 15 being proposed. If that not it, well, then, that's not it, but
 16 that's how it sounded to me.

17 Q. So then what?

18 A. Well, so if it's not maximal, if you don't have to
 19 maximize compactness within boundaries, it becomes an exercise
 20 in trying to decide, okay, well, what is acceptable? What is
 21 the range of what we do here?

22 Q. Did you take a stab at that?

23 A. It did.

24 Q. And how did you take a stab at that?

25 A. The way I took a stab at it was to look at other maps

1 that -- in other districts that have been drawn in Missouri and
 2 determine, you know, what the compactness scores for these
 3 districts were and if the districts in the enacted map fell
 4 within the range of those. In other words, is this really
 5 something unique that has never been tried before in the State
 6 in terms of the compactness of the districts? Or is this
 7 something that is -- are these districts, kind of, within the
 8 range of what has been accepted in the past.

9 Q. Is this perfect?

10 A. It's not. I mean, for one thing, if a district falls
 11 outside that range you then have to -- you have -- I don't know
 12 that you have to be perfectly tethered to the past in terms of
 13 bounding what the State can do. If it falls outside the range,
 14 you start having to fight about, okay, well how far outside the
 15 range does it have to be? But, fortunately, that's not an issue
 16 here.

17 Q. That was going to be my next question. Is that an
 18 issue here?

19 A. It's not because as it turns out, these districts fall
 20 within the range of what's been draw in Missouri in fairly
 21 recent maps.

22 Q. What about for District 5?

23 A. District 5 also falls within the range of what has
 24 been drawn in Missouri in terms of just District 5, Kansas City-
 25 based districts.

1 Q. Did you also look at the State Senate and statehouse
2 districts?

3 A. I did.

4 Q. Now, plaintiffs point out that the State house and
5 state Senate districts have different numbers of districts and
6 different considerations. Do you have a response to that?

7 A. Well, I think that is a factually true statement to an
8 extent but, you know, having done the Faatz case the compactness
9 criteria's at the top of the list for the state senate and state
10 house districts just like it would be for the congressional
11 districts. And then there are other criteria that are
12 subordinated to it. Not only that, but the state house and
13 state senate districts have a requirement that they be drawn --
14 it's actually, kind of, more restrictive than Congress, because
15 they have to be drawn to be square like or rectangular or
16 hexagonal which actually is a convex hull measure. The convex
17 hull measure would give a perfect score to a square or
18 rectangular or hexagonal district.

19 Q. Now the plaintiffs critique, could this be valid?

20 A. I mean, it could. I think if you went through the
21 districts and showed how they were special cases or something
22 outside the range of, you know what would be acceptable in
23 congressional districts for some other reason, then that could
24 be but that type of analysis didn't happen. It's just sort of
25 asserted, well, these are different.

1 Q. Did you do some of this checking?

2 A. Well, I did. So that first district, the really non-
3 compact state house district we saw, I looked at it. It is in
4 St. Louis city. It doesn't cross jurisdictional boundaries, so
5 that wasn't a constraint on it. It runs down the same -- it
6 runs down the Missouri River -- or not the Missouri -- the
7 Mississippi River, but that's Illinois on the other side, so
8 you're not gonna cross over it. It wasn't completely required
9 that it looked like that to comply with other state provisions
10 it's just how they drew the district.

11 Q. Let's talk about Table 1 on Pg. 10 of your report.
12 And can you let me know what does this table?

13 A. So in addition to looking at the individual districts
14 I also calculated the average score for various Missouri maps
15 for the 2011, 2022, enacted, state house and state Senate
16 districts.

17 Q. And what do we see from it?

18 A. So for the reock score, the enacted map on average is
19 more compact than the 2011 map. It is four thousand civilpoint
20 less compact than the 2022 and it is more compact on average
21 than the current house or senate map.

22 Q. And what about the other metrics?

23 A. You can go through it but the enacted map is more
24 compact using Polsby-Popper, convex hull, and this I know it
25 when I see score than any of the -- either of the last two

1 Missouri congressional maps, then the statehouse map and then
2 the State senate map. It's better on all three of those
3 measures.

4 Q. Can averages obscure things?

5 A. So Dr. Rodden makes this point in his report and yeah
6 absolutely averages can obscure outliers and that's -- I didn't
7 entirely get the critique though, because that's why I do both.
8 There is an analysis of individual districts in my report and
9 then there is the analysis of the overall average which is in my
10 experience typical of how you do a compactness analysis.

11 Q. Let's bring up Table 2, located on Pg. 11 of your
12 report. Which, again, for the record is Defense Exhibit 101.

13 THE COURT: Just a quick question. I have Table
14 2, but on my exhibit is on Pg. 19, I think.

15 MS. HUNKER: Oh, thank you, Your Honor

16 THE COURT: And Table 1 was Pg. 18. It looks the
17 same as what's on the screen, I just wanted to make sure.

18 MS. HUNKER: Yeah. No. I must've just written -
19 - this must be a typo in my outline.

20 THE COURT: Okay.

21 Q. So let's look at table 2 on Pg. 19 of the report.

22 A. So Dr. Rodden had given some historical look at maps
23 in his report and so rather than just doing the last two maps, I
24 also took the average compactness score going back to 1972. So
25 as you can see, reock scores again the enacted map does worse in

1 2022, it's better than 2012 and it's better than 1972, it is
2 worse on average than some of the others. When you look at
3 Polsby-Popper the enacted map is better than all the maps going
4 back to 1972 other than the 1982 map which does score better but
5 it is within the range.

6 And when you look at the convex hull score, the enacted map
7 is the most compact map going back to 1972 on average. So again
8 if you have this idea of trying to fall within the range of what
9 Missouri has done and Missouri congressional districts in the
10 past, all these maps fall within the range.

11 Q. Doctor Rodden looks at individual districts. What is
12 your reaction to this?

13 A. So I didn't do the individual analysis going back to
14 1972 but Dr. Rodden does and I thought it was helpful for the
15 State because when you look at all the congressional districts
16 that have been enacted going back to 1972, it turns out that the
17 maps, the enacted maps, all fall within that range. These
18 aren't the most extreme districts drawn in Missouri even if you
19 look at them on the individual district level.

20 Q. But didn't District 5 of the enacted go in the lower
21 end of the range?

22 A. So it does fall on the other -- on the lower end of
23 the range of districts that have been implemented in Missouri,
24 but it is still within the range that has been implemented and
25 considered an acceptable range by Missouri mapmakers in the

1 legislative before. It's not some type of special case. The
2 other thing that I think is important is that, you know, he
3 gives the percentiles of what the enacted map falls into. And
4 it, kind of, brings to mind -- it's unclear whether this is
5 really what Dr. Rodden is getting at and I don't want to accuse
6 him of something he is not doing but there is this idea of like
7 a 95% error margin or a 95% confidence interval that you hear in
8 polling or in political science a lot.

9 And I think it is important to understand that is only for
10 samples. When you're drawing a sample political scientist will
11 look at 95% interval, assuming you have a truly random sample
12 that draws from the entire field. That is not what we have
13 here. We have a census. We have all the districts that have
14 been drawn back to 1972. So there is no statistical uncertainty
15 here. We know that the enacted -- as a factual matter -- that
16 the enacted map districts fall within that range that is
17 previously been implemented in Missouri.

18 Q. A couple of Plaintiffs experts, principally doctors
19 Stern, suggested it's inappropriate to compare the challenged
20 map with prior ones. In our experience, is it unusual for
21 experts to evaluate compactness by looking at earlier maps
22 within a state?

23 A. Yes. I read that and from a mathematics perspective,
24 maybe you wouldn't do it that but we do this all the time. I
25 mean, I was in Alabama with some of the same attorneys and we

1 were talking about Alabama maps going back to the 1820s in a
2 voting rights acts context about what a reasonably compact
3 district was. We -- it is in a compactness analysis, not at all
4 unusual to compare to earlier maps within a state to determine
5 whether a map is -- a district is reasonably compact or not.

6 Q. Did you also look at the total number of splits
7 counties compared to the enacted plan?

8 A. I did.

9 Q. What did you find?

10 A. I found that the -- similar to Dr. Cervas, that the
11 enacted map reduces the number of split counties and county
12 splits relative to the 2021 map or 2022 map.

13 Q. Can we bring up figure 7? I believe this is page 20
14 of Dr. Trende's report, defense Exhibit 101. Doctor Trende what
15 does this exhibit -- this figure show?

16 A. So this highlights the area where the county splits
17 exist within the 2022 map so I have drawn circles around the
18 county splits.

19 Q. And let's go to Figure 8 on the next page. What does
20 that show?

21 A. So this again highlight them for the enacted map where
22 the split counties exist.

23 Q. And how do the two maps compare? Figure 7 and figure
24 8.

25 A. Again, you can see, there's fewer split counties in

1 the enacted map.

2 Q. I'm going to have Keith bring up Figure 12, Pg. 25 of
3 your report. What is Figure 12?

4 A. So this is an illustration for Jackson and Clay
5 counties of the municipalities that were split in those counties
6 in the 2022 map. So places I remember from clerking in
7 Lawrence, these are major suburbs, Independence, and Lee's
8 Summit, Blue Springs, these were all split under the 2022 map.

9 Q. And what about Figure 13 on Pg. 26 of your report?

10 A. So this shows how the enacted map splits those
11 jurisdictions, which is to say it doesn't. It splits Kansas
12 City, as we have talked about quite a bit in this matter but
13 those other cities had their splits removed.

14 Q. And what is the take away?

15 A. Well, that the enacted -- and I should say, you can
16 see that there are some areas where the municipalities have
17 splits because they follow along county boundaries. So Lee's
18 Summit way at the bottom. You can see a little bit from
19 Independence where it crosses over into Clay County but those
20 are all -- there is no population there. So the populations of
21 those municipalities aren't split at all. It tells us that the
22 municipal splits in this area has been reduced.

23 Q. Now plaintiff experts in their response seemed to
24 shift to the quality of the splits; is this something that
25 exists in social science?

1 A. It is not something that I've seen citations to or a
 2 great deal of really any analysis in social science literature
 3 mostly we're just talking about the shape of the district.

4 Q. Are there other three-way splits of major countries
 5 that have previously existed in Missouri?

6 A. Yeah. So if you look at Jefferson County, it has been
 7 split three ways in the past.

8 Q. Well, were they just minor splits?

9 A. They weren't. The -- I believe it was the 2011 map it
 10 was split three ways which was like 20% of the population of one
 11 district, 30% in another district and then 50% in yet another
 12 district. So this idea of a three way split, substantial,
 13 meaningful split of a county isn't new.

14 Q. Are there splits across the map?

15 A. There are. We see this in the map that we just showed
 16 that highlights the county splits, Boone County is slip right
 17 down the middle.

18 Q. Are they always minimal?

19 A. They aren't. So, you know, we have this split in
 20 Boone County. You can look and see that Jefferson County now is
 21 split almost perfectly vertically in that map. So these splits,
 22 this idea of trying to make splits minimal or as small as
 23 possible, just doesn't seem to pop up.

24 Q. And by map, you meant the 2022 map?

25 A. Yes, I'm sorry.

1 Q. I would like to shift to a particular expert starting
2 with Dr. Rodden and some of your responses to his expert report.
3 In Dr. Rodden's report he suggests that the senate districts
4 cannot provide the basis for splitting Jackson County; do you
5 agree?

6 A. No. So at the end of Dr. Rodden's report, there is a
7 series of sub county divisions in Jackson -- in Jackson County
8 that Dr. Rodden runs through and says the lines don't match so
9 this doesn't explain how the district was drawn. And it was
10 really strange to me, because I looked at the State Senate lines
11 for Jackson County and they lined up almost perfectly with the
12 enacted map.

13 Q. Let's pull up Figure 9. I believe, it can be found on
14 Pg. 22 of your report, Defense Exhibit 101. What is Figure 9?

15 A. So Figure 9 shows the Jackson County state senate
16 districts in black and the congressional districts are
17 illustrated with blue lines.

18 Q. What can we see from this figure?

19 A. Well, the important thing is what you don't see, which
20 is blue lines. And that's because the congressional boundary
21 almost perfectly lines up with the boundary between districts 8
22 and 11, 8 and 9, and then seven, nine. There is one area where
23 were about 20,000 people are split off at the very top of
24 district 7 that is where you do see the blue lines but other
25 than that, as Jackson County gets split that split is following

1 state Senate boundaries.

2 Q. What does that mean?

3 A. Well, it means that when Dr. Rodden suggests state
4 Senate boundaries don't explain how Jackson County is being
5 split, it just seems wrong to me.

6 Q. So what Senate districts are in congressional district
7 4?

8 A. Those would be 7 and 8.

9 Q. What about district 5?

10 A. 9 and 11. And I should say most of seven is in
11 District 4.

12 Q. Let's turn to figure 10 which is on the next page.

13 What does figure 10 show?

14 A. So this is the same map but with the layering order
15 reversed. So now we see the congressional districts on top in
16 blue and the State Senate districts underneath in black. So,
17 again, you see the blue everywhere and very little black because
18 those lines are coterminous with each other for the most part.

19 Q. So what does this mean for example in terms of the arm
20 jutting up in District 3?

21 A. Well, when you look at District 4 and you see that arm
22 jutting up, it seems weird at first blush until you see the
23 underlying state Senate district and understand that it has that
24 sort of narrow shape to it as well.

25 Q. Now Dr. Rodden notes elsewhere in the map state senate

1 districts are split; what is your response to that?

2 A. Well, again, Faatz, I have some experience with these
3 State Senate districts and that doesn't surprise me because when
4 you get out to rural Missouri or I guess there it's "Missoura"
5 you get these large sprawling districts that cover up a vast
6 amount of area. And if the mapmaker out there is focusing
7 mostly on just keeping county boundaries intact, you're going to
8 end up splitting rural state senate districts because he county
9 -- the state senate districts cover multiple -- multiple
10 counties.

11 Q. Well, Dr. Rodden in his support lists a bunch of other
12 lines that the map doesn't follow in Jackson County. How does
13 that reconcile with your observations?

14 A. Well, so if a map maker selects the State Senate
15 boundaries, that is going to minimize the extent to which he can
16 follow other boundaries, because for example the State assembly
17 lines don't perfectly line up with state Senate boundaries.
18 School district lines don't perfectly line with State Senate
19 boundaries. So if he's following -- or she I guess I don't know
20 -- is following the State Senate lines it not going to follow
21 these other potential lines because they're different lines.

22 Q. Now, what about Dr. Rodden's claim that the central
23 business district is split for the first time?

24 A. So that might be true for congressional districts,
25 depending on how you define the central business district, but

1 that doesn't mean it is sacrosanct and never had been split in
2 other areas or order maps.

3 Q. Let's pull up Figure 11, Pg. 24 of your report. What
4 does figure 11 show?

5 A. So this is zoomed in on the central business District
6 for Kansas City and this is the State house map.

7 Q. Could you have drawn a district that includes all of
8 the central business district here?

9 A. You could have. The central business district has our
10 population than the ideal population for a state house map. So
11 it didn't have to be split three ways. It is just how the
12 mapmakers drew it so it's not -- at least for the State house
13 map, it's not something they were paying particular attention
14 to.

15 Q. Now, Dr. Rodden shows a lot of other things get split
16 in the enacted map. Did you respond to all of them?

17 A. I didn't. The Census Bureau and Department of
18 Agriculture puts out hundreds if not thousands of different data
19 sets for states. Some of which the mapmaker may have paid
20 attention to or been aware of and others they might not have so
21 I don't know what you take away from the fact that some, you
22 know, that the wheat production is split in a different way than
23 it had to be.

24 Q. Is that why you didn't respond to all them?

25 A. Yeah.

1 Q. Now, Dr. Rodden suggests a racialized split in the --
 2 sorry -- a racialized split in the districts; what is
 3 responsive?

4 A. So Dr. Rodden notes that Troost avenue has a racial
 5 component to residential patterns in Kansas City. But when you
 6 look at how these boundaries appear to be selected within
 7 Jackson County, it follows that 7, 8 or that -- I don't make my
 8 glasses on -- 7,9 split which runs along Troost Avenue, so.

9 Q. What about Dr. Rodden's suggestion that it's unusual
 10 to cross the Missouri River?

11 A. Yeah. That was another one that I didn't entirely get
 12 because districts have crossed the Missouri River for a very
 13 long time.

14 Q. Doctor Rodden also discusses a metric in his report
 15 called district sprawl. Have you ever seen Dr. Rodden's
 16 district sprawl metric used in any other case?

17 A. I have not.

18 Q. To your knowledge, has this metric ever been peer-
 19 reviewed?

20 A. Not to my knowledge.

21 Q. Are there other peer-reviewed measures of population
 22 compactness available?

23 A. Yes. So the, kind of, go to for population
 24 compactness is the moment of inertia test. It's been used in
 25 redistricting since 1960 -- since the mid-1960s.

1 Q. Are there other cases where you and Dr. Rodden both
2 participate in a redistricting case as experts?

3 A. Yes. We were both in a case in California for
4 purposes of voting rights act -- not voting rights act -- for a
5 racial gerrymandering case in California.

6 Q. Did Dr. Rodden use this method of districts sprawl in
7 the California case?

8 A. Not in December, he did not.

9 Q. All right. Let's talk about Dr. Stern now. What was
10 your main critique of Dr. Stern?

11 A. So Dr. Stern has an ensemble of maps and to the extend
12 this is just more examples of how maps could've been drawn in
13 Missouri, I mean it, kind of, is what it is. To the extent it
14 is just builds on what Dr. Cervas did, you know, the implication
15 of that is just whatever the location of Dr. Cervas maps would
16 have been. I mean, some -- a lot of Dr. Stern's maps are very
17 similar.

