

1 A. In forming -- I would say yes it informed my
2 methodology. Although, the conclusions I reach do not depend
3 on any ascertains in the Kincaid memo.

4 Q. You can take that down. Thank you. I'm going to
5 have Keith bring up Defendant Exhibit 113. Do you recognize
6 this exhibit?

7 A. I do.

8 Q. This is the Adam Kincaid memo dated September 10,
9 2025?

10 A. This looks like the first page of that memo. I
11 remember it had Kincaid's CV on the first page.

12 Q. If you want we can scroll a few more pages if you
13 want to use that to confirm?

14 A. Sure. So this is a different version of the document
15 than the one I was provided by counsel.

16 Q. Was the one you were provided by counsel
17 black-and-white?

18 A. Yes.

19 Q. But this is a memo outside of it being in color and
20 not black-and-white, that you're referring to footnote 10 of
21 your report?

22 MR. CHEUNG: Objection, Your Honor. The witness
23 already testified that he's not seen this version of the
24 memo before.

25 THE COURT: Well, I don't think he's answered that

1 after he answered whether it was black-and-white or not.

2 I don't know the answer now that we've clarified that.

3 MR. CHEUNG: Could we ask a clarifying question?

4 Q. (BY MS. HUNKER) Yeah. Do you recognize this memo

5 with the exception of the fact that it's in color as opposed to

6 black-and-white?

7 THE WITNESS: Yes. This looks like a different

8 version of the memo that I reviewed.

9 MR. CHEUNG: Your Honor, I'm not sure if we got any

10 further clarification on whether there are other

11 differences in this memo other than the color.

12 THE COURT: Why don't I just jump and ask, what do

13 you mean by different version?

14 THE WITNESS: Well, I can see -- for example, I can

15 see that it's in color versus black-and-white. I would

16 have no way of knowing whether maybe I saw an earlier

17 draft unless I had both my original version and this in

18 front of me and had time to do a detailed comparison I

19 couldn't speak to whether there were any other substantive

20 differences.

21 MS. HUNKER: This is the one that was received a

22 color copy from the state senate in order to provide

23 clarity, but it is the same. We have an affidavit in the

24 intervenors exhibit. I think it's 206 that attest to it

25 coming from the General Assembly.

1 MR. CHEUNG: Your Honor, I believe we're still in the
2 same -- a key factual nexus between the document that
3 counsel obtained from the legislator versus the document
4 that Dr. Stern may have reviewed.

5 THE COURT: Okay.

6 MS. HUNKER: I'm not aware of any substantive
7 difference, Your Honor. It's just color.

8 THE COURT: We'll give it time to sort it out. It's
9 time for afternoon break anyway, and then during the break
10 our witness can take a look at it and that way we can be
11 efficient to make sure we're working from the same stuff.

12 MS. HUNKER: Thank you, Your Honor.

13 THE COURT: So I'll try to just do one afternoon
14 break, so we'll make it a little longer that will give him
15 time to have a break and look at it. So let's plan to
16 resume about 3:15.

17 (Court in recess.)

18 THE COURT: We're back from our recess. And I don't
19 know if there's specific question on the table, so I'll
20 just have you ask a question then we'll take it from
21 there.

22 MS. HUNKER: Thank you.

23 **CROSS-EXAMINATION (continued)**

24 BY MS. HUNKER:

25 Q. Dr. Stern, during the break I had provided you with a

1 version of the Adam Kincaid memo; is that correct?

2 A. That's correct.

3 Q. And you had a chance over the break to review the
4 memo?

5 A. Yes, I did.

6 Q. And was that the same as the memo State Exhibit 113
7 that was on the screen and we were discussing before the break?

8 A. No.

9 Q. And what were these differences?

10 A. So aside from the color versus black-and-white
11 reproduction differences that I previously mentioned, the memo
12 I've relied on had a number of pages of output from the
13 redistricting software maptitude, and those are not included in
14 the color document that was provided. It purports to be the
15 same document. So it definitely appears to be incomplete
16 compared to what I was reviewing before.

17 MS. HUNKER: Your Honor, I forwarded -- or say my
18 cocounsel forwarded plaintiff's version that we had
19 received and used during the deposition. I'm going to use
20 this as Exhibit 139 and ask questions from the
21 black-and-white version that we gave Dr. Stern during the
22 break.

23 THE COURT: Plaintiff's 139?

24 MS. HUNKER: Defendant's 139.

25 THE COURT: Okay. Defendant's 139.

1 MR. CHEUNG: Your Honor, I don't believe that exhibit
2 was on the exhibit list.

3 MS. HUNKER: What's our next number?

4 THE COURT: So you left off at 138 on your exhibits.

5 MS. HUNKER: Yes. And so I'm marking this as 139.

6 THE COURT: Okay. You all have a copy of it?

7 MR. CHEUNG: Yeah.

8 THE COURT: Okay.

9 MR. CHEUNG: Just a note, we don't currently have an
10 objection because counsel has not sought admission of the
11 document. We're fine with seeing how the question is
12 played out.

13 THE COURT: All right.

14 Q. (BY MS. HUNKER) Dr. Stern, you have Defendant's
15 Exhibit 139 in front of you?

16 A. Yes, I do.

17 Q. And do you see the exhibit number on the bottom
18 corner of the page?

19 A. Yes, I do.

20 Q. And do you recognize that exhibit number and the
21 document from our deposition?

22 A. I believe I do.

23 Q. And this is the memo that you were referring to in
24 footnote 10 in your report?

25 A. I believe it is.

1 Q. It was counsel that drew your attention to the
2 Kincaid report?

3 A. That's correct.

4 Q. It was counsel that provided you with the Kincaid
5 report?

6 A. Yes.

7 Q. And counsel, in fact, asked you to respond to certain
8 ascertains made within the Kincaid report?

9 A. That's right.

10 Q. And you read the memo in preparing your report?

11 A. Yes, I did.

12 Q. In addition to the compactness metrics there are
13 other parts of the Kincaid memo that you used to determine the
14 contours of your report?

15 A. Can you repeat the question, please?

16 Q. In addition to the compactness metrics, which we
17 discussed just before the break, there were other parts of the
18 Kincaid memo that you used to determine the contours of your
19 report?

20 A. Yes.

21 Q. That included a discussion of county splits?

22 A. I don't recall reviewing the Kincaid reports. The
23 portion of the Kincaid report about county splits or relying on
24 that in my report.

25 Q. Would you like me to refresh your recollection?

1 A. Sure.

2 Q. Let's pull up your deposition transcript page 139.

3 And we're going to be looking specifically at lines eight
4 through 17. I will give you a chance to read.

5 A. Okay. I've read them. Would you like me to read
6 them out loud?

7 Q. Yes, please.

8 A. Outside of the compactness metrics were there other
9 parts of the Kincaid report that you used to determine the
10 contours of your analysis? Yes. And what were those? So for
11 one thing I looked at the discussion of county splits and I
12 also refer to the discussion of the degree to which the map has
13 boundaries that respect the boundaries of senate -- State
14 Senate Districts.

15 Q. Thank you. And I'll ask again, did you look at the
16 discussion of county splits to help determine the contours of
17 your report?

18 A. Yes.

19 Q. So let's take a look at the section of the Kincaid
20 report addressing the county splits page two?

21 A. Okay.

22 Q. The report asserts that -- a county splits decline
23 nine to five?

24 A. That's right from the 2022 to the 2025 map.

25 Q. And your response to this part of the report was to

1 do your trade-off analysis and you totaled up the largest
2 pieces of the municipalities and counties?

3 A. I wouldn't say that it was response to this part of
4 the analysis, no.

5 Q. But we had stated earlier that you did not assess the
6 number of county splits in the map; correct?

7 A. I did assess the number of county splits in my map
8 and in the Missouri First Map between the CD4 and CD5.

9 Q. I was referring to the comparison between 2025, not
10 the 2022 map.

11 A. That's right. I did not compare with 2022 in terms
12 of the number of county splits.

13 Q. And so you didn't have an opinion on Mr. Kincaid's
14 assertion that the number of county splits declined from nine
15 to five from the 2022 map to the 2025 map?

16 MR. CHEUNG: Your Honor, I would object to the extent
17 that counsel is injecting claims from the report into the
18 record.