18 The only difference is, kind of, how you carve out a small
19 population in Jackson County but, again, it kind of, is what it
20 is. But there is a suggestion in it, when he starts talking
21 about the percentile that the enacted maps fall into. And to
22 the extent that the Courts supposed to draw some type of
23 conclusion about the extremism of the maps based upon what Dr.
24 Sterns ensemble drew, I don't think that is a valid inference to
25 draw at all.

1 Q. Why do you not think it is a valid inference?

2 A. Because these -- I'm trying to think of how to explain
3 this in English. But these simulation methods that generate the
4 ensembles don't draw from the entire range of maps that could be
5 drawn in Missouri. As a matter of fact, the most extreme maps,
6 they just won't draw. It is not in their nature is, kind of,
7 the best way to put it. So I mentioned earlier talking about
8 confidence intervals, that for confidence intervals to be valid,
9 you have to have something that will sample from the full
10 available distribution, right?

11 When you do a poll, it has to theoretically be possible
12 that you would draw ever respondent in Missouri from that pool
13 for it to be a good poll. If for some reason it won't talk to
14 many residents of rural Missouri, you are not going to get a
15 good poll result from it is going to be skewed. In the same
16 way, if you have something -- and this is one of the benefits in
17 other contexts of the gerrychain approach -- if it won't draw
18 from the full range of maps -- it cuts off the most extreme maps
19 just to start with, then you can't draw any inferences about the
20 extremeness of the districts being drawn by the legislator.

21 Q. Does he concede that his program will not draw the
22 full range of maps?

23 A. That's my read, is that -- there's this, kind of,
24 image in his report of three different types of maps and there's
25 one really ugly map in the middle of it, just an absurd looking

1 map, that doesn't get draw. Which, when you are doing a
2 political gerrymandering case like that's really good because
3 you're trying to imitate with the mapmaker would be doing. But
4 when you actually trying to just compactness that is not good,
5 like, you have to be able to draw something like the spaghetti
6 mander over in Illinois.

7 If you are -- if you are ensemble just won't draw something
8 like the Illinois map because it is not in its nature then
9 you're cutting off a whole range of non-compact maps that the
10 legislator might have chosen to draw. And so what you're left
11 with is just these districts are less compact than what the
12 computer thinks is a map that it would draw. And I don't know
13 that that really tells us anything, because humans and
14 computers.

15 Q. Is it a conscious decision not to draw the maps?

16 A. So as Dr. Stern explains it -- I have no reason to
17 disagree with him -- it is not. It's just something that is in
18 the nature of the redistricting algorithm that doesn't produce
19 extreme maps. Somewhere between that awful map in the middle
20 panel of his map and the least compact map that he's draw is
21 where it's just not going to go. And I don't know where it is,
22 but the fact that that line exists somewhere is a problem.

23 Q. And I want to hone in on that is, why is it a problem?

24 A. Again, it gets back to this idea that to do -- the
25 whole idea of ensembles is you're trying to pull maps, in

1 essence. You're having a computer draw a lot of maps that would
2 have been available to the mapmaker and then just like with the
3 poll, you examine statistical -- you do a -- you draw
4 statistical inferences from it. Say it is extreme because it is
5 you know less Republican than 99.9% of the maps.

6 But for that to be a valid inference, just like the poll
7 has to theoretically be able to talk to everyone in Missouri for
8 it to be a valid inference otherwise use skew it, if you're
9 talking about politics, all of the -- all the political maps
10 have to be available and there's actually been a lot of work
11 done to establish that these techniques will draw political --
12 politically available maps. If you're trying to draw
13 conclusions about compactness though it has to be able to draw
14 all the non-compact maps as well as the compact maps.

15 Q. Have you done simulations for political
16 gerrymandering?

17 A. I have.

18 Q. How does what doctor Stern did compare -- actually I'm
19 gonna take that back.

20 How did what you did for political gerrymandering compare
21 to what Dr. Stern did in this case?

22 A. So when you do a political gerrymandering case with
23 ensembles, the way you do it is you have the enacted map and so
24 you look at it and you say, Okay. These districts have like a
25 Polsby-Popper of .35 and you generate your ensemble and you try

1 to make sure based on the parameters you put in that the -- that
2 the ensemble is doing what the mapmaker did. That the ensemble
3 that's generated has a similar compactness score to what the
4 mapmaker produced.

5 And if their other things -- if the mapmaker was not
6 crossing the boundaries, you make sure that the ensemble doesn't
7 cross county boundaries. And if the mapmaker wasn't double
8 bunking incumbents, you make sure that the ensemble doesn't
9 double bunking incumbents. Doctor -- and then you can draw your
10 inference because you say, Okay. These are all the things the
11 mapmaker cared about, having established that, I can make -- I
12 can start to draw inferences because I'm going to make sure that
13 my ensemble is doing what the mapmaker could have done if they
14 were blind to politics.

15 The problem is when you are then doing -- and I see the
16 appeal of trying to do this with respect to compactness -- but
17 we know within the constraints that the mapmaker is bound by
18 that the computer ensemble will draw from a full range of
19 political outcomes. There is a sample of precincts that we know
20 all potential outcomes from and of these ensembles are tested
21 against that. What we don't know is whether they will draw
22 every, from the full range of Missouri, of all the compact and
23 non-compact maps that are available. As a matter of fact, Dr.
24 Stern's suggest that it will not because it won't draw extreme
25 maps however that is defined.

1 Q. Does Dr. Stern ever define the range of maps that the
2 software just refuses to draw by its nature?

3 A. I don't know if he did that in his testimony, but I
4 didn't see it in the reports.

5 Q. What is your take away from that observation?

6 A. So again to the extent that Dr. Stern's ensemble is
7 trying to illustrate other maps that could be drawn under the
8 parameters, you know, fine, that is what it is and it is and it
9 has the same impact of whatever Dr. Cervas maps would have. But
10 to the extent he's trying to prove that the enacted maps are
11 outliers, it doesn't do that because again this isn't a random
12 sample. This is just the enacted maps are not within the range
13 of whatever gerrychain is going to tend to draw because of its
14 nature and I guess it's a legal conclusion how interesting that
15 is but I don't think that's a terribly interesting conclusion.

16 Q. In your opinion, does that limit the significance of
17 his findings?

18 A. It really does. The fact that this -- the enacted
19 map, one of the districts is in the lower two percent of what
20 the computer program draws, well, the computer by its nature is
21 drawing districts within certain compactness range so.

22 Q. Thank you very much. I pass the witness.

23 MR. GORE: I have one quick question.

24 THE COURT: Okay.

25 **EXAMINATION BY MR. GORE**

1 Q. Good morning, Dr. Trende.

2 A. Morning.

3 Q. I'm John Gore. I represent the Intervenor in this
4 case. As I understand your report, you reported that a total of
5 five counties were split seven times; is that correct?

6 A. Correct.

7 Q. And in a map with eight districts, would you expect
8 that total of seven splits to be the minimum number of splits
9 possible in a plan eight districts?

10 A. Yeah. So there's actually a paper, some really good
11 authors, about the -- it's the M-1 rule, that generally speaking
12 -- and some people have found exceptions to it where things work
13 out perfectly -- but generally speaking that you need to have
14 with one person, one vote, one -- at least one fewer splits than
15 the number of districts. So if there are eight districts, seven
16 splits is the fewest you can achieve. Like I said, there are
17 outlying examples to the contrary, but.

18 Q. So there might be a plan somewhere where a combination
19 of whole counties just magically lands on equal population; is
20 that your testimony?

21 A. Exactly. There is an example in Montana where you can
22 actually draw perfectly two districts with whole counties but
23 that's the exception.

24 Q. And barring that exception in a plan with eight
25 districts, you would expect to see a minimum of seven times that

1 county was split?

2 A. That's right.

3 Q. Thank you. No further questions.

4 MS. MENG MORRISON: Just for the record, Your
5 Honor. We'd like to move to strike this testimony. This
6 is not anything that Dr. Trende or intervenors have
7 offered. Doctor Trende was not one of their experts and it
8 wasn't obtained in his expert report.

9 MS. HUNKER: Your Honor, the number of county
10 splits as well as his analysis was disclosed in the
11 reports. Also, counsel had plenty of opportunity to ask
12 Dr. Trende questions about those observations at
13 deposition. I don't believe Missouri case law prevents Dr.
14 Trende from expanding on those observations.

15 THE COURT: I -- I don't know if I completely
16 understand your request to strike.

17 MS. MENG MORRISON: The analysis that he just
18 testified to was not ever disclosed in his expert report.
19 The topic of splits certainly was, but the analysis that
20 intervenors counsel just talked about was not and he's not
21 intervenors expert.

22 THE COURT: Well, but they can -- I don't think
23 he has to their expert for him to testify about a topic.
24 In terms of you know Missouri law, I don't know about
25 Missouri law requiring the testimony to be in the report.

1 If there is a discovery question that is, kind of, a
 2 separate issue, but I don't -- I am unaware of everything
 3 that is in his testimony as to be been some sort of report.

4 I think, it's whether or not he's qualified to give
 5 testimony on an issue, is certainly the relevant question.

6 And I don't think that's your argument. It seems like your
 7 argument is this wasn't necessarily spelled out in his
 8 report; is that the argument you're making?

9 MS. MENG MORRISON: Yes, Your Honor.

10 THE COURT: Okay. And I don't think -- you all
 11 can correct me if I'm wrong as we go forward here. I don't
 12 think that is a requirement that it has to be in his report
 13 under Missouri law. I think, the relative question is, is
 14 he qualified to give testimony on it? You can certainly
 15 cross-examine him about, you know, where that came from and
 16 whether he could have put that in his report.

17 But I think the fact that there is the general
 18 conversation, at least, from my recollection of looking in
 19 the report about counties splits, I don't think that's a
 20 bar to the testimony. I think its stuff you can certainly
 21 cross-examine on. So I'm not inclined to strike it from
 22 the record.

23 MS. MENG MORRISON: Thank you.

24 MS. HUNKER: Your Honor, that aligns with our
 25 understanding of Missouri laws as well.

1 MS. MENG MORRISON: Thank you, Your Honor.

2 THE COURT: Are you ready?

3 MS. MENG MORRISON: Yes.

4 THE COURT: Okay. Go ahead.

5 **CROSS-EXAMINATION BY MS. MENG MORRISON**

6 Q. Good morning, Dr. Trende.

7 A. Good morning.

8 Q. It's nice to meet you in person.

9 A. Good to meet you as well.

10 Q. Just for the record, my name is Tina Meng Morrison on
11 behalf of the Healey plaintiffs.

12 Doctor Trende have you published any peer-reviewed
13 articles?

14 A. Yes.

15 Q. And what was the title of that publication?

16 A. Oh, gosh. I don't remember the exact title of it. It
17 had to do with bellwether counties.

18 Q. So can we pull up demonstrative -- I believe it is
19 307. And --

20 MS. KHANNA: 308.

21 Q. 308. Sorry. Plaintiff's demonstrative 308.

22 And Dr. Trende, this is an expert report that you submitted
23 in a case in California; is that correct?

24 A. Correct.

25 Q. And could be just put the header for the date that

1 this was submitted to the Court? And this document was filed on
2 December 11, 2025; is that right?

3 A. Correct.

4 Q. So about two months ago?

5 A. Correct.

6 Q. And could be go to the last page and can we zoom in on
7 the publications? So Dr. Trende, is this the publication that
8 you are referring to?

9 A. Yes.

10 Q. And it says forthcoming and it's dated 2022; is that
11 still accurate?

12 A. Yeah. No. That should be updated or should have an
13 update a while ago. It has been published.

14 Q. And so there are no other publications that you are
15 referring to that is not listed in his CV from two months ago?

16 A. Correct. You asked me if I published anything and
17 this is the only thing I've published.

18 Q. This is a peer-reviewed article?

19 A. Yes. That's my understanding.

20 Q. Can you clarify by what you mean by this is your
21 understanding?

22 A. My understanding -- you're asking me that I presume
23 for a reason. My understanding is it is peer-reviewed, but.

24 Q. Doctor Trende, prior to drafting your report you never
25 spoke with any member of the General Assembly about the 2025

1 map; is that right

2 A. Correct.

3 Q. And you never spoke to the governor or any member of
4 his staff either?

5 A. Correct.

6 Q. In preparing your report, you didn't know what
7 considerations motivated a map drawer, legislators, the
8 governor, or anyone else involved in adopting between 2025 map;
9 is that right?

10 A. Correct.

11 Q. And you are not reviewed any complaints that have been
12 filed in this case when you were preparing your report?

13 A. Correct.

14 Q. You did not review any cases in preparing your report,
15 as well; is that right?

16 A. Correct.

17 Q. Prior to your deposition you were not familiar with
18 the case *Pearson V Koster*; is that right?

19 A. Correct.

20 Q. So in preparing your report you did not read or review
21 that case?

22 A. Correct. I was just responding to plaintiff's
23 experts.

24 Q. And in fact you did not believe that Pearson is
25 relevant to the analysis in this case; is that right?

1 A. Not to mine, because I was just responding to your
2 experts.

3 Q. And so just to clarify, you didn't believe that
4 Pearson was relevant to your response to our experts in creating
5 your report; is that right?

6 A. Correct. I was just responding to their analysis.

7 Q. You were never asked to analyze whether certain
8 districts in the 2025 map were closely united territory; is that
9 right?

10 A. Only in so far as I'm responding to your experts who
11 are attempting that analysis.

12 Q. And so as you just mentioned in putting together your
13 report in this case, you said that your task was to respond to
14 plaintiff's experts including Dr. Rodden?

15 A. Correct.

16 Q. Now I just want to hand you a binder that can dance PX
17 27 so that you have it in front of you and this is Dr. Rodden's
18 report. It's quite a large binder.

19 A. Thank you.

20 Q. Yep. And there are tabs so it's easier to find.

21 A. Which number?

22 Q. PX 27.

23 A. Okay.

24 Q. So I'm gonna ask you about several portions in the
25 report and it's available for you to flip through or consult if

1 you need to.

2 Dr. Rodden's report analyzes the congressional
3 redistricting history of Kansas City from the 1800s to present-
4 day. You offered no response or opinion about his analysis on
5 this topic, correct?

6 A. I think, the maps are accurate representations of what
7 the district lines are.

8 Q. You don't dispute Dr. Rodden's analysis of how Kansas
9 City grew based on those maps either?

10 A. Correct.

11 Q. You do not dispute Dr. Rodden's analysis of how
12 congressional district lines in the Kansas City area have
13 changed over time?

14 A. Correct.

15 Q. You also don't respond to or dispute any of the
16 historical population data offered in Dr. Rodden's Figures 4, 5,
17 and 6, right?

18 A. Correct.

19 Q. Doctor Rodden also examines a metric called core
20 retention; is that right?

21 A. Correct.

22 Q. And you're familiar with the term?

23 A. Yes.

24 Q. It's something that experts use in redistricting
25 commonly in their examinations?

1 A. Yes.

2 Q. But you offer no opinion on core retention in your
3 report; is that right?

4 A. Correct.

5 Q. You don't dispute Dr. Rodden's numbers that he
6 calculated?

7 A. That's right.

8 Q. Doctor Rodden also examines population density in
9 Missouri's congressional maps. You offer no opinions on this
10 topic either?

11 A. I think, that's right.

12 Q. In fact, you don't offer any alternative ways of
13 looking at population density either?

14 A. I don't calculate the any, but I think I testified
15 that the peer-reviewed way to do it would be the moment of
16 inertia.

17 Q. The phrase, moment of inertia, however, doesn't appear
18 anywhere in your report; is that right?

19 A. That is correct.

20 Q. And so you don't offer any analysis under the moment
21 of inertia in your report?

22 A. I don't. That's right.

23 Q. Doctor Rodden also examines various demographic
24 factors such as renter and owner-occupied housing, transit
25 patterns, occupational sectors; is that something you recall?

1 A. Yes.

2 Q. And you do not offer any opinions on these topics
3 either, right?

4 A. Correct.

5 Q. Now Dr. Rodden also presents an analysis called
6 district sprawl, which you just discussed with Counsel. You
7 don't offer any opinion on the metric as he's defined it in his
8 report, correct?

9 A. Yeah. I've never heard of it before so I don't have a
10 very well developed one.

11 Q. And so you don't dispute any of his calculations that
12 he presents under district sprawls?

13 A. Oh, that's correct.

14 Q. Are you familiar with the term medium population
15 center in your work as an expert?

16 A. If that is the centroid, then, yeah.

17 Q. And have used it to analyze other maps in other cases?

18 A. Yeah. The population centroid is usually the basis
19 for some type of sprawl metric.

20 Q. But, you didn't use that concept in your report in
21 this case; is that right?

22 A. That's correct.

23 Q. Doctor Trende, your report which I believe you have in
24 front of you as well, first begins by discussing several
25 compactness scores that you discussed with counsel earlier. You

1 would agree that all of these metrics are based on the physical
2 shape and size of a district; is that right?

3 A. That's right.

4 Q. Now, if we could pull up your report which is DX 101;
5 is this your report?

6 A. It appears to be.

7 Q. And I believe, just for the record, this is the
8 original report you submitted and not the amended report that
9 came a couple of days later that fixed one scrivener's error; is
10 that right?

11 A. That's right.

12 Q. So if we could go to Pg. 6 of your report. Can you
13 please read the highlighted sentences?

14 A. Plaintiff's experts discuss two commonly used
15 compactness measures in their reports, reock And Polsby-Popper.
16 I add two more, convex hull and IKIWISI scores, these are
17 probably the most commonly used compactness measure but
18 importantly they are but a sample of dozens of metrics that have
19 been proposed over the over the years. In other words there is
20 no one compactness measure rather different measures emphasize
21 different aspects of what we might consider compact.

22 Q. So in your report, Dr. Trende, you examined
23 compactness scores on these four metrics, correct?

24 A. Correct.

25 Q. But as you say, they are dozens of other metrics that

1 you don't examine?

2 A. Correct.

3 Q. And you're not offering any opinion in your report or
4 today on the stand about which of these metrics is the best
5 measure of compactness, right?

6 A. I don't really think -- I mean I think one of the
7 inferences from this -- I don't really think there's a best
8 measure. They all emphasize different things.

9 Q. So and I believe you testified to this earlier, a
10 district that scores poorly on one compactness metric can score
11 better on another compactness metric, right?

12 A. Correct.

13 Q. So depending on which metric you choose one could come
14 away with a different understanding about the compactness of any
15 given district?

16 A. That's right.

17 Q. In your report you look at whether there are districts
18 from a variety of different maps that score lower than District
19 5 the 2025 map on these four compactness metrics, right?

20 A. Correct.

21 Q. Is it your opinion that a district is compact so long
22 as it scores higher than one or more other comparator districts?

23 A. I don't know if I actually go that far because I think
24 that starts to get into the job of the Court to determine what
25 is compact and what is not compact. It is the idea is just that

1 they fall within a range of maps that have been accepted or used
2 in Missouri in the past.

3 Q. So was the guiding principle in your report that if it
4 falls within a range then a district is compact?

5 A. I think, if it falls within -- I think, it's useful
6 that it -- to determine whether or not it falls within the range
7 of maps that have been used before. It is something that the
8 map drawers can draw upon, certainly, but there may be
9 exceptions. I don't know.

10 Q. And when you refer to a range of compactness metrics,
11 as we just discussed, districts can score differently on each
12 metric. So is the range any number across any of the metrics
13 that you look at? Can you just describe that a little bit so I
14 can understand?

15 A. No. I think, if it falls within -- I think when you
16 get into this universe where it starts to fall outside some of
17 them or even outside all of them the inquiry becomes more
18 demanding. But as I understood it, this district falls within
19 the range for all four of these measures.

20 Q. In your report, you report average compactness scores
21 for the 2011 map, the 2022 map, the 2025 map, as well as the
22 current house and senate maps; is that right?

23 A. I think I also did the average scores going back to 7.

24 Q. Yes. I believe that is correct, and if you would like
25 pull up the table.

1 A. No. No. I am pretty sure that's right.

2 Q. You would agree that a statewide average can mask the
3 existence of highly noncompact districts in a given map; is that
4 right?

5 A. Sure. That's why you want to do it both ways.

6 Q. So you list out the district that are less compact
7 than the District 5 -- than District 5 in the 2025 map, correct?

8 A. Correct.

9 Q. But you don't actually list out the districts that are
10 more compact than district 5 in that map; is that right?

11 A. Right, because the idea is to see if it falls within
12 the region and if so, if their districts are on the lower end
13 then falls within the range of what has been an enacted.

14 Q. But you haven't flagged the top end of that range in
15 your report; is that right?

16 A. Right. Because, I don't think that is relevant. I
17 think you're only looking to see whether it falls within the
18 range of what has been used in Missouri before and like I said,
19 since we have an actual census, it is not a sample that has been
20 drawn. The percentile just isn't that interesting.

21 Q. You don't report the lowest or higher compactness
22 metrics for an individual districts in the 1972, 1982, 1992, or
23 2002 maps, correct?

24 A. That's correct. Doctor Rodden went and did that.

25 Q. Doctor Trende, you report out the raw number of county

1 splits with in the 2022 and 2025 maps?

2 A. Correct.

3 Q. But other than the pictures that you produced on I
4 believe pages 20 and 21 of your report, you offer no analysis of
5 any these county splits; is that right?

6 A. Right. It's the count of county splits.

7 Q. So you would agree your report itself does not look at
8 how many individuals are impacted by any of the county splits
9 that you report?

10 A. Yeah. Yeah. I testified in my deposition about for
11 example the split of Jefferson County and we produce the code
12 for that to plaintiffs. So for example, Jefferson County had
13 been split three ways before with a 20, 30, 50 split.

14 Q. And Dr. Trende you would agree that different counties
15 have different population densities, right?

16 A. Correct.

17 Q. So depending on where a county is split, that split
18 can either impact a sparsely populated or a densely populated
19 area?

20 A. Sure.

21 Q. But you are not offering any opinions about the impact
22 of the type of county split or whether the district is in a
23 closely -- on whether the district is a closely united
24 territory? Let me repeat that question for you.

25 A. Please.

1 Q. You are not offering any opinions about the impact of
2 the type of county split on whether a district is a closely
3 united territory; is that right?

4 A. Correct.

5 Q. Now, I'm going to ask about Dr. Rodden's rebuttal
6 report, which if you need to refer to is PX 28.

7 A. Okay.

8 Q. You do not dispute any of Dr. Rodden's calculations of
9 Jackson city residents excluded from the CD 5 under the 2012,
10 2022, and 2025 maps, right?

11 A. Correct.

12 Q. You also analysis municipality splits in Jackson
13 County and Clay County in the 2022 and 2025 maps, right?

14 A. Correct.

15 Q. And just like with the county splits, you only look at
16 the raw number of splits in each plan; is that right?

17 A. Yeah.

18 Q. And similar to counties you would agree that
19 municipalities have different population densities, as well?

20 A. Right but because it is not splitting any of the
21 jurisdictions we know that the enacted map doesn't impact any of
22 that.

23 Q. Sorry. Could you clarify that? Are you saying no
24 municipalities are split under the 2025 map?

25 A. No. We're talking about the Jackson County splits

1 that are in my report in what I calculated at least that was my
2 understanding. So with respect to the municipalities

3 illustrated in my report, the enacted map doesn't split them.

4 To the extent they're split so there is some of the analysis you
5 suggest actually -- to the extent it splits those

6 municipalities, it is where the cross county splits exist and
7 the cross county portions of this municipalities are populated.

8 Q. So you just referenced portions of municipalities that
9 are unpopulated. In your report, do you offer any analysis
10 about how many individuals are impacted by where the splits
11 currently exist under the 2025 map?

12 A. Well, yeah. Because the only way those municipalities
13 I discussed are split are unpopulated splits.

14 Q. And can you point to where you mentioned that in your
15 report?

16 A. Sure. On Pg. 26, there are cross-country splits for
17 Sugarcreek and sorry -- there are cross-county splits for
18 Sugarcreek and Independence but these are unpopulated.

19 Q. And can you just describe how this relates when -- in
20 talking about cross county splits with municipalities?

21 A. Well, so the idea is that these municipalities are
22 generally made whole under the enacted map but when you look at
23 Figure 13 you can see a portion of Independence that is in fact
24 cut by the map it, kind of, sticks out at the bottom and so I
25 looked at that cross counties split -- there's a similar one for

1 Sugarcreek where it goes into Clay County -- and I looked at the
2 split and the split is in an unpopulated portion of the city.

3 Q. And Dr. Trende, I believe, earlier in your testimony
4 today you had said that you never heard of a social scientist
5 analyzing how district splits affect people living in the
6 district; is that right?

7 A. I don't think I was asked anything. No I don't think
8 so.

9 Q. Have you heard of social scientist analyzing district
10 splits by looking at the number of people impacted?

11 A. I actually don't know if that -- if I've seen that in
12 peer-reviewed literature or not.

13 Q. Have you seen it in any of your expert work?

14 A. I don't know.

15 Q. You do not dispute any of Dr. Rodden's calculations in
16 his rebuttal report about the impact of municipality splits in
17 Jackson County; is that right?

18 A. I don't think so. Can you point me to that? I just
19 want to double check.

20 Q. Sure. Page 12 of his report.

21 A. I'm assuming you have me in the deposition answering
22 that so I'm inclined to agree but.

23 THE COURT: Which Pg. 12.

24 Q. PX 28, Your Honor.

25 THE COURT: Okay. Thank you.

1 A. Yeah. Okay. So I see that Pg. 12 and he's talking
2 about Kansas City so no I don't dispute his calculation.

3 Q. Doctor Trende you also examined the extent to which
4 the 2025 map follows senate district lines, right?

5 A. Correct.

6 Q. But you no opinion on whether you believe a senate
7 district is a political subdivision?

8 A. Yeah. That's right. I mean, one thing that I've
9 learned in state court cases is that process and definitions
10 change radically from state to state. Sometimes in ways you
11 wouldn't expect. I never would've expected in New York a civil
12 case was a beyond a reasonable doubt standard, so I don't know
13 about Missouri defines political subdivisions.

14 Q. But you would agree that unlike county and
15 municipality lines, state Senate District lines can change every
16 10 years just like congressional district lines; is that right?

17 A. Oh, sure. Yeah.

18 Q. You do not dispute that under the 2022 maps CD5 splits
19 three state senate Districts, right?

20 A. Correct.

21 Q. So you also don't dispute that under the 2025 map CD 5
22 splits eight states into district?

23 A. Correct.

24 Q. You don't dispute that in prior maps only three or
25 four additional state senate Districts were added to District 5;

1 is that right?

2 A. Yeah. That I don't know so I don't dispute it.

3 Q. So when you were looking at Senate splits in your
4 report you only focused on the Jackson County area?

5 A. Well, right, because on Pg. 37 there is this of this
6 report there is a zoom in for Jackson County. And Doctor Rodden
7 is suggesting it doesn't follow the State Senate boundaries and
8 I look at the blow up of Jackson County and it pretty clearly
9 does so I thought that was worth pointing out.

10 Q. Just for the record you are looking at PX 27, not 28;
11 is that right?

12 A. That's all right. Sorry. Page 37 of PX 27.

13 Q. So you did not look at how district lines --
14 congressional district lines respond with county splits in any
15 other part of the State is that right?

16 A. That's right. The focus of Dr. Rodden's report has
17 been on -- generally, been on Jackson County and that is what I
18 spent most of my time on.

19 Q. But earlier in your report when you presented
20 statewide compactness metric averages, there you are looking at
21 the entirety of the 2025 map, right?

22 A. Correct.

23 Q. And Dr. Trende, you would agree that you did not
24 examine the extent to which the 2022 adheres to state senate
25 district lines in any part of the State?

1 A. Correct. I'm responding to Dr. Rodden suggestion on
 2 Pg. 37 of his report that it doesn't follow any type of boundary
 3 within Jackson County because it looks like it follows the state
 4 senate boundaries pretty closely. I'm just responding to Dr.
 5 Rodden.

6 Q. Doctor Rodden puts forth the calculation of how many
 7 residents are carved out of the dominate portion of their State
 8 Senate districts under the 2022 and 2025 maps, you don't dispute
 9 any of those calculations, right?

10 A. I don't dispute any of Dr. Rodden's calculations.

11 Q. Now, Dr. Trende, in your report wherever you state you
 12 were asked to do a certain thing you said that that indicates
 13 that those analysis were suggested to you by counsel; is that
 14 right?

15 A. Yes.

16 Q. So based on that, according to your report, counsel
 17 asked you to run the compactness scores of your report?

18 A. Correct. Well, I don't think they selected the
 19 compactness measures but they asked to run compactness scores,
 20 yes.

21 Q. When you mean compactness measures, you mean of the
 22 Polsby-Popper, reock?

23 A. Right. It was a general analysis I was asked to
 24 undertake but they weren't saying you know these are the
 25 measures you shall use.

1 Q. Counsel also asked you to provide the statewide
2 average compactness scores for different maps?

3 A. Correct.

4 Q. Counsel asked you to calculate the average compactness
5 metrics for congressional districts going back to 1972?

6 A. Correct.

7 Q. Counsel also asked you to count up of the number
8 county splits across the 2020 -- 2012 and 2022 maps; is that
9 right?

10 A. Yes.

11 Q. As well as municipal splits for those maps?

12 A. Correct.

13 Q. Counsel asked you to produce a map highlighting county
14 splits in the 2022 and 2025 maps?

15 A. Correct.

16 Q. Counsel pointed out to you that the MKC airport is now
17 in district 6; is that right?

18 A. Right.

19 Q. You did not look into what impacts might otherwise
20 exist with municipal splits under the 2025 map because counsel
21 did not ask you to, right?

22 A. Generally, well, no, because I was also asked
23 generally to respond to plaintiff's experts but generally the
24 role of an expert is to answer questions that the Court would
25 find helpful. The lawyers know the law much better than I do so

1 if they are suggestions on things -- on questions to answer, if
2 I can answer them honestly, I will answer them.

3 Q. So your failure to look at how municipal splits -- the
4 impacts of municipal splits under the 2025 map, that decision to
5 not look into it was discretionary on your part?

6 A. I suppose I could have.

7 Q. But it wasn't something you were asked to do?

8 A. That's right.

9 Q. He also did not look at how the 2025 map follows state
10 Senate district lines elsewhere in the State because counsel did
11 not ask you to, right?

12 A. No. You make that sound like it was a conscious
13 choice if they don't ask you to do something I'm just not going
14 to do because there are lots of things and responding to Doctors
15 Rodden and Cervas and Stern that weren't directly suggested by
16 counsel. Honestly, the main constriction on this report was
17 that, I believe I got your reports December 22 and the response
18 was due January 7 which was the day I was testifying in a case
19 so I got done what I could get done. But I was -- there was
20 never anything don't do anything we don't ask you to do.

21 Q. And you also didn't look at state Senate district
22 lines the 2022 map because counsel did not ask you to, right?

23 A. Can you ask me that again?

24 Q. You didn't look into how state senate district lines
25 in the 2022 map follow state district lines -- apologies. Let

1 me rephrase.

2 You also did not look at how the congressional lines in the
3 2022 map follow state Senate district lines because counsel did
4 not ask you to, right?

5 A. No. That would have nothing to do with it because the
6 idea of looking how state senate lines correspond with the
7 enacted map was from reading Dr. Rodden's report and responding
8 to it that had nothing to do with counsel. That was probably
9 just a limitation on how much time I had writing this over the
10 holidays.

11 Q. Doctor Trende, when you testify as an expert in
12 litigation you don't report to offer legal opinions; is that
13 right?

14 A. I do my best. I mean, you do enough VRA cases for
15 example and you, kind of, understand at least some of the
16 parameters of what you're allowed to do legally but I try to
17 stay away from.

18 Q. Would you agree that experts are often required to
19 operate under legal assumptions or understandings in order to
20 carry out their examination in a case?

21 A. Sometimes you're given an assumption or an
22 understanding of the law. For example, I have done, under the
23 VRA population -- I'm imagining this will come up at some point
24 -- population compactness analysis. Where the appropriate of it
25 depends entirely on what the interpretation of compact within

1 the meaning of the VRA is. So if I'm told to just assume
2 population compactness is important and now do the compactness
3 analysis, okay. And if the Court disagrees with the legal
4 interpretation, they disagree and the analysis and is unhelpful.

5 Q. In the course of your expert work over the course of
6 the years, have you familiarized yourself with case law in order
7 to understand how a given jurisdiction might evaluate certain
8 metrics for redistricting?

9 A. Well, so again when you are doing a lot of expert work
10 for example in the VRA. Okay. I know gingles 1 requires the
11 minority group to be 50% +1 of the population that is just
12 something you learn along the way. And in federal court, you
13 know, I teach some of these cases in my class so I have a pretty
14 good understanding of how the law works. In state court, I
15 mean, there is -- you have 50 states that all do these things
16 differently. One thing I learned from practicing law is that
17 you don't shoot from the hip on what state court -- on what the
18 law is in a jurisdiction. You spent a lot of time researching
19 it and running in to ground so a little more cautious there.

20 Q. So if we could pull up plaintiffs demonstrative 309.
21 Now Dr. Trende this is an expert report you submitted in a case
22 in the Central District of California; is that right?

23 Q. And I could go to Pg. 21 -- Pg. 6 of your report.
24 Doctor Trende you said, I am aware of case law from the Ninth
25 Circuit suggested that CVAP is the proper measure; did I

1 everything correctly?

2 A. Correct.

3 Q. If we could pull up demonstrative 310. This is also
4 an expert report you submitted in a case in the middle District
5 of North Carolina; is that right?

6 A. Correct.

7 Q. Can we go to Pg. 20 of your report? Doctor Trende can
8 you just repeat -- can you just read the heading of this
9 subsection?

10 A. Yeah. And so real quickly on the last question and
11 then I will do this but to give a fuller answer, I have been the
12 -- as I mentioned earlier -- I've been the VRA expert counsel
13 for the Arizona redistricting commission on the VRA. So I have
14 a pretty good understanding of Ninth Circuit case law as it
15 relates to the VRA you know and that's one of those areas where
16 you pick things up and I had a unique experience there right.