19 MS. HUNKER: I'm trying to ascertain, Your Honor, the
20 extent that the witness relied upon on the report. To the
21 extent his conclusions are based on this report. The
22 Kincaid memo was given to Dr. Stern from counsel. They
23 told him to read it. They told him to make to respond to
24 it in his report.

25 And so the fact that this is an underlying part of

1 his report in the assumptions means it is capable ground for me
2 to proceed. I do want to refer, Your Honor, to a case Peterson
3 v. National Carriers Incorporated. This is 972 S.W 2d 349.
4 And this talks about how facts, data, or opinions reasonably
5 relied on may be disclosed to the jury on either direct or
6 cross-examination to assist in evaluating expert opinions. Now
7 in this case it's a bench trial. So the fact finder is you,
8 Your Honor.

9 The judge. And so therefore, under this precedent
10 and understanding long-standing interpretation of Section
11 490.065 it is, again, open grounds for me to question the
12 witness on. I am not moving this particular exhibit into
13 evidence.

14 MR. CHEUNG: Your Honor, if you look at Dr. Stern's
15 report, the footnote that was cited, you'll see that on
16 that page. Dr. Stern specifically cited to the
17 compactness metrics reported in the Kincaid memo to
18 ascertain which metrics the legislature may have seen that
19 informed the metrics that Dr. Stern chose for his report.
20 He's testified that he did not evaluate and compare the
21 2025 map to the 2022 map. So this question about how many
22 county splits or in the 2022 map versus the 2025 map was
23 beyond the scope of what Dr. Stern used this memo for.

24 MS. HUNKER: Your Honor, my question specifically is
25 ascertaining whether or not he made that assertion in his

1 report.

2 THE COURT: Okay. Let me try to just say what I

3 think, and then maybe that will help everybody we chart a

4 path forward. I agree with the premise that I think you

5 can use the report that he cited in there and ask

6 questions about it to attack his opinion -- the opinion of

7 the case. I don't get the sense that you're trying to

8 admit it independently as a separate piece of relevant

9 evidence in the trial. Fine. To the extent he's saying

10 there's stuff in the memo that he didn't evaluate or

11 consider or factor into his report that is what it is.

12 Right.

13 MS. HUNKER: I would agree, Your Honor.

14 THE COURT: And so I don't know how helpful that is.

15 But if he's saying he didn't do that, I don't know what

16 more you want to do with the question, if that's going to

17 be his response for that particular issue. Does that make

18 sense?

19 MS. HUNKER: Yes, Your Honor. That was actually my

20 last question about the county splits. I was just

21 confirming that he did make that particular observation or

22 response. So, again, I'm going to try to clarify the

23 contours.

24 THE COURT: Okay. Is that right?

25 THE WITNESS: Is what right? Apologies.

1 THE COURT: You checked out for a second, that's
2 fine.

3 THE WITNESS: No, I didn't check out. There was a
4 lot it entailed.

5 THE COURT: It's not an accusation. Why don't you
6 kind of restate what you think he's saying, and then we'll
7 see if he says that or not and then we can move on.
8 Please don't be offended. They were going back and forth
9 over here you don't need to be locked in it for all that.

10 THE WITNESS: The lawyers were talking maybe I was a
11 little out of it.

12 THE COURT: I get it.

13 Q. (BY MS. HUNKER) Now simply that you offered no
14 conclusion in your report about the assertion Mr. Kincaid
15 offered is that number of county splits declined from the 2022
16 map to the 2025 map?

17 MR. CHEUNG: Objection, Your Honor. I think counsel
18 can ask that question without reference to the assertion
19 in the Kincaid memo considering that the memo is not an
20 exhibit.

21 THE COURT: Let's see what his answer is. I think
22 he's capable of sorting through that.

23 MR. CHEUNG: Okay.

24 THE WITNESS: Okay. My answer is no. I did not
25 compare county splits between 2025 and 2022 in my report.

1 Q. (BY MS. HUNKER) You also looked at a discussion about
 2 the degree to which 2025 map boundaries respect State Senate
 3 Districts. Let me rephrase that question. You had testified
 4 just before there were other parts in the Kincaid memo that you
 5 used to determine the contours of your report, that included
 6 discussion of the degree to which the 2025 map boundaries
 7 respect senate districts?