17 Now, this is, As threshold matter, the substantive --

18 Q. Sorry. Not to cut you off. Just the heading.

19 A. The Rodden report overstates the Court's ruling in
20 Cooper.

21 Q. Can you finish the rest of that?

22 A. Oh, *V. Harris* and *Alexander v. South Carolina*
23 conference of the NAACP regarding the county envelope approach.
24 This is another one where I specifically say I'm not telling the
25 Court how it needs to rule on the law. I'm going through expert

1 reports in cases I was involved in and saying what it was the
 2 experts have done which is different from how Dr. Rodden had
 3 interpreted it. I mean I was the expert in Alexander

4 Q. So just to be clear, Harris and Alexander are two
 5 court cases; is that right?

6 A. Yeah. They are federal racial gerrymandering cases.
 7 They are cases that I teach in class so I understand those cases
 8 very well.

9 Q. Can we go to last paragraph on this page? Can you
 10 just read the first three here?

11 A. Yeah. At the same time, interpreting Harris is
 12 crucial for structuring the response here. The Rodden report
 13 proceeds under one different interpretation of Harris and
 14 Alexander.

15 Again, this is relating to how the experts are supposed to do
 16 their work.

17 I have a very different understanding of those cases having
 18 reviewed the record because that different understanding affects
 19 the way I structuring my report and because I would be reluctant
 20 to criticize the county envelope method had it fully been
 21 briefed and cleanly ruled upon as the Rodden report suggests. I
 22 describe my understanding below.

23 Q. And you proceed to then describe your understanding of
 24 the Harris and Alexander cases; is that right?

25 A. Right. So as they ruled on evidentiary issues

1 regarding the County envelope approach I was the expert in
 2 Alexander. I am pretty sure Dr. Rodden got it wrong and I am
 3 pretty -- I'm comfortable stating that for a sort of unique
 4 Missouri compactness analysis as may be or closely united
 5 territory I am not going to testify on what that means without
 6 doing a lot of research the type of research I've done for
 7 federal court. I'm just not going to do it. That's basic
 8 lawyering.

9 Q. Can we go to Pg. 23 of your report? And can you just
 10 read the --

11 THE COURT: I'm sorry. I just want to be clear,
 12 you're talking about Pg. 23 of the demonstrative that your
 13 showing?

14 Q. Correct. Still the same demonstrative I believe it's
 15 310 Your Honor. Can you just read the first sentence here?

16 A. The trial court opinion spends little time on the
 17 county envelope report.

18 Q. And can we jump to the next section titled 5.1.5
 19 Supreme Court ruling? And could you read the first three
 20 sentences here?

21 A. Sure. The Supreme Court does not appear to have
 22 directly ruled upon the validity of the county envelope
 23 approach, either in Harris or Alexander. In fact, the Supreme
 24 Court was not as to rule directly on the merits of the County
 25 envelope approach in Harris. Harris went to the Court and an

1 abuse of discretion standard, as the appellees attorneys made
2 clear.

3 Q. And on the following page, Pg. 24 of demonstrative
4 310, can we go to the last paragraph in -- before subsection
5 5.1.6? And can you just read the first three sentences here?

6 A. The Supreme Court's opinion in Cooper v. Harris,
7 attached as Exhibit 9, does not weigh the pros and cons the
8 County envelope approach. Instead, it concludes that the
9 evidence cleared the bar of clear error review. The closest the
10 Court came to commenting on the methodology was in a footnote,
11 where the majority observed that registered voting could be
12 preferable to doctor Hillfellers -- or Hofeller's response on
13 the -- reliance on the 2008 presidential election that is a long
14 sentence because the 2009 election involved a black presidential
15 candidate.

16 So, again, this is a situation where Dr. Rodden had said
17 the Supreme Court had indorsed his approach. I was involved as
18 the expert in a case that he was citing and I knew exactly would
19 the record was and how the Supreme Court had dealt with it in
20 previous cases. I'm comfortable putting all that evidence
21 before the Court with the sentence that we haven't talked about
22 saying I'm not trying to do the legal analysis for the Court,
23 this is just -- this is just stuff that's left out of Dr.
24 Rodden's opinion.

25 I am not going to opine on the meaning of a Missouri state

1 constitutional provision without doing extensive research on the
 2 case law in Missouri. I don't know that off the top of my head,
 3 like I do to stuff.

4 Q. You said that you were an expert in Alexander was your
 5 expertise related to the prior case law that that case depended
 6 on?

7 A. I believe so, yeah. That's how I knew this.

8 Q. So you were --

9 A. I mean the Supreme Court -- the Supreme Court cites me
 10 in Alexander.

11 Q. So you were certified as an expert to offer legal
 12 opinions in Alexander?

13 A. No. No. I wasn't certified as an expert to offer
 14 legal opinions here either.

15 Q. You are not an expert in Harris, though; is that
 16 right?

17 A. I'm trying to remember because there's a weird thing -
 18 - the first case I did was to Dickson v. Rucho and it lost in
 19 the State court and then it got brought -- almost identical same
 20 complaint in federal court. And I can't remember if -- and I
 21 didn't do the federal case but I had done the State case and I
 22 don't remember if that was Covington or Cooper v. Harris that
 23 was the revised state case. I just don't remember.

24 Q. Could we pull up what we'll mark as demonstrative 311?
 25 This is an expert report you submitted in a state court case

1 called Republican Party of New Mexico v. Oliver; is that right?

2 A. Correct.

3 Q. And we go to Pg. 7, can you read the sentence that
4 starts, The first principal?

5 A. Sure. The first principle which this report relies is
6 one that all nine justices agreed upon in Rucho. Judges should
7 not be striking down maps left, right, and, center of the view
8 that every smidgen of politics is smidgen too much.

9 It's a nice quote from a case that I teach that is meant to
10 reassure the Court that the idea behind the political science
11 techniques is not to exclude everything that a jurisdiction
12 might implement.

13 Q. Were you an expert involved in *Rucho*?

14 A. Yes.

15 Q. Can you read the sentence on the same page that
16 starts, Second?

17 A. Second, Justice Kagan identifies a three part test for
18 measuring a gerrymander, intent, effects, and causation.

19 Q. And can we go to Pg. 9? Can you read this sentence?

20 A. Yeah. Justice Kagan also endorsed a more qualitative
21 analysis noting that in the *Lamone v. Bensiek* case arising out
22 of Maryland which was consolidated with the *Rucho* case for
23 purposes of appeal, the plaintiffs lacked the North Carolinas
24 plaintiffs fancy evidence.

25 Q. So Dr. Trende, is it fair to say that you've seen fit

1 to review case law in order to guide your expert analysis in
2 both federal and state court cases?

3 A. Well, they are all federal cases and there cases that
4 I've been involved that I teach in class and that I know well.
5 And in that circumstance, I am comfortable saying, Yeah. That -
6 - this is how the Court's approached things to try to
7 illustrate. There is no -- there is no way that any lawyer
8 would appear in court and shoot off about some type of state law
9 provision without having done extensive research, which I just
10 didn't have the time and authorization to do here.

11 Q. But just to be clear this expert report in this case
12 is a state court case?

13 A. Sure that the state Supreme Court had endorsed
14 literally endorsed Justice Kagan's dissent as what was going to
15 guide the definition of a gerrymander. And I know Justice
16 Kagan's dissent very well.

17 Q. And so you reviewed the New Mexico Supreme Court cases
18 to know that they had adopted this?

19 A. Yes.

20 Q. But you've reviewed no Missouri case law or Missouri
21 Supreme Court cases for your work in this case; is that right?

22 A. That's right.

23 Q. Thank you, Dr. Trende. I will pass the witness now to
24 my colleague, representing the wise plaintiffs.

25 MR. CHEUNG: Your Honor, is this time for a

1 break? Or --

2 THE COURT: We can take one if you'd like.

3 That's fine.

4 MR. CHEUNG: I'm also happy to start whenever.

5 THE COURT: No. We can take one. That's fine.

6 It is -- let's 10:09, let's try to start -- well, we'll say

7 10:25 just plan on one break for the morning. Okay. Thank

8 you.

9 (COURT IS IN RECESS.)

10 THE COURT: All right. Welcome back, everybody.

11 Looks like you're ready to begin.

12 MR. CHEUNG: Thank you, Your Honor.

13 **EXAMINATION BY MR. CHEUNG**

14 Q. Good morning, Dr. Trende.

15 A. Good morning.

16 Q. My name is Ming Cheung. I'm from the ACLU and I
17 represent the Wise plaintiffs this case.

18 A. Good morning.

19 Q. And I'm sorry for inadvertently referring to you as
20 Mr. Trende earlier. I had seen you testify and -- that's

21 obviously another case in South Carolina and I think at that
22 time you were still under Mr. title.

23 A. I'm not offended.

24 Q. I apologize. Based on your exchange with Ms. Meng
25 Morrison earlier, I take it that you did not affirmatively

1 assess whether the 2025 congressional districts consist of
2 closely united territory in this case?

3 A. Certainly not directly if the testimony I give is
4 relevant to that question then I guess it's built-in but I
5 didn't do any research to what that means in Missouri.

6 Q. Okay. And so you've not provided any opinion on
7 whether CD 4 under the 2025 plan consists of closely united
8 territory?

9 A. Only in so far as I'm responding to plaintiff's
10 experts?

11 Q. And the same for CD 5?

12 A. Same for CD 5.

13 Q. You've not offered a definition of closely united
14 territory that was different from what plaintiff's experts have
15 used in this case?

16 A. I haven't offered any definition, no.

17 Q. You have reviewed Dr. Ari Sterns additional and
18 rebuttal reports in this case; is that correct?

19 A. Correct.

20 Q. You don't dispute any of the calculations in either of
21 Dr. Sterns reports?

22 A. That's right.

23 Q. And you don't dispute the reliability of any data that
24 Dr. Stern used?

25 A. The data itself, that's right; the interpretation is

1 where we have a disagreement.

2 Q. And you don't dispute the way that Dr. Stern defines
3 and describes the various compactness and metrics in his
4 reports?

5 A. Not that I can recall.

6 Q. Okay. You also did not dispute the data or
7 calculations provided by Dr. Jonathan Cervas?

8 A. Correct.

9 Q. And the same for Dr. Cromartie?

10 A. Correct.

11 Q. Doctor Stern used a ensemble analysis in this case; is
12 that correct?

13 A. Correct.

14 Q. You sometimes refer to an ensemble analysis as a
15 simulation analysis?

16 A. Correct.

17 Q. And you've conducted ensemble or simulation analyses
18 yourself?

19 A. Correct.

20 Q. For instance, you did that in a Maryland partisan
21 gerrymandering called Szeliga v. Lamone?

22 A. Correct.

23 THE COURT: I'm sorry. Can you spell that for
24 us?

25 MR. CHEUNG: Sure. Szeliga is S-Z-E-L-I-G-A;

1 Lamone is L-A-M-O-N-E.

2 Q. You also conducted an ensemble analysis in New York
3 partisan gerrymandering called Harkenrider v. Hochul?

4 A. Correct.

5 Q. Harkenrider, H-A-R-K-E-N-R-I-D-E-R; Hochul, is H-O-C-
6 H-U-L.

7 In the Harkenrider case you created an ensemble of 5000
8 maps; does that sound right?

9 A. There were multiple ensembles. I think the expert --
10 the opposing expert complained about the number of observations
11 being too small and so in the reply we -- I can't remember -- we
12 did more.

13 Q. In your rebuttal you did another 35,000; does that
14 sound right?

15 A. I believe you.

16 Q. Okay and you've written in the past that ensemble or
17 stipulation analyses are widespread in political science?

18 A. Yes.

19 Q. And you've also written that ensemble or stipulation
20 analyses have been accepted by multiple courts?

21 A. Yes. I believe you.

22 Q. And you specifically used a ReCom algorithm before in
23 your own work?

24 A. I have.

25 Q. And so in general you would agree that the ReCom

1 algorithm is a reliable way to draw maps for an ensemble
2 analysis?

3 A. Yes.

4 Q. In your amended report in this case, you describe the
5 ReCom algorithms natural preference for compactness for as a,
6 quote, soft preference; is that right?

7 A. I believe you.

8 Q. And you would agree that Dr. Stern could have pushed
9 his algorithm to draw even more compact maps than those that
10 appear in his ensembles?

11 A. That's my understanding.

12 Q. But he did not do so?

13 A. Correct.

14 Q. And similarly, Dr. Stern did not push the algorithm to
15 draw the maximally compact district possible?

16 A. That is my understanding.

17 Q. In your report, you also stated that if doctor Stern
18 had required his ReCom algorithm to draw less compact maps he
19 would have produced more maps that looked like the enacted map?

20 A. I think that's right, yes.

21 Q. But generating maps that look like the enacted map
22 would not be a useful comparison; would you agree?

23 A. Well, I agree but maybe not for the reason you
24 suggest. I don't think it's useful because even if you push the
25 compactness down it is still not going to be a complete random

1 sample of what is available and all it tells you is that the
 2 enacted map falls within a given range of what the algorithm has
 3 been told to do.

4 Q. But you would agree that if the question is to
 5 determine whether the map could have been drawn in a more
 6 compact manner, you would have to compare that map to more
 7 compact possibilities?

8 A. Yes, so the extent that Dr. Stern is doing the
 9 computerized version of the doctors Cervas did like I said I
 10 think it is what it is.

11 Q. Earlier you described an extreme map that appeared in
 12 Dr. Sterns rebuttal report as an example of a map created by the
 13 SLIP algorithm; do you recall that?

14 A. I thought it was in his rebuttal.

15 Q. Yeah.

16 A. What tab -- do you know what tab it is?

17 Q. 22.

18 A. All right.

19 Q. And we can pull up exhibit, Plaintiff 22.

20 Do you recognize this as Dr. Sterns rebuttal report?

21 A. Yes.

22 Q. Can we turn to Pg. 11 of the exhibit?

23 THE COURT: I think you may have said it, but
 24 this the Exhibit 22 as well?

25 MR. CHEUNG: Yes.

1 A. 10?

2 Q. 11.

3 A. Okay.

4 Q. Or I mean, it's 11 of the PDF but Pg. 10 of the paper
5 report.

6 A. Okay.

7 Q. The map in the middle labeled B is the extreme map
8 they you were describing, right?

9 A. Right.

10 Q. And you described this map as absurd?

11 A. Yes.

12 Q. Do you believe that a legislator would enact an and
13 absurd looking map like this one?

14 A. That is probably more extreme although increasingly
15 our maps seemed to be a pushed towards that and some of the
16 states but that would be beyond what has been enacted so
17 somewhere between that and what we see in panel C the map -- the
18 algorithm tends to not draw.

19 Q. Yeah but you would agree, you have not seen a map in
20 your experience that looks like the staticky map in the middle?

21 A. That's right.

22 Q. And earlier I believe you testified that it's
23 important for an algorithm to be able to theoretically sample
24 from the range of possibilities, a full range of possibilities?

25 A. Correct.

1 Q. Is it your understanding that the ReCom algorithm has
2 a hard compactness cut off at some point where the map won't be
3 drawn as opposed to more extreme maps simply being less likely
4 to be drawn?

5 A. If you drew it an infinite amount of time, it would
6 maybe draw this but the point is that there is a tendency, in
7 what this was meant to illustrate, there's a tendency for it to
8 draw more like what you see in C.

9 Q. Yes. But you agree that a map like B is theoretically
10 possible to obtain from the algorithm?

11 A. I suppose it's theoretically possible but the point is
12 so -- so I know remember the pop culture reference we were
13 talking about from my deposition at the break. There is an old
14 Rush song that has a line that, If you choose not to decide you
15 still made a choice.

16 The fact that he hasn't put in a primary, a thumb on a
17 scale one way or other doesn't mean that there is not a default
18 type of map that it draws and its preferred because of the way
19 it draws things unlike the flip approach is what you see in C.

20 Q. As you said it is a tendency not a hard cut off; is
21 that right?

22 A. I don't know if it would actually ever draw something
23 like B. one way or the other but the preference for this is for
24 C. And so what you get with the ReCom algorithm is a sample that
25 looks like the default preferences of the ReCom algorithm, not

1 necessarily what a human being would attend to draw. It's just
2 not interesting.

3 Q. Earlier you also testified about some of Dr. Sterns
4 maps being conceptually similar; do you recall that?

5 A. Yeah.

6 Q. And you have drawn duplicate maps when you've run
7 simulations in the past, correct?

8 A. Sure. So if you're sampling from distribution of --
9 just like if we were sampling adult male heights in the US, you
10 would get a lot of 5 11s. But the fact that it repeats isn't a
11 mathematical problem. It is more to illustrate, I think, when
12 you tell someone for the time there's 100,000 maps, the default
13 understanding is 100,000 configurations and that -- we -- if one
14 precinct is different, it's going to count it as a different
15 map. So that is not a mathematical critique of what Dr. Stern
16 has done, it is more about of a understanding from a lay
17 perspective what it is these ensembles are and aren't doing.

18 Q. You would say that drawing a set of 100,000 is in part
19 intended to address the possibility of duplicates and non
20 representative samples?

21 A. That's right. So one of the ways -- at least -- so
22 there is a competing approach I tend to use more called re-discs
23 and it will actually flag an errors if you get too many
24 duplicates. And so one of the ways to address that is to
25 increase the number of maps drawn. Again, I'm not saying -- and

1 if I was unclear on this I didn't mean to be. This isn't meant
2 to be a mathematical or methodological critique of Dr. Stern.

3 It is just trying to make clear what it is these algorithms are
4 doing. That when it says 100,000 maps, that doesn't necessarily
5 mean 100,000 unique maps or 100,000 radically different maps it
6 could just mean precincts flipped.

7 Q. And in the past when you've drawn ensembles you are
8 almost certain that some duplicative plans would appear; is that
9 right?

10 A. Oh, yeah. Yeah. From a methodological perspective
11 when you for doing statistical inference, the duplicates are
12 actually beneficial.

13 Q. And in those cases, you did not always know what
14 percentage of your computer generated maps were duplicates?

15 A. That's right.

16 Q. And when you've run simulations in the past, you do
17 not set the algorithm to achieve perfect population equality; is
18 that right?

19 A. That's right.

20 Q. And it is your opinion that you can nonetheless draw
21 conclusions from the results of those simulations?

22 A. Yeah. So for partisanship which is how I've typically
23 run them, if you have a district of 700,000 people that is off
24 the ideal population by 1,000 there is literally no way that
25 moving around 500 people or whatever to make it perfectly

1 populace is going to make change the partisanship of that
2 district in a meaningful way. So I don't worry about it there.

3 Q. What levels of population deviation tolerance have you
4 used in your own report?

5 A. I think it is typically 1%.

6 Q. Plus or minus 1%?

7 A. I don't remember. I think we had a dispute about that
8 in Utah so I don't remember if it is plus or minus 1% or 1%

9 total.

10 Q. So either plus or minus 1% or plus or minus half a
11 percent?

12 A. Yes.

13 Q. What other levels of population tolerances have you
14 seen another experts simulations or ensembles work?

15 A. So in the Utah case, Joey Chen was drawing that with
16 his algorithm with zero population deviation. The -- Joey
17 Chen's 2013 report or article on it, I think, it was, maybe, 5%
18 so it is varied.

19 Q. You are aware that Dr. Sterns ensemble only changed
20 the boundary line between CD 4 and CD 5; is that right?

21 A. That's my recollection.

22 Q. And that means the lines outside of that CD 4 and CD 5
23 boundary would become identical to the rest of the 2025 plan?

24 A. That's my understanding?

25 Q. On Pg. 27 of your report, you provided a potential

1 justification for why the Kansas City airport should be kept in
2 CD 6; is that right?

3 A. Yeah.

4 Q. Under Dr. Sterns maps the airport will always be kept
5 in CD 6?

6 A. Correct.

7 Q. And I believe you testified earlier that you have not
8 spoken with any legislators in Missouri about the 2025 plan?

9 A. Correct.

10 Q. And your report does not identify any other
11 considerations of that legislators may have had that are not
12 accounted for in Dr. Stern's ensembles?

13 A. Correct.

14 Q. You also testified earlier that the split of Jackson
15 County follows state Senate boundaries, particularly the
16 boundaries between senate District seven and Senate district 9;
17 is that right?

18 A. Yeah. I think I -- if I ever said that categorically
19 it should be largely but yes.

20 Q. But you are aware that senate district 7 has a three-
21 way split between CD 4, CD 5, and CD 6?

22 A. Right.

23 Q. And that's with in Jackson County?

24 A. Correct.

25 Q. When you were conducting that analysis did you

1 consider if senate district nine was drawn the way it was
 2 because of a need to comply with Section 2 of the Voting Rights
 3 Act?

4 A. No.

5 Q. And do you believe that CD 4 or CD 5 under the 2025
 6 plan was drawn to comply with the voting rights act?

7 A. I'd be surprised.

8 Q. I believe you also testified about KC 811; do you
 9 recall that?

10 A. I'm sorry. What?

11 Q. You testified about two geographic areas labeled KC
 12 811?

13 A. Oh, the precincts yes or VTDs.

14 Q. Those VTDs are both labeled KC 811 but have two
 15 different GEO IDs?

16 A. Correct.

17 Q. Have you review the text of HB1 enacting the 2025
 18 districts?

19 A. I think I did at the outset of the case but not since.

20 Q. HP1 does not identify geographic areas by GEO ID; is
 21 that right?

22 A. Correct.

23 Q. And as you say in your report, you are not comfortable
 24 opening on the amount of the discussion that agency officials
 25 have to decide how to assign those two areas labeled KC 811?

1 A. Not at all. You're right. I did say that. I'm not
2 at all comfortable.

3 Q. Thank you. Dr. Trende are you familiar with the
4 concept of cracking?

5 A. Yes.

6 Q. The concept of redistricting?

7 A. Yes.

8 Q. What does cracking mean?

9 A. Cracking means splitting up a group.

10 Q. And what is the effect of splitting up a group?

11 A. Well, it depends and this is one of the problems with
12 the concepts of cracking and packing because sometimes it is
13 suggested that you want to split up a group to maximize their
14 impact on multiple districts, sometimes it suggest you don't
15 want to split a group because the desire of one side or the
16 others is to maximize their impact.

17 Q. But you agree that if a group is split it tends to
18 have less opportunity or less certainty of electing their
19 preferred candidate as opposed to not cracking them?

20 A. I understand what you're getting at. I just can't
21 agree with that so completely, because sometimes the suggestion
22 is you want the group split across multiple districts so that
23 the member would be responsive to them, multiple members would
24 be responsive. So like sometimes you want -- if there's no
25 particular reason you would want Army bases in multiple

1 jurisdictions so that you have multiple members of Congress
2 fight for them.

3 Q. But, within a district, more people tends to translate
4 into more electoral influence?

5 A. Can you try that again?

6 Q. Within a given district more people tends to translate
7 into more electoral influence?

8 A. Again, but I don't know that is right because
9 sometimes a suggestion in cases is that you want to split up say
10 a minority group across multiple districts instead of putting
11 them into one. So again just the way you're wording these
12 questions I don't think -- I get what you're getting at but I
13 don't think I can agree. This transcript is going to follow me
14 for the rest of my life so I have to be careful. Sorry.

15 Q. You do have a lot of transcripts following you.

16 A. I imagine we're going to see some examples of this.

17 Q. Cracking in an urban population can divide their
18 voting power in your experience?

19 A. Cracking an urban -- it can, yes.

20 Q. I believe you testified earlier that your report
21 looked at four compact -- compactness metrics?

22 A. Correct.

23 Q. And that's reock, Polsby-Popper, convex hull, and the
24 I know it when I see it scores.

25 A. Correct.

1 Q. And you testified earlier that all four were designed
2 to measure physical shape and size?

3 A. Correct.

4 Q. So those four do not account for whether a district is
5 following natural boundaries?

6 A. Correct.

7 Q. They do not account for population or population
8 density?

9 A. Correct.

10 Q. You did not look at the Schwartzberg score because it
11 would be duplicative of the Polsby-Popper score?

12 A. Yeah. It the square -- I think it's the square root
13 of the inverse with the Polsby-Popper's score.

14 Q. So if an expert in this case analyzed compactness
15 based only on reock, Polsby-Popper, and Schwartzberg, would say
16 that expert essentially analyzed two compactness scores and not
17 three?

18 A. There is some differential between Polsby-Popper and
19 Schwartzberg. But for me they are duplicative and I don't see -
20 - I used to do both and I don't anymore.

21 Q. As part of your analysis of those compactness metrics
22 you compared the 2025 map to the 2012 map?

23 A. Correct.

24 Q. You would agree that the 2012 map was drawn using data
25 collected from the 2010 census?

1 A. Correct.

2 Q. The 2022 map was drawing using data collected from the
3 2020 census?

4 A. Correct.

5 Q. And same for the 2025 map?

6 A. Correct.

7 Q. The population data from the 2010 census would be
8 different from the population from 2020 census?

9 A. Correct.

10 Q. You also analyzed average compactness scores for
11 Missouri congressional districts going back to 1972?

12 A. Correct.

13 Q. And each of those maps would have been drawn using
14 population data from the preceding census?

15 A. Correct.

16 Q. And you would agree that the population in Missouri
17 has changed over time?

18 A. Yes.

19 Q. People also move over time?

20 A. Yes.

21 Q. And are you aware that Missouri has been losing
22 congressional seats over time?

23 A. Yes.

24 Q. Following the 1970 census, Missouri had 10
25 congressional districts?

1 A. That's right.

2 Q. And it currently has eight?

3 A. Correct.

4 Q. And in the 80s 90s and 2000s it had nine.

5 A. Yes. Yes.

6 Q. You also compared these compactness scores for the
7 2025 map to the State Senate and Senate -- and the statehouse
8 maps in Missouri; is that correct?

9 A. Correct.

10 Q. And as you acknowledged earlier, there's a different
11 number of state senate districts and state house districts in
12 the state verse congressional districts?

13 A. Correct.

14 Q. There are 34 states senate districts in Missouri?

15 A. That sounds right.

16 Q. Do you recall only many house districts there are?

17 A. A lot.

18 Q. 163 so that's --

19 A. I was gonna say 168 so good.

20 Q. You'd agree that if you were dividing Missouri into

21 163 districts versus 8 Districts, the size and shape of each

22 district would be different?

23 A. Yeah. So if you're doing an area based measure
24 compactness you would get a -- that isn't relative to itself by
25 changing the shape of the area of the circle around it, you'd

1 get something different. If you were looking at the total areas
2 of the districts.

3 Q. The metrics you used some of them are based on area,
4 right?

5 A. Well, yes but the shape of the district shape or the
6 area of the bounding circle is proportional to it. If you have
7 a square that is one square mile and a square that's a thousand
8 square miles the reock scores will be identical. The -- two
9 identically shaped districts regardless of their will have the
10 same reock score, so it's not sensitive to area that way.

11 Q. But the size of the districts would be different?

12 A. Yeah.

13 Q. And you also understand that different constitutional
14 standards govern congressional redistricting versus houses and
15 their redistricting in state?

16 A. Yes.

17 Q. There are more requirements in the State legislator
18 redistricting context?

19 A. Yes.

20 Q. And in your report, you rely on average compactness
21 scores across historical plans?

22 A. In part.

23 Q. And you would agree that maps average statewide
24 compactness score can mask the existence of highly non compact
25 districts?

1 A. Sure. That's why I started out by looking at all the
2 districts and listing them. Doctor Rodden has come back and
3 done a complete analysis for 70s -- going back to '72 and I
4 don't think it is inconsistent with any of my analyses.

5 Q. So in looking at individual districts you testified
6 earlier that you looked at one specific district in the St.
7 Louis area that was particularly unusual looking?

8 A. Yes.

9 Q. Do you recall which house district that was?

10 A. No.

11 Q. Does 76 sound right?

12 A. I'll believe you.

13 Q. Other than looking at house district 76, did you look
14 at any other districts to analyze whether any local or specific
15 factors explain the shape of that district?

16 A. No.

17 Q. For house district 76 in the St. Louis area, you
18 testified that park of the border is the Mississippi River; is
19 that right?

20 A. I think that's right.

21 Q. Following natural geographical lines like a river can
22 impact geo metric scores like Polsby-Popper; is that right?

23 A. Yeah. But that one doesn't score poorly on Polsby-
24 Popper it scores poorly on reock which isn't sensitive to
25 geographic boundaries like that.

1 Q. I'm saying as a general matter?

2 A. Oh, yeah. For Polsby-Popper you're right.

3 Q. And did you conduct a Section 2 analysis to determine
4 if house District 76 was required to be drawn that way because
5 of federal law?

6 A. It is a uniformity democratic area where the black
7 candidate of choice is going to win no matter what so it doesn't
8 matter.

9 Q. Did you conduct that analysis?

10 A. Yes.

11 Q. And to determine that it's majority black district?

12 A. I believe, it is a majority black district but I think
13 it's-- I would actually agree with many of your counsel on
14 this, that the Voting Rights Act doesn't require a specific
15 target, a racial target, even of 50% for the actual district
16 that is drawn. In other words, the voting rights act doesn't
17 require cross over districts but you can satisfy it verses cross
18 over districts.

19 Q. So in that area, if that house district did not
20 provide an opportunity for black voters to elect a preferred
21 candidate that would be a voting rights violation?

22 A. Correct.

23 Q. Going back to state Senate District for a minute.

24 Doctor Trende you had testified that state Senate district

25 boundaries were a potential explanation for the boundary between

1 CD 4 and 5 in Jackson County; is that right?

2 A. Correct. Well, it was more -- doctor Rodden had said
3 it doesn't state senate boundaries and I don't think that's
4 correct.

5 Q. The boundary between CD 4 and CD 5 extends far outside
6 of Jackson County in the 2025 map, right?

7 A. Correct. But Doctor Rodden has a specific blow --
8 again, this is a response report to Dr. Rodden so he has -- oh,
9 boy -- px 27 and Pg. 37. Yeah. He has a specific blow up of
10 the Jackson County area. So that's -- since he's focused on it
11 I focused in on it.

12 Q. But you agree that the boundary between CD4 and CD5
13 goes beyond Jackson County?

14 A. Yes.

15 Q. It goes all the way out to Pulaski County?

16 A. I believe you.

17 Q. It extends to rural counties and a central part of the
18 state?

19 A. Yes.

20 Q. And along the way it splits Miller County from Camden
21 County?

22 A. I'm sorry?

23 Q. It's splits Miller County from Camden County?

24 A. I'll believe you.

25 Q. Benton county from Morgan County?

1 A. Again, I'll believe you.

2 Q. In other words, the boundary now extends across the
3 State splitting what was once a largely rural district?

4 A. Well, it doesn't go all the way across the State, six
5 does that. And if you're referring to four, the previous
6 version of four, that is split. I don't know for three, if the
7 old three which, kind of, went from St. Louis to rural areas
8 then back around to the St. Louis suburbs and split that -- I
9 don't know if that would've been considered a rural district or
10 not.

11 Q. And as I believe you stated in your report, you don't
12 consider whether 2025 map respects senate district boundaries
13 outside of Jackson County?

14 A. Correct.

15 Q. And if you were to do that you would find as Dr.
16 Cervas notes in his rebuttal, that the 2025 map splits a greater
17 number of Senate districts than the 2022 map?

18 A. Yeah. Again, it doesn't surprise me that if you get
19 into rural areas, if you're adhering to county lines that you
20 end up splitting more senate districts that way.

21 (Mr. Cheung confers with counsel.)

22 Q. Doctor Trende you testified earlier that you are not
23 offering an opinion in this case on whether a given district is
24 compact; do you recall that?

25 A. Correct.

1 Q. But you have opined on compactness of districts in
2 other cases?

3 A. Yeah. Voting rights act cases.

4 Q. And in your direct with Ms. Hunker, I think you've
5 acknowledged taking a few hits in your career as an expert
6 witness?

7 A. Oh, yeah.

8 Q. Do you recall how many cases have criticized or
9 questioned your analysis?

10 A. No.

11 Q. More than a half-dozen cases?

12 A. I think, I've done 50 so I'd believe that.

13 Q. More than a dozen?

14 A. I don't know.

15 Q. And you previously analyzed compactness in a 2022 case
16 in Maryland state court regarding the State legislative
17 redistricting?

18 A. Oh, that's right.

19 Q. That case involved a challenge under Maryland's
20 constitutional compactness requirement?

21 A. Yeah. I didn't give an opinion. I didn't give an
22 opinion, period. All I did was list out Polsby-Popper and reock
23 scores and draw some maps because that's what I was I asked to
24 do.

25 Q. According to the Maryland state high court your

1 testimony attempting to have the Court assess the degree to
 2 which the challenged districts deviated from what one might for
 3 expect a compact district; does that sound right?

4 A. I don't -- that sounds familiar I don't -- yes. I
 5 believe you that that's what the opinion says.

6 Q. And you tried to show that the challenged Districts
 7 were not compact by comparing the compactness scores to the
 8 score of districts from around the country?

9 A. I don't remember but I believe you.

10 Q. The State court found that your comparisons, quote,
 11 were not those that would have been helpful, closed quote; is
 12 that right?

13 A. Again, I will believe you.

14 Q. The Court also responded to your analysis by saying,
 15 quote, It seems odd to compare the shapes of the district in a
 16 State like Maryland which itself resembles a paint splatter that
 17 someone half heartily tried to wipe up with districts in the
 18 many states that are relatively rectangular in shape.

19 A. Yeah. So this is one where -- yes, I got that
 20 opinion. I tried a similar argument in the Alabama case and the
 21 Court decided it like comparisons to other states but here I

22 just compared to within Missouri precisely because it's a fair
 23 point the Court made there about doing cross state comparisons.

24 Q. The Court also criticized your work because you,
 25 quote, Did not do anything other than compute and compare

1 compactness scores, closed quote, and, quote, Provided no
 2 opinions for analysis of the other Districting Factors, closed
 3 quote set forth under the Constitution?

4 A. That's right. All I was asked to do in that case was
 5 to compact -- was to calculate compactness scores and draw some
 6 maps and so that's what I did.

7 Q. And ultimately the Court found that you're quote
 8 number crunching had the appearance of rigger but contributed
 9 little to meeting the petitioner's burden?

10 A. Sure. Yeah. I like to think I've learned from that
 11 case.

12 Q. You also testified in the redistricting case in
 13 Washington State called Soto Palmer versus Hobbs?

14 A. Yes.

15 Q. And in that case, the Court criticized a data
 16 visualization you made as misleading?

17 A. Yeah. And I don't -- that one I don't understand
 18 because on the next -- I agree with what the Court said about
 19 the data visualization it doesn't show what the Court suggested
 20 it shows but there is a table on the next page that provides
 21 that information. I agree, you can't use a map to show the
 22 number of people that are impacted.

23 Q. You also testified in a Louisiana redistricting case
 24 called Nairne v. Ardoin?

25 A. Right.

1 THE COURT: Can -- Soto Palmer versus Hobbs I
2 think we're okay on but can you help me with this one?

3 MR. CHEUNG: Sure. N-A-I-R-N-E; A-R-D-O-I-N.

4 THE COURT: Thank you.

5 Q. And in Nairne, you offered an opinion on rather a
6 District is reasonably compact under the gingles framework for a
7 section 2 case?