8 A. That's correct.

9 Q. And let's take a look at page four. Specifically,
 10 the paragraph on top and you can look at your copy.

11 MR. CHEUNG: Your Honor, I thought the question was
 12 about state senate --

13 MS. HUNKER: That's not what I was asking. I might
 14 have gotten the wrong page number.

15 Q. (BY MS. HUNKER) The report asserts that the split of
 16 Jackson County closely aligned with existing Missouri state
 17 senate map?

18 A. Yes. Sorry. Can you repeat the question one more
 19 time?

20 Q. Sure. The report asserts that the split of Jackson
 21 County closely aligned with the existing Missouri state senate
 22 map?

23 A. Yes. The memo says that.

24 Q. And was your response to look at the combined CD4 and
 25 CD5 area to determine whether the boundary lines, in fact,

1 complied with the Missouri state senate map?

2 A. That's correct.

3 Q. And you noted that the senate district lines of CD4
4 and CD5 follow in the Jackson County area do comply with the
5 state senate district lines?

6 A. I observed that it follows certain senate lines and
7 it also splits other senate districts or one other senate
8 district.

9 Q. Thank you. You can put the document down. We
10 already discussed that your first ensemble had a population
11 deviation senate plus or minus one-percent of the ideal
12 district size?

13 A. That's correct.

14 Q. And that deviation meant that the maps within the
15 ensemble could have as many as 7,694 people above the ideal
16 district size than 7,694 people below the ideal district size?

17 A. That's right.

18 Q. In other words, the map in the ensemble could have a
19 population variance of over 15,000 people between the two
20 districts?

21 A. In the first ensemble, that's correct.

22 Q. The conclusions you describe in your amended report
23 section Roman Numeral V about splitting county municipalities
24 compactness metrics and preservation of congressional
25 and senate districts came from assessing the 2025 map with your

1 first ensemble?

2 A. Which paragraph are you referring to, please?

3 Q. Section Roman Numeral V. You had A, B, C, D. And

4 I'll repeat my question. The conclusions you describe in your

5 amended report section Roman Numeral V about splitting county

6 municipalities compactness metrics and preservations of

7 congressional and senate districts came from assessing the 2025

8 map with this first ensemble?

9 A. You've got a page number, that's great. 12. Now

10 that I've had a look through those sections could you please

11 repeat the question?

12 Q. Yes. The conclusions you described in your amended

13 report section Roman Numeral V about splitting county

14 municipalities compactness metrics and preservation of

15 congressional and senate districts came from assessing the 2025

16 map with this first ensemble?

17 A. There is a portion of section five that discusses the

18 other ensemble as well.

19 Q. Yes. However, that was not specifically splitting

20 county municipalities compactness metrics and preservation of

21 congressional and senate districts? I can also rephrase it.

22 A. Sure.

23 Q. The conclusions you describe in your amended report

24 section Roman Numeral V subsections A, B, and C came from

25 assessing the 2025 map with this first ensemble?

1 A. Yes.

2 Q. You also create a second ensemble?

3 A. Yes, I did.

4 Q. And that ensemble also consisted of 100,000 maps?

5 A. That's correct.

6 Q. Minus whatever duplications?

7 A. No, not minus 100,000 maps.

8 Q. Including deviations?

9 A. Including any possible deviations, yes.

10 Q. The second on ensemble had a different population
11 tolerance?

12 A. Yes, it did.

13 Q. It was a tighter population tolerance?

14 A. Yes.

15 Q. You said the population deviation at plus or minus
16 .1 percent of the ideal district size?

17 A. That's correct.

18 Q. That meant the map could have as many as 769 people
19 above the ideal district size?

20 A. Yes.

21 Q. It also meant that the map could have as many as 769
22 people below the ideal district size?

23 A. Yes.

24 Q. In this second ensemble, you noted that 30 maps by
25 chance had exactly the population balance between CD4 and CD5?

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A. That's right.

Q. So thirty maps out of 100,000 maps generated in the second ensemble had equal population between CD4 and CD5?

A. Exactly equal, yes.

Q. The first ensemble also had some maps that by chance had exact population balance between CD4 and CD5?

A. Yes.

Q. You did not specify the number in your report though?

A. That's right.

Q. However, you recall the number of maps in the first ensemble with exact population balance was fewer than in the second ensemble?