8 A. I think Nairne was about population compactness, not
9 the compactness of the district itself. As a matter fact, that
10 was the entire dispute.

11 Q. But regardless, the Court described your compactness
12 analysis as, quote, fundamentally flawed and completely useless?

13 A. Well, it is not regardless because in that case I was
14 doing a population compactness analysis. The Court found that
15 you can use district compactness, which are the numbers we're
16 talking about here, more or less as a proxy for population
17 compactness and I hate to say it but I, kind of, agree that if
18 you are going to use district compactness shape as the proxy for
19 population compactness it's useless to do a population
20 compactness analysis. The Court's under those circumstances.

21 Q. The Court also described you as having relied on a
22 novel approach referred to as the moment of the inertia to which
23 a compactness?

24 A. Correct.

25 THE COURT: I'm sorry, a what approach?

1 Q. Novel.

2 THE COURT: Novel approach. Okay.

3 Q. The Court also goes on to say, Trende admits that the
4 moment of inertia has never been employed been employed in a
5 redistricting case and that the methodology does not entire
6 districts or maps and does not consider traditional
7 redistricting principals?

8 A. Correct.

9 Q. You also recently testified in a Utah congressional
10 redistricting case?

11 A. Correct.

12 Q. You are also the map drawer retained by the Utah
13 Legislature in that case?

14 A. Correct. Correct.

15 Q. And then you served as an expert in that case?

16 A. That's right.

17 Q. The Utah State Court invalidated the map that you
18 drew?

19 A. Correct.

20 Q. And the Court found that the map you drew violated the
21 State's prohibition on partisan gerrymandering?

22 A. Correct. And under the standards the Court ended up
23 adopting that is probably right.

24 Q. The Utah state court said that you, quote generally,
25 admitted the many errors in his report and in analysis he

1 conducted as part of the legislative process. The sheer number
2 and magnitude of these errors, however gives the Court pause and
3 leads the Court generally to give little way to Dr. Trende's
4 analysis; does that sound right?

5 A. I believe you.

6 Q. No further questions, Your Honor.

7 THE COURT: Okay.

8 MS. HUNKER: Can you give me one second, Your
9 Honor?

10 THE COURT: Sure.

11 **EXAMINATION BY MS. HUNKER**

12 Q. Doctor Trende, did you testify in the Faatz case?

13 A. Yes.

14 Q. You were an expert in that case?

15 A. That's right.

16 Q. And did you testify on behalf of the state?

17 A. I did.

18 Q. Was that in defense of the maps?

19 A. Yes.

20 Q. And was that case based in Missouri?

21 A. It was.

22 Q. Did that case involve Missouri's compactness
23 requirement?

24 A. It did.

25 Q. And did it involve the requirement that the map be as

1 compact as may be?

2 A. I think that is right.

3 Q. Did the trial court in that case find your testimony
4 helpful?

5 A. Yes.

6 Q. And did it cite your -- did the trial court cite your
7 testimony and -- as grounds for its opinion?

8 A. Yes.

9 Q. And do know if that case was upheld by the Supreme
10 Court of Missouri?

11 A. It was.

12 Q. And do you know if the Supreme Court of Missouri cited
13 your expert report as well?

14 A. Yeah. I think it just refers to me as the expert but
15 there was only one expert for the defense and that was me.

16 Q. And that opinion by the Missouri Supreme Court also
17 confirm that your testimony helpful?

18 A. Yes.

19 Q. No further questions, Your Honor.

20 THE COURT: Okay.

21 MR. GORE: No questions for Intervenor.

22 THE COURT: Go ahead.

23 MS. GAMBHIR: None from --

24 THE COURT: Sorry. You're both lined up there.

25 MS. GAMBHIR: Yep.

1 THE COURT: No questions for the Healey
2 plaintiff's?

3 MS. GAMBHIR: No, Your Honor.

4 MR. CHEUNG: No questions, Your Honor.

5 THE COURT: All right. Thank you. You can step
6 down.

7 THE WITNESS: Thank you, Your Honor.

8 THE COURT: All right. If you'd like to call
9 your next witness?

10 MS. HUNKER: Yes. The State Defendants will be
11 calling Mr. Sean Kieffer. He's coming into the courtroom
12 now.

13 THE COURT: If you can please raise your right
14 hand.

15 **Shawn Kieffer,**

16 having been sworn by the Court testifies as follows:

17 THE COURT: Thank you. Have a seat, please.

18 THE WITNESS: Thank you.

19 **DIRECT EXAMINATION BY MS. LANSDELL**

20 Q. Good morning, Mr. Kieffer. Thank you so much for
21 being here for today. I know we met very briefly in the
22 hallway, but I am Madeline Lansdell, counsel for the State
23 defendants. Would you please state your name and spell your
24 name for the record?

25 A. My name is Shawn Kieffer; S-H-A-W-N, K-I-E-F-F-E-R.

1 Q. Thank you. I am going to ask you a few questions
2 about your background to provide the Court with some reference
3 for your testimony. Will you tell us a bit about your current
4 occupation?

5 A. I am the director of elections for the Kansas City
6 election board. It's a bipartisan position that I share with
7 another person.

8 Q. And is this the only role that you have held that the
9 Kansas City election board?

10 A. No. Prior to that, but the first 20 years of my
11 career there, I was the finance manager. I handled all the
12 accounting and finance transactions. At the 20th year my boss
13 had left and they moved me up to the director position. I've
14 been there 18 and a half years.

15 Q. And how many redistricting cycles have you seen during
16 your tenure as director?

17 A. I've been directly involved in a few of them, 2012 and
18 the 2022 and then we had a couple others that just dealt with
19 the Kansas City school district. So I would say probably 4 to 5
20 of them.

21 Q. And how many of those would you say involved
22 congressional redistricting?

23 A. Two.

24 Q. Would you tell us what the Kansas City Board of
25 elections does?

1 A. We do a lot of things. We -- first of all we conduct
2 all the elections in the Kansas City portion of Jackson County.
3 Do everything from recruit judges, I do the registration for all
4 the different voters, we do absentee, we train poll workers, we
5 find poll worker, we find polling places. We program the
6 computer. We test the computers. We do administrative duties,
7 of course. Just everything a manager would do for a place of
8 employment.

9 Q. And are these responsibilities part of your role as a
10 director of the Kansas City Elections Board?

11 A. Yes.

12 Q. Thank you. Before we turn to what your role is
13 implementing new redistricting plans I want to ask a few
14 questions about this year's election cycle. How many elections
15 is your office responsible for this year?

16 A. We anticipate having three elections; April 7, I
17 believe August 4, and one in November. I'm not sure about the
18 November date right now.

19 Q. That's all right. I'm going to have Keith pull up
20 exhibit DX 114. Do you recognize this exhibit?

21 A. Yes this is the Missouri collection calendar.

22 Q. And could you tell us about the different deadlines
23 associated with the August 4 primary?

24 A. Okay. The big one -- well, we have one that comes up
25 next week where candidates file that starts on the 24th I think

1 it ends on March 31 and but they do that down in Jeff City. The
2 big date that we're looking for is May 26, that's when everybody
3 is supposed to turn in their certifications into us on exactly
4 what they want on the ballot but that is the big date for us.

5 Q. And you just explained a little bit about what the
6 candidate filing is but would you expand on that a little bit?
7 What is the candidate filing period?

8 A. That's where people that want to run for office or
9 statewide office or federal law, they go to Jeff City to the
10 Secretary of State department and they would file at that place
11 that is basically what I know what that.

12 Q. In your experience, have you observed candidates
13 making decisions on whether to run for office based on district
14 lines?

15 A. Yes. I have no solid proof it's just part of the
16 business that people look and see who they'd be running against
17 and see what kind of chances they would have that's my opinion,
18 the way I see that.

19 Q. And in your experience how does changing district
20 lines impact congressional candidates?

21 A. Just, people are, of course, they are looking to see
22 who they'd be running against and if they think have an opponent
23 that they would put them in a favorable spot then they may want
24 to run in a particular district. So yeah that is the big thing
25 of it.

1 Q. And if those lines change they may alter their
2 decisions?

3 A. It could.

4 Q. Thank you. I -- we can take this down. I want to
5 turn to the certification deadline for the August 4 primary.
6 You mentioned that on that date you all receive certification.
7 Can you explain a little bit more about what it is your office
8 receives from the Secretary of State?

9 A. Okay. First of all, we know that we are going to
10 three entities, at least, participate in that election. One,
11 being the city, one being the county, and one being the state of
12 Missouri. So those are the three certifications I'm looking
13 for. Other people can jump on that election they generally
14 don't but they can because this is a primary election. They
15 generally hold their questions till November. So we anticipate
16 three entities coming on. They will give us a list of
17 candidates and questions that they want us to put on the ballot.

18 Q. And once you receive that certified candidate list,
19 what steps does your office take to administer an election?

20 A. We start by deciding what polling places we want to
21 use. Of course, all the lines sort of dictate what ballots
22 styles go to what particular areas. Based on how many people
23 that you have in a particular precinct we will decide how many
24 polling places we need for the election.

25 Q. And could you tell us about the process that your

1 office goes through to design the ballots for -- for your
2 jurisdiction?

3 A. Yeah. We design our ballots based on our actual
4 polling places. So for this particular election we are having
5 in April, we have I think we have 70 roughly polling places. So
6 I have 70 different ballot styles. Everybody that goes to that
7 particular polling place generally votes on one ballot however
8 we can't have multiple ballots at a particular poll.

9 Q. And after the ballots are prepared does your office
10 perform any logic or accuracy testing?

11 A. Yes. Yes. Every different ballot style is tested to
12 make sure it tabulates correctly.

13 Q. Is this testing done prior to printing the ballots?

14 A. Yes.

15 Q. And how long does it usually take to print ballots?

16 A. Probably a couple weeks I would guess.

17 Q. Okay. So two weeks-ish?

18 A. Yeah probably 2-3 weeks.

19 Q. Two to three weeks. Can your office make changes to
20 the ballots after they've been printed?

21 A. We could but it would be very expensive. In excess of
22 probably \$100,000.

23 Q. So it would be difficult for your office to these
24 changes?

25 A. And expensive, yes

1 Q. When must the ballots after they've been printed, be
2 distributed to voters?

3 A. Generally we distribute ballots with the -- with the
4 other election equipment the week prior to election day. It
5 could go up to just a couple days before however it's usually
6 the week before.

7 Q. Is there a 45 day requirement for sending ballots out?

8 A. The 45 day requirement is actually the military portal
9 where we have to have a portal set up -- a matter-a-fact, in
10 tomorrow is actually the day for the April election that our
11 portal has to be ready and anybody from military can access our
12 portal and bring their ballots down and vote on it and send it
13 back to us.

14 Q. So the ballots need to be completed by this date?

15 A. Yes.

16 Q. And the -- for the general public, when do ballots
17 need to be available?

18 A. For absentee voting --

19 Q. Yes.

20 A. -- that would be at the 42 mark, so next Tuesday for
21 the April election.

22 Q. And is that 45 mark and the 42 day mark, are those
23 legal requirements?

24 A. Yes.

25 Q. We've discussed a lot of different responsibilities

1 that your office goes through to accomplish before printing
 2 these ballots. We talked about preparing the ballots you said
 3 over 70 for the -- the 70 is that for the April election or is
 4 that --

5 A. Yes.

6 Q. -- for the August?

7 A. No, that's just for the April.

8 Q. How many do you anticipate for the August election?

9 A. It could be several hundred maybe up to five or six
 10 hundred because we'll have different parties and each party will
 11 have their own ballots. So a particular polling place,
 12 depending on the number of parties, we might have up to five or
 13 six different ballot styles.

14 Q. So for preparing that massive numbers of ballots and
 15 accuracy testing all of them, how long does that need to be done
 16 ahead of the 45 day mark for the military portal?

17 A. We start probably 2 to 3 weeks prior to that 45 day
 18 mark.

19 Q. And can your office make changes to the ballots once
 20 they've been distributed to voters?

21 A. No.

22 Q. Let's shift gears and discuss a little bit how your
 23 office and implements redistricting plans, including House Bill
 24 1.

25 A. Okay.

1 Q. When the legislator enacts new congressional districts
2 what are the responsibilities at the Kansas City Elections
3 Board?

4 A. Okay. Well, we have to change our lines. First, we
5 have to actually download our shape files. Then, we layer new
6 lines over our old map to see where we have split precincts,
7 then we determine exactly how many people we have to move over
8 from -- in this case it'd be from congressional district 5 to 6
9 and 4 then we have to make those changes could be up to 100,000
10 people. Then, after that, then we got to change our maps,
11 because since we have four split precincts, every single map
12 which we have about probably about 11 different maps or to
13 change. Then, we have to go into our tabulation equipment and
14 make sure all those changes are into our tabulation equipment.
15 And then also whenever we make a change into our MCVR we have to
16 send out new voter ID cards to every single voter that was
17 affected and then we canvas those codes.

18 Q. And how -- you talked about your office assigning
19 voters to different districts. How does your office do this?

20 A. We do it based off on lines. We have all these
21 different set of lines from the city, the county, the State,
22 federal clients, school district lines. They will all come
23 together and form precincts those will be our boundaries. And
24 then we assign the different precincts according to whatever
25 race is being run and those are actually the ones that are

1 assigned to that particular ward and precinct that votes on that
2 ballot.

3 Q. You mentioned shape files, has your office received
4 the shape files for the new redistricting plan, the 2025
5 congressional plan from -- have you all received them?

6 A. Yes.

7 Q. And who did you receive them from?

8 A. Secretary of state's office.

9 Q. Was this the first time that you had viewed the shape
10 files?

11 A. No. Prior to the trial, we went on the State of
12 Missouri website and we downloaded the same files. Not knowing
13 those were actually the ones were going to be used, but we just
14 wanted to get some type of jump on it sort of seeing what we had
15 in store for us and so we did download those same exact files
16 from their website.

17 Q. To do some preliminary work?

18 A. Yes.

19 Q. I want to wrap up by asking a few questions about your
20 review of those files. First, are those files that you

21 downloaded to review, were they the same as were delivered to
22 you from the Secretary of State?

23 A. Yes.

24 Q. And are you familiar with voting tabulation districts?

25 A. We don't use that terminology. I am guessing that

1 maybe they're referring to something like what we call
 2 precincts. Like I said, that is the best -- the best analogy
 3 that I could use or what I think it is.

4 Q. Have you read through the text of House Bill 1?

5 A. Yes.

6 Q. And have seen the voting tabulation districts
 7 mentioned in the text?

8 A. (Nonverbal response.)

9 Q. Are you aware of the voting tabulation districts
 10 called -- labeled KC 811?

11 A. Yes.

12 Q. Are you all right if I refer to them as KC811 even if
 13 we're using lightly different terminology?

14 A. Sure.

15 Q. Perfect. Are these KC 811 districts within the
 16 jurisdiction of the Kansas City elections board?

17 A. Yes.

18 Q. And you mentioned you did some preliminary; could you
 19 tell us about the research that you have done on these two
 20 districts?

21 A. The 8, 11 district?

22 Q. The 8, 11 districts.

23 A. Okay. Yeah. We looked at our 2022 map, our most
 24 recent redistricting map and 811 was complete within the
 25 district and in Ward 8 and it was exactly in our opinion exactly

1 where it should be. There was no controversy whatsoever on its
2 present there.

3 Q. What have you discovered about the 2025 plan and --
4 what have you discovered about the 2025 plan and how it assigns
5 the 8, 11 districts?

6 A. It would still stay in the same area which I
7 believe is in the fourth district.

8 Q. Are these two separate districts? Or a single
9 district?

10 A. This issue would be only one district and that'd be in
11 the fourth district.

12 (Ms. Lansdell confers with Ms. Hunker)

13 Q. Is there a KC 8 11 that is mislabeled?

14 A. There could be I mean this is something -- I have not
15 investigated potential errors but I think there is an errors in
16 this situation. I think there is potentially a wrong map that
17 was used. The map that I was shown during my deposition looked
18 like it was an old map, not the current one. I think there has
19 been some mislabeling and I think there's an error in the data
20 file.

21 Q. In drawing -- in the shape files, does that same error
22 persist?

23 A. The shape files are much more generic and don't go to
24 that, kind of, detail. They just give us the actual lines and
25 they don't go into the precinct detail.

1 Q. Would your office assign two distinct geographic areas
2 to a single -- as a single district precinct?

3 A. Well, that situation would not come up. Like I said
4 in this particular situation I think something has been
5 mislabeled, 8, 11 would go in the 4th. Given what I've seen of
6 the maps, there should not be an 8, 11 in the 5th. I think that
7 is where the labeling error has occurred.

8 Q. What will your office do about that?

9 A. It will be processed in the fourth only.

10 Q. So you will relabel the other district the one that's
11 in the 4th?

12 A. Yeah. We don't have -- the one that is in the fourth
13 is the correct one. The one that you guys have or whoever drew
14 the lines as the fifth, we'll ignore that one or like you said,
15 I think there's another label that goes to that and they'll be
16 out in the fifth.

17 Q. Would implementing a redistricting plan, does your
18 office seek to comply with the Constitution?

19 A. Yes.

20 Q. Thank you for your time today, Mr. Kieffer. No
21 further questions, Your Honor.

22 THE COURT: Okay. Any questions for the
23 Intervenor?

24 MR. GORE: No questions, Your Honor.

25 THE COURT: All right.

EXAMINATION BY MR. CAMBELL-HARRIS

1

2

Q. Good morning, Mr. Kieffer. Pleasure to see you again.

3

4

A. Good morning. Thank you. Good seeing you.

5

Q. Thank you. I want to talk a little bit more about your role as director of the Kansas City Board of Election Commissioners. The Kansas City Board of Election Commissioners is the election authority for Kansas City within Jackson County, correct?

6

7

8

9

10

A. Correct.

11

Q. And the board plays a role implementing new apportionment plans, correct?

12

13

A. Correct.

14

Q. And when you and board are implementing new congressional districting plans you manually assign voters in your jurisdiction to their congressional district, correct?

15

16

17

A. Correct.

18

Q. And other than your office, you don't know anyone else who could accomplish that task of assigning voters to the correct precincts and districts, correct?

19

20

21

A. I -- people try but I know nobody other than us that I would trust with that information.

22

23

Q. Thank you. And you're not aware of anyone outside of the Kansas City Board of Election Commissioners with the knowledge, training, and tools to reassign precincts in the

24

25

1 Jackson County portions of Kansas City, correct?

2 A. Correct.

3 Q. Mr. Kieffer, do you recall at your deposition that we
4 spoke about your role implementing districting plans?

5 A. Yes.

6 Q. And according to your understanding of state law, the
7 Kansas City Board of Election Commissioners can change precinct
8 boundaries any time you all feel it is necessary to do so,
9 right?

10 A. Correct.

11 Q. There is no law requiring your office to begin
12 implementing HB1 by a certain time, correct?

13 A. There was never a timeframe that was actually given to
14 us.

15 Q. Okay. But there is also no law that you're aware of
16 requiring your office to begin implementing HB1 by a certain
17 time?

18 A. Correct.

19 Q. When you start implementing HB1, it's within your
20 discussion, correct?

21 A. Correct.

22 Q. Now, the voter information currently in MCVR is based
23 on the 2 022 congregational lines correct?

24 A. Yes.

25 Q. And for the record, and MCVR is the Missouri

1 centralist Voter registration data base?

2 A. Yes.

3 Q. And it took your office very little to no time to
4 implement the 2022 congressional districts in Kansas City,
5 correct?

6 A. Correct.

7 Q. And had you discussed on direct steps you take to
8 implement congressional district lines, correct?

9 A. Yes.

10 Q. Your office already took those steps to implement the
11 2022 congressional districting plan, correct?

12 A. We've taken -- yes.

13 Q. The MCVR system has restrictions on when you can
14 implement a districting plan, correct?

15 A. Yes.

16 Q. Those restrictions are set by the Secretary of State's
17 Office?

18 A. To the best of our knowledge, it is.

19 Q. Okay. You not aware of any legal requirements that
20 forbids you from implementing a districting plan at other times,
21 correct?

22 A. No. Yeah. That is correct.

23 Q. When an election cycle starts your office is not
24 allowed to change district lines until the election cycle ends,
25 correct?

1 A. Correct.

2 Q. And election cycles final certification day is when
3 your office considers an election cycle has started, correct?

4 A. That is correct.

5 Q. The Secretary of state's office -- I believe on direct
6 it was referenced sent you the -- well, scratch that. The
7 Secretary of state's office sent you the Kansas City board of
8 election commissioners shape files for HB1 on January 9 2026,
9 right?

10 A. Yes.

11 Q. Your office until have enough time to update the
12 districts in the MCVR then, correct?

13 A. Correct.

14 Q. And that was because the certification date for the
15 April 7 election was on January 27, correct?

16 A. Yeah. We actually contacted the secretary of state's
17 office. They asked us to hold until we have more clarity on
18 exactly what to do with the lines.

19 Q. Okay. The election certification date January 27
20 resulted in the MCVR being locked down which prevented your
21 office from making changes to district lines in the system,
22 correct?

23 A. Correct.

24 Q. Now, your office cannot make adjustments to district
25 lines until the April 7 elections are over, correct?

1 A. Correct.

2 Q. And you have about two weeks to wrap up the April 7
3 elections, right?

4 A. That is correct; however, there's an asterisk to it,
5 if there are recounts then that that extends that timeframe.

6 Q. Okay. Unless there are re-counts, then you have about
7 two weeks to wrap up those April 7 elections, correct?

8 A. Correct.

9 Q. Okay. Now on direct you discussed a certified list of
10 candidates that you've received from the Secretary of state's
11 office, correct?

12 A. For what particular election? Can you rephrase?

13 Q. I can rephrase. Your office receives a certified list
14 of candidates from the Secretary of State's office 10 weeks
15 prior to election days, correct?

16 A. For the both for the primary and general elections,
17 yes, not for the April.

18 Q. Okay. And that is the final certification date?

19 A. Yes.

20 Q. The final certification date for the August 4 primary
21 elections is May 26, 2026, right?

22 A. Yes.

23 Q. And implementing the new congressional districts --
24 well, scratch that.

25 Working overtime -- well, let's scratch that, too.

1 The next window for your office to implement new districts won't
2 open until April 21; is that correct?

3 A. At the soonest.

4 Q. At the soonest. And as of right now, the 2022
5 congressional district information is in MCVR, correct?

6 A. Correct.

7 Q. If the Court rules that the 2025 districts are
8 unlawful, your office will not implement a HB1, correct?

9 A. Correct.

10 Q. And you can implement a new map up until at least May
11 26; is that fair?

12 A. That is correct.

13 Q. And if the Court rules that the 2025 congressional
14 plan is unlawful, you don't need to change any lines correct?

15 A. That is correct.

16 Q. A moment to confer with counsel?

17 THE COURT: Sure.

18 Q. No more questions Your Honor. Thank you so much Mr.
19 Kieffer. And again thank you for your service.

20 A. Thank you.

21 MS. LANSDELL: Just a brief.

22 THE COURT: Sure.

23 **EXAMINATION BY MS. LANSDELL**

24 Q. Mr. Kieffer, do you recall earlier when we discussed
25 KC 8 11?

1 A. Yes.

2 Q. You discussed a map, correct?

3 A. Yes.

4 Q. Is the map that you were referring to a map that was
5 shown to you during your deposition?

6 A. Yes.

7 Q. Are you aware that that map was drawn for plaintiff's
8 petition and is not an official map for the State of Missouri?

9 MR. CAMPBELL-HARRIS: Objection, Your Honor. This
10 is beyond the scope of cross.

11 MS. HUNKER: Your Honor, it's my understanding
12 that there is no limitation based on your order.

13 THE COURT: There is not a limitation on the
14 direct -- on the cross-examine from the direct. There
15 typically is for a redirect coming from cross examination.
16 And so I do think that it's outside the scope of the cross-
17 examination and for that purpose I would sustain the
18 objection.

19 MR. CAMPBELL-HARRIS: Thank you, Your Honor.

20 MS. LANSDELL: A moment to confer?

21 THE COURT: Sure.

22 MS. LANSDELL: No further questions, Your Honor.

23 THE COURT: Okay. Any questions for the
24 Intervenor?

25 MR. GORE: None, Your Honor.

1 THE COURT: Any final questions?

2 MR. CAMBELL-HARRIS: None from plaintiffs, Your
3 Honor.

4 THE COURT: All right. You can step down. Thank
5 you.

6 THE WITNESS: Okay. Thank you.

7 THE COURT: If you all would like to call your
8 next witness?

9 MS. HUNKER: Yes, Your Honor. If we could, the
10 State would like to move it's exhibits into evidence. I
11 believe that all of State exhibits 111, 113, and then 140,
12 have been admitted.

13 THE COURT: Let's see. Let me make sure because
14 I think we may have some additional marked exhibits and we
15 started from.

16 MS. HUNKER: Yes.

17 THE COURT: So my recollection from our beginning
18 record was that all of the defense exhibits at that time --

19 MS. HUNKER: At that time.

20 THE COURT: -- besides 111 and 113 we admitted.

21 MS. HUNKER: That is correct, 111 and 113.

22 THE COURT: Is that right? Let me make sure
23 everybody's on the same page with me here.

24 MR. MULJI: Yes, Your Honor. That's correct.

25 THE COURT: Okay and so --

1 MR. MULJI: If you don't mind, Your Honor, if
2 Counsel doesn't mind restating that initial list again,
3 just to be sure.

4 MS. HUNKER: Sure, 111 and 113 are the two that I
5 want to discuss particularly.

6 THE COURT: Okay. Those are not --

7 MS. HUNKER: Those are not admitted, as far as I
8 understand.

9 THE COURT: Everybody agrees, those are not in
10 evidence so far?

11 MR. MULJI: That's correct.

12 MS. HUNKER: That's right.

13 THE COURT: Okay. Yes.

14 MS. HUNKER: And so Ms. Lansdell is going briefly
15 explain why we believe exhibits 111 113 are objected to and
16 she is going to give an examination of why we think they
17 should be admitted.

18 THE COURT: Okay. So you're going to ask right
19 now as part of your case to admit 111 and 113?

20 MS. HUNKER: That's correct.

21 THE COURT: Okay. And --

22 MS. HUNKER: I'm assuming their objection still
23 remains, and if that's the case, I was going to ask if Ms.
24 Lansdell could give a quick explanation of our position on
25 those two exhibits.

1 THE COURT: Sure. And I'm assuming but I'll just
 2 clarify my assuming being correct, your position is going
 3 to be that you don't need a separate witness to admit these
 4 exhibits? That just the papers and the exhibits
 5 sufficient?

6 MS. HUNKER: That is correct, Your Honor. I have
 7 conferred with counsel, and they agree that they do not
 8 have an objection on authentication. The objections
 9 instead, hearsay.

10 THE COURT: Okay.

11 MR. MULJI: At least, hearsay.

12 MS. HUNKER: At least, hearsay.

13 THE COURT: All right.

14 MS. HUNKER: At the very least, there was no
 15 authentic objection.

16 MR. MULJI: Oh, I'm sorry. Your Honor, 111 is
 17 the -- is the -- is the objection to it, we don't -- or we
 18 -- is the exhibit to which we don't have an authentication
 19 objection, but do have other objections.

20 MS. HUNKER: Okay. Well, we move for exhibits
 21 111 and 113 to be added into evidence. I would ask if you
 22 accept them?

23 MS. KHANNA: Well, just be clear, Your Honor,
 24 113, we do object on authentication grounds as well as the
 25 other grounds.

1 THE COURT: Okay. Well, let's hear arguments. I
2 don't know much about them yet, so I will that Ms. Lansdell
3 tell me about them and then we will work through it here.

4 MS. LANSDELL: Your Honor, would it be most
5 helpful first to hear the plaintiff's objections to the
6 exhibits? Or would you like me to give an affirmative?

7 THE COURT: I'll give everybody as much time as
8 you want, so why don't you -- they're your exhibits --

9 MS. LANSDELL: Sure.

10 THE COURT: -- so why don't you tell me about
11 them and we will go back and forth as long as everybody
12 needs to.

13 MS. LANSDELL: Your Honor, the first exhibit,
14 Exhibit 111, is an email from the governor's office to the
15 Secretary of State's office. And I believe that
16 plaintiff's objection is on hearsay, they say among other
17 things as well, but I will address the hearsay issue first.

18 Your Honor, we are not offering this email for the
19 truth of the matter asserted. The email is just being
20 offered to confirm -- or it is not being offered, rather,
21 to confirm or deny the existence of an ambiguity in the map
22 nor is it being offered to prove that 8 11 is in fact two
23 separate districts. We do not need it to function in this
24 capacity.

25 We have plaintiff's expert stating that the shape

1 files used by election authorities have the VTD's 8 11s
2 marked as separate and distinct geographical districts.

3 Instead, we are just presenting this exhibit as a window
4 into the states interpretation of the alleged issue. And
5 the states interpretation and construction of House Bill 1
6 is relevant in this case.

7 MR. MULJI: Your Honor, if the purpose is not to
8 bring this in for the truth of the matter asserted it is
9 hard to see what could possibly be the reason. We would
10 add a relevance objection. This is an email between I
11 believe the -- a staffer who I don't think was disclosed on
12 any exhibit -- on any witness list, to a number of other
13 individuals it looks like from the Secretary of State's
14 office and that was later forwarded to some individuals
15 some individuals from the AG's Office. It's an internal
16 email of the State.

17 None of these -- none of the -- the author of this --
18 the State has presented a single witness to bring this
19 exhibit in and if they're not even offering it for the
20 truth I don't see how it is relevant to the case at all.

21 In so far as it's just about the states internal
22 discussions about the lawsuit it actually includes
23 extremely prejudicial statements describing the nature of
24 the lawsuit, the nature of the law firms that have brought
25 the lawsuit on behalf of the plaintiffs that have brought

1 the lawsuit.

2 And so we would seek to exclude it if it is not

3 necessary to prove the truth of any matters related to KC 8

4 11 most of the facts are stipulated and they haven't

5 presented a witness to bring it in. There's really no

6 basis to let this in.

7 THE COURT: I'm going to get back to you in

8 second. I think we clarified at the beginning, you all are

9 not making a authenticity or foundational objection it's

10 just about the hearsay or --

11 MR. MULJI: That's correct, Your Honor.

12 THE COURT: -- relevance, admissibility of it?

13 MR. MULJI: Right. The relevance, there's no

14 witness that who could speak to the relevance of this of

15 this document. And we heard from the State that it is not

16 about the truth of any material facts related to the KC 8

17 11 claim. And I can only imagine the reason here is to

18 bring in prejudicial statements that the State has been

19 making among -- among its own staffers. I don't see any

20 other reason why this exhibit will be relevant to the

21 claim.

22 MS. LANSDELL: The relevance here, Your Honor, is

23 it is legal. It is a legal relevance argument. There are

24 two claims related to the constitutionality of House Bill 1

25 -- or sorry there are two questions that are related to the

1 constitutional of House Bill 1 that are related to the
2 claims surrounding 8 11. The first is whether the bill
3 double assigns a district. This is not being offered for
4 that purpose.

5 The second question is the application. And part of
6 the application is -- and how the bill is going to be
7 applied -- is how the State election authorities are going
8 to interpret and understand how House Bill 1. So long as
9 the State is not going to interpret a statute in an
10 unconstitutional manner, there is no injury. This exhibit
11 merely demonstrates the states interpretation. It is a
12 window into the states interpretation of House Bill 1,
13 rather than it is not being offered for the facts inside.

14 THE COURT: Anything else you want to add?

15 MR. MULJI: We have been told, Your Honor, in
16 response to discovery requests directed to the State that
17 the State is not an entity that can take a position on any
18 of the interrogatories we sent, that could produce
19 documents. These are statements of staffers who can't make
20 authoritative legal conclusions about the meaning of the
21 statute. They're also emails from the governor's office to
22 the Secretary of State's office.

23 The Secretary of State per the defense omission is the
24 official responsible for implementing elections under the
25 map. Their interpretation would be perhaps you know

1 relevant but this is just -- sort of the discussion about
2 the lawsuit among staffers who are not happy about having
3 to deal with this lawsuit.

4 MS. LANSDELL: The Secretary of State is the
5 chief election officer and the person that all of the
6 election authorities contact with questions as will be
7 shown in the designations to the depositions. This email,
8 again, it does demonstrate the effect on the listener or in
9 this case the reader, who is -- are individuals in the
10 secretary of states office, individuals responsible for
11 informing the opinions of the Secretary of State's office.
12 Thus, this is providing a window into how the secretary --
13 what information the secretary's received, and what will
14 inform the secretaries interpretation.

15 MR. CHEUNG: Last thing I'll note, Your Honor,
16 perhaps. We've gone back for forth a number of times.

17 THE COURT: That's the risk of saying I'll let
18 you do it as long as you want. So go ahead.

19 MR. MULJI: I think, that what I'm hearing
20 actually is they are seeking to, essentially -- it is hard
21 to imagine that this is not been provided for the truth of
22 the matters asserted here. If it is, then, hearsay. I
23 don't think I've said that on the record yet but that is
24 our objection. And to the extent that, you know, this
25 opens a window into what the governor thinks proper

1 interpretation of HB1 is, they should produce a witness to
 2 come speak to that. A document that is just immediate
 3 reaction circulated among a group of staffers is hearsay,
 4 and if the State wants to produce a representative, a
 5 corporate representative of his office, they could do that,
 6 but they didn't.

7 MS. LANSDELL: This is the last thing I will say,
 8 Your Honor.

9 THE COURT: That's fine.

10 MS. LANSDELL: This court is presumed to only
 11 consider evidence for its proper purpose and would be able
 12 to give the evidence the appropriate weight.

13 THE COURT: Okay. The Intervenor or other
 14 plaintiffs have anything else you want to say?

15 MS. KHANNA: We join with the Wise plaintiffs on
 16 this one.

17 MR. GORE: We join with the State.

18 THE COURT: Okay. So for this particular
 19 exhibit, I think there is a reason for bench trials, why
 20 the Court has 7301A for me to let stuff in unless I think

21 it's absolutely clearly inadmissible but give it what
 22 weight I think it deserves. I take them at their word that
 23 they're not offering for its truth. I do not plan to
 24 consider it for its truth. But given I have the ability to
 25 give it what weight it may need, I'm going admit 111 over

1 objection.

2 MR. MULJI: Fair enough, Your Honor. Thank you.

3 THE COURT: Okay. Let's talk about 113.

4 MS. LANSDELL: Sure. Your Honor, Exhibit 113
5 it's been discussed a few times. This is the first time we
6 are moving it into evidence or requesting to move it into
7 evidence. This is the memo from Adam Kinkaid. A bit of
8 history on this document, plaintiffs produced the black and
9 white copy of this memo and their reliance files for their
10 experts to defendants. It was the first time that
11 defendants had seen this memo.

12 In order to ensure authenticity, State defendants
13 obtained the copy being offered into evidence from the
14 House of Representatives, and state defendants also having
15 an affidavit from the custodian of records of the office of
16 Representative Dirk Deaton, District 159, of the Missouri
17 House of Representatives.

18 THE COURT: I've got the digital copy of it. But
19 I assume that's the original?

20 MS. LANSDELL: Is it in our --

21 THE COURT: It looks like an original or
22 something close to it.

23 MS. LANSDELL: This affidavit is not in our
24 digital copy.

25 THE COURT: Okay.

1 MS. LANSDELL: It is in intervenors IX --

2 MR. SULLIVAN: That's the one I give you, 206.

3 MS. LANSDELL: -- 206, but we can hand this to
4 plaintiffs if they would like to --

5 MS. MENG MORRISON: Your Honor, we are familiar
6 with the affidavit. Counsel is correct, that it is
7 attached only to Intervenor's version which I believe is 206
8 -- is that right -- and not to 113. So if we're just
9 discussing 113, there is no affidavit attached to that
10 version. If we'd like to discuss intervenor's version we
11 can -- we can happily do that.

12 MS. LANSDELL: We will move to submit the
13 affidavit in conjunction.

14 THE COURT: Okay. And let me just zoom out here
15 and try to guide your discussion a little bit, because this
16 one may be helpful to get a little bit of their objection
17 and then hear your response to it because this is one you'd
18 plan to make a foundational objection to in addition to the
19 actual kind of other matters that may be evidentiary
20 issues, correct?

21 MS. MENG MORRISON: Correct.

22 THE COURT: Okay.

23 MS. MENG MORRISON: Would you like me to list out
24 the reasons we are objecting so --

25 THE COURT: Go ahead. And just assume the

1 affidavit is part of the exhibit, because I don't know that
 2 it matters where they grab it from just to expedite that
 3 discussions.

4 MS. MENG MORRISON: Sure, Your Honor. So yes, we
 5 do objection foundational grounds. There is an affidavit
 6 attached but for reasons related to hearsay as well
 7 representative Deaton has not been called to testify to the
 8 mode of preparation of this document and he's claiming it
 9 as a business record. Which, we also object that it is
 10 hearsay. That does not fall within the business record
 11 exception.

12 And separately from that, the document itself if you
 13 were to flip through reads like an expert report. Mr.
 14 Kinkaid was never disclosed as an expert. There were
 15 disclosure deadlines that the Court and the parties had
 16 agreed to. The expert, that report was not disclosed. Mr.
 17 Kinkaid was never listed as an expert and frankly we
 18 weren't -- we did not find out about this exhibit until a
 19 week before trial so we would say that this is also
 20 untimely.

21 THE COURT: Let me clarify the timeliness issue
 22 because --

23 MS. MENG MORRISON: Sure.

24 THE COURT: -- there is 490, the business records
 25 statute has its own timing requirement on disclosure.

1 MS. MENG MORRISON: Yes.

2 THE COURT: You're not saying that that wasn't
3 timely, you're just complaining about when it was provided
4 to you?

5 MS. MENG MORRISON: Well, the -- we do have
6 certain arguments about that as well, Your Honor. I believe
7 the memo is dated September 10. To the extent that the
8 memo was written contemporaneously with the drafting of
9 HB1, the bill was introduced I believe a week before the
10 memo is even dated and in fact was voted on by the house by
11 September 10 -- September 9. And so the memos actually
12 postdates the house passing this map.

13 THE COURT: And I don't think I was being clear
14 probably with my question. Generally, business record in
15 Missouri if they're gonna rely on an affidavit, it has to
16 be provided to you within a certain period of time. You
17 are not making that statutory objection to the use of the
18 affidavit. It's more whether or not this business record
19 affidavit is sufficient to use this exhibit; is that
20 correct?

21 MS. MENG MORRISON: Correct.

22 THE COURT: Okay. All right. Sometimes there's
23 a complaint that the affidavit wasn't timely and I didn't
24 think that was your objection but I wanted to make sure.
25 Go ahead.

1 MS. LANSDELL: Yes, Your Honor. I do want to
2 clarify that we did receive just for the record because
3 there was some confusion of the timing, we did receive the
4 memo originally from plaintiffs. But I do believe that
5 this, that Exhibit 113 falls under the hearsay exception
6 permitted under section 490.680 of the Missouri rights
7 statutes the business records exception used in the
8 ordinary course.

9 The memo is a record that was made and transmitted in
10 the ordinary course of business, that information is
11 contained in the affidavit. This Court has wide discretion
12 to accept these records into evidence once that requirement
13 is satisfied. We've provided an affidavit, we have the
14 document here, it was used in the ordinary course. The
15 affidavit contains that information. It was use
16 additionally for the Senate but this affidavit is
17 specifically from the house.

18 MS. MENG MORRISON: Your Honor, on the timing
19 piece, counsel is correct that one of the plaintiffs
20 experts included this in their underlined files. That was
21 handed over to counsel far in advance of their disclosure
22 deadline, which was January 7. So this idea that they
23 found out about it through us then didn't have the time to
24 if they wanted to disclose Mr. Kinkaid as an expert such
25 that we could cross-examine him, depose him, read his

1 report, analyze it, which was the agreed upon schedule
2 between the parties, that did not occur.

3 On the business records exception, the statute and the
4 Missouri Supreme Court and made clear there are three
5 requirements that the party offering the exhibit has to
6 meet. The first is that there is a qualified witness that
7 is able to testify to the tenancy and mode of preparation.
8 The affidavit itself does not have any discussion about the
9 mode of preparation about the memo. And, honestly, I don't
10 know how representative Deaton would be able to because
11 he's not the one who drafted the document. It's fairly
12 clearly stated on the memo header this is a memo written by
13 Adam Kinkaid who according to his CV which is also the
14 first page of the document does not work for representative
15 Deaton.

16 That is also the reason why Counsel cannot satisfy the
17 second requirement under the statute. Which is that the
18 document was made in the regular course of business at or
19 near the time of the event, act, condition, that it's being
20 offered for. This document was not made in the regular
21 course of business of representative Deaton's office. It
22 was something that was transmitted to him as is very clear
23 from the header of the memo. And the case is clear that
24 when you're just a custodian of records that happens to be
25 the conduit or happens to have something in your files,

1 that does not allow you to bring something in through the
2 hearsay exception for business records.

3 And finally, the third requirement under the statute
4 is that the Court has to be sure that -- of the source of
5 information the method and time of preparation to justify
6 its admission. And as just covered, I don't believe any of
7 that information has been sufficiently covered simply by
8 providing a form affidavit that is contained within
9 Missouri statute.

10 MS. LANSDELL: I do want to address the
11 compliance with deadlines. The State has complied with all
12 deadlines in this case and I believe that plaintiffs may be
13 mixing deadlines. January 7 was the deadline for expert
14 reports. We are not offering this as an expert report. It
15 is just being offered as a document that the legislator
16 considered that was used in the ordinary course of the
17 legislature's business. However, if Your Honor does not
18 want to admit this under the business records statute, it
19 is also proper subject for judicial notice.

20 This Court is permitted to take judicial notice of
21 public records. This document is part of the legislative
22 record and it is well-established that Missouri courts can
23 take notice of a wide variety of public records, including
24 legislative records. I do want to point this court's
25 attention to a 2013 Missouri Supreme Court case, Schweich

1 v. Nixon. I will spell that. It is as S-c-h-w-e-i-c-h,
2 and the citation for that is 408 SW. 3d 769 and that is Pg.
3 778 at footnote 11. This footnote catalogs a number of
4 documents related to legislative proceedings that a Court
5 may properly take judicial notice of.

6 For example, the court the court may take judicial
7 notice of proceedings by -- of the proceedings by which
8 laws were enacted. This court may take judicial notice of
9 journal entries associated with the passage of a bill, as
10 well as legislative records to compare a house bill its
11 senate counterpart. It follows that this court may take
12 notice of this document used by the house and Senate during
13 the process of confirming House Bill 1.

14 MS. MENG MORRISON: Your Honor, just want to
15 clarify one thing I said before -- before I get to
16 counsel's point. We actually we're just checking our email
17 records and we did not receive the business record
18 affidavit under the statutory rules that I believe seven
19 days before it is being offered. I think we received it
20 maybe on Friday before trial started on Tuesday might have
21 been Thursday so do want to clarify the record that that is
22 also a grounds on which we would like to object to this
23 document.

24 On the point that counsel just made about public
25 records, we agree that there are certain things related to

1 the maps enactment that we could perhaps stipulate to.

2 There are a couple of legislative documents that we've

3 submitted and the other side has agreed to bring into

4 evidence. This document however, our understanding and are

5 not aware of where it is you know located within the

6 legislative record. It is also not a document coming from

7 the General Assembly. It's being offered as a document

8 that is being offered from representative Deaton. And

9 unless counsel has a citation for judicially noticeable

10 documents contained within the records of a representative,

11 we are not aware of how that would allow judicial notice to

12 bring this document in.

13 And sorry one last point I also know that counsel

14 noted that they're not offering this as an expert opinion.

15 The contents of this document goes over county splits,

16 municipality splits, compactness to scores, it contains

17 printouts I believe of scores from mapitude, things like

18 that. That is all things that we just spent the last two

19 days talking to several experts about over and over and

20 over again. So the contents of this document is not near

21 lay witness testimony or information. It is certainly

22 expert opinion.

23 MS. LANSDELL: I think I will just say that the

24 context of this memo here was elicited by the expert

25 reports and expert testimony of the plaintiffs both Dr.

1 Cervas and Dr. Stern cite to this memo. Doctor Stern
2 testified that we was instructed by counsel to respond to
3 this memo and relied on the memo informing his report.

4 Admission of the record provides the court with the full
5 context for the opinions of plaintiff's experts.

6 And I just want to note that it is again this is a
7 discretionary decision for this court and plaintiffs
8 although have asked us to cite a specific case have not
9 cited a case in the other direction saying that this would
10 be appropriate.

11 THE COURT: Let me -- they injected one
12 additional issue which was the timing of the affidavit that
13 wasn't on the table earlier when you spoke. Can you tell
14 me about the timing of the affidavit production?
15 (Defense Counsel confer.)

16 MS. LANSDELL: Your Honor, I think I'll just note
17 that the purpose of the business records timing is to give
18 notice, ample notice to plaintiff's and in this case, it
19 was plaintiffs who introduced this to the defendants.
20 This, being the memo.

21 THE COURT: Right. But I think I have to, kind
22 of, resolve the factual issue with the parties here without
23 hopefully having to swear any of you all about whether or
24 not he was sent to them --

25 MS. LANSDELL: Sure.

1 THE COURT: -- timely.

2 MS. LANSDELL: This did come a bit later. You

3 know they had subpoenaed representative Deaton but there

4 were some faults with that they and did not pursue it

5 ultimately. So this did -- the affidavit did come delayed

6 to plaintiff's.

7 THE COURT: Okay. Fair enough.

8 MS. LANSDELL: Yes.

9 THE COURT: Again, I just want to make sure I

10 have the counterfactual agreement about what that is.

11 MS. MENG MORRISON: Your Honor, on the timing

12 issue, I do believe the affidavit has only signed six days

13 ago, so.

14 MS. HUNKER: We're checking, Your Honor.

15 THE COURT: Okay.

16 MS. LANSDELL: The affidavit was signed on

17 January 27.

18 THE COURT: Well, in any event, you are saying

19 you didn't send it timely?

20 MS. LANSDELL: Yes. Correct.

21 THE COURT: That's -- I don't want to get too

22 bogged down and made if that the agreement anyway, I don't

23 know that is matters particularly when it was signed.

24 Okay. Anything else anybody else wants to I will give you

25 some thoughts here.

1 MS. MENG MORRISON: Just to add one additional
2 thing, Your Honor. Counsel said that we weren't able to
3 provide a case cite about bringing this in if it's relied
4 upon by an expert, for the very reasons that I believe
5 counsel did not object to allow them to ask questions about
6 the memo when they were cross-examining our experts. So we
7 have no objection to them, you know, understanding how the
8 memo was useful, but offer the memo which is an out-of-
9 court statement, not a by a party opponent, and it doesn't
10 fall under any exception that they pointed to.

11 We will not that there is a case Meyers v. Cheng 238
12 SW 3d 717 that talks about expert reliance materials and in
13 certain instances perhaps there is some materials that can
14 be brought in, but in this case, that does all under the
15 treatise exception. It is a document that contains very
16 similar analysis and counsel has not provided an exception
17 that would allow that hearsay into this case.

18 MS. LANSDELL: I'll just say I think the
19 exception we've provided is judicial notice for the
20 legislative records.

21 THE COURT: Okay. All right. Let me, kind of,
22 walk through my thoughts on the different, kind of, topics
23 here. I will start -- I usually like to tell folks what
24 I'm doing so you're not waiting in suspense, then I'll go
25 through my process. I'm going to sustain the objection at

1 this time. Walking through the, kind of, different levels
2 of analysis, at first, we'll start with the business
3 record, it's not dispositive. It could be -- I have some
4 other thoughts about it that make it not the sole issue.

5 The timing issues, there a statutory requirement and
6 we don't have that. I think the more substantive issue as
7 it relates to business records that I have and usually at
8 least some of the cases that I'm familiar with this, kind
9 of, shows up in often collection type of cases, where one
10 company absorbs another company or buys their debts and
11 then they're -- you have this situation where the secondary
12 company is trying to enter them into evidence using a
13 business record at trial.

14 And I'm using that analogy because some of the cases
15 that I look at I think are somewhat applicable here because
16 Representative Deaton obviously is not the author of this
17 document. It may have been received by the legislator
18 Representative Deaton but he didn't create it, didn't
19 author it, it's just stored there right? And I don't think
20 that -- that is a way to access it as a business record of
21 the legislative because he didn't create it, he's not
22 familiar with, he just received it.

23 I think do that's similar or at least analogous to
24 some of the cases that I reviewed that deny business record
25 admissions because in those circumstances they're companies

1 that didn't create the records they got them from some
2 other company and then are trying to use them at trial.
3 I'll give you a couple cases if you want to look at and
4 we're gonna be here today and tomorrow if you want to try
5 to talk me out of it, anybody can; 697 SW 3d 795, that's
6 Jefferson Capital Systems LLC v. Rice from the eastern
7 district in 2024.
8 And 136 SW. 3d 134, that is CNW asset acquisition LLC
9 v. Somogyi, S-o-m-o-g-y-i, that's a southern district case
10 from back in 2024. Again, different context, but I think
11 in terms of analyzing the business record foundation and
12 what it can be used for I think its kind of applicable
13 since this came from outside the legislature. And so I
14 don't know that I'm convinced that the legislature can use
15 a business record for something that it didn't create, that
16 it only received.
17 The other basis that I've heard so far is the
18 *Schweikert* case versus *Nixon*. I do have some familiarity
19 with that and to me I think this is one step removed from
20 whatever you see in footnote 11, from that case, talking
21 about because those all of those examples given in footnote
22 11 of that are what I would classify as actual records
23 created by the General Assembly. They're bills that they
24 you know, were in front of them, comparing bills, actions
25 taken by them in their records.

1 I think that's different than again something that was
 2 writing from outside of the General Assembly that was sent
 3 to them that happens to be stored there and maybe was
 4 passed around there. And I don't know that I've seen a
 5 case for judicial notice purposes that accesses that's --
 6 to me, I'm not phrasing it is precisely as I'd like but
 7 maybe one step beyond what I see in the Footnote 11
 8 examples in terms of things that the General Assembly
 9 actually wrote themselves that are stored somewhere there,
 10 is that makes sense.

11 So because they are, kind of, threshold I think
 12 authentication and foundation issues, I think it's more
 13 appropriate to deny their admission at this time and that's
 14 just where I'm at. So obviously we'll be here if anybody
 15 thinks they can change my mind feel free later but based on
 16 what we've talked about that is where about.

17 MS. MENG MORRISON: Thank you, Your Honor.

18 MS. LANSDELL: Thank you, Your Honor

19 THE COURT: Okay. All right. Normally, I would
 20 drag you all till 12:15 but where are you at with your
 21 evidence and case?

22 MS. HUNKER: The witness that we call would be
 23 Intervenors expert and so that would probably take a piece
 24 of length for the direct.

25 THE COURT: Okay.

1 MR. GORE: Yeah. I think our preference would be
2 to break for lunch now if it's suitable to the Court.

3 THE COURT: Again, I'm going to reward you all
4 for being ahead of schedule and that is fine with me.

5 MS. KHANNA: I'm sorry, Your Honor. I didn't
6 mean to interrupt. Just for scheduling purposes I wanted
7 to alert the Court and let you know that we are going to be
8 huddling over the lunch break about a short possible
9 rebuttal presentation, do not expect that to go past today,
10 I know only one witness left for the defendant so we will
11 be taking care of that in next hour.

12 THE COURT: Okay. Just make sure they know
13 probably before I know make sure the other side knows so we
14 can talk about it if we need to put but let's plan to
15 resume at 1:10 and we will see then. Okay.

16 (Off the record at 12:03)