A. That was my recollection, yes.

Q. And by chance one of the maps that had equal population appeared in both your first and second ensemble?

A. That's right.

Q. So between your two ensembles you had 200,000 alternative maps?

A. Yes, I did.

Q. But out of the 200,000 you only had 30 maps in your second ensemble and somewhat less than 30 in your first ensemble and equal population between the districts?

A. That's right.

Q. And you're aware of the principle of one person, one vote?

1 A. Yes, I am.

2 Q. You're not aware of a legal requirement exactly but
3 you have an understanding that congressional districts have
4 strict population requirements?

5 A. Yes, I do understand that.

6 Q. You're aware that CD4 and CD5 in Missouri First plan
7 each has 769,364 persons in it?

8 A. Yes.

9 Q. These are exactly equal numbers?

10 A. Yes, they are.

11 Q. Keeping with your second ensemble. Of the 30 maps in
12 your second ensemble that had equal population 11 through the
13 CD4 and CD5 incumbents in two separate districts?

14 A. That's correct.

15 Q. That means that of 100,000 maps in your second
16 ensemble only 11 would have had both equal population and the
17 incumbents in their own district?

18 A. Correct.

19 Q. You did not identify the number of maps in your first
20 ensemble that had both equal population and the incumbents in
21 their own district?

22 A. No, I did not.

23 Q. But you believe it is less than 11?

24 A. I haven't looked at the exact number, but I recall it
25 being less.

1 Q. Turning to appendix four in your report which is
 2 exhibit 21 -- Plaintiff's Exhibit 21, page 51. You provide
 3 visuals for five of the 11 maps in your second ensemble that
 4 had both equal populations and the incumbents in their own
 5 district?

6 A. That's correct.

7 Q. To be specific you provide the visuals for the five
 8 most compact of these 11 maps based on the number of cut edges?

9 A. Correct.

10 Q. You do not provide visuals for the six maps that were
 11 less compact by that specific method cut edges?

12 A. No, I did not.

13 Q. You also note the properties of the five maps that
 14 were most compact based on the number of cut edges?

15 A. Can you repeat the question, please.

16 Q. You also note the properties of the five maps that
 17 were most compact based on the number of cut edges?

18 A. Yes, I did.

19 Q. You do not describe the properties of the six maps
 20 that were less compact based on the number of cut edges?

21 A. That's correct.

22 Q. The Missouri First Map put the incumbents into
 23 separate districts?

24 A. Yes, it did.

25 Q. The location of incumbents is a factor that is often

1 considered by map drawers?

2 A. Yes, that's my understanding.

3 Q. You generated your first ensemble in December
4 of 2025?

5 A. Yes, I did.

6 Q. This is also when you would have produced your second
7 ensemble?

8 A. Yes.

9 Q. Missouri legislature did not have the ensemble maps
10 before it when it to enact the Missouri First Map?

11 A. No, they did not. I produced these maps after the
12 enactment of the Missouri First Map.

13 Q. I know you generated maps with ReCom. But you had
14 never sat down and moved district lines yourself; correct?

15 A. That's correct.

16 Q. Other than programmatically, you do not have
17 experience drawing district maps?

18 A. That's correct.

19 Q. I want to quickly discuss a few points about your
20 rebuttal report. In your rebuttal report you discussed the
21 percentages of Jackson County and Kansas City that was split
22 among CD4, CD5, and CD6 in the 2025 map and prior congressional
23 maps?

24 A. Correct.

25 Q. You did not look to see what percentage of other

1 cities were split among CD4, CD5, and CD6 in the 2025 map and
2 prior congressional maps?

3 A. Correct.

4 Q. You do not do a comparison for the other cities?

5 A. No. Historical comparison like this one, no.

6 Q. You do not look to see, for example, what percentage
7 of Independence was split in the 2025 map compared to the prior
8 existing maps?

9 A. That's correct.

10 Q. You do not look to see what the percent of Blue
11 Springs was split in the 2025 map compared to the prior
12 existing maps?

13 A. Correct.

14 Q. You do not look to see what percentage of Columbia
15 was split in the 2025 map compared to prior maps?

16 A. Correct.

17 Q. Switching to counties. You do not see what
18 percentage of other counties besides Jackson were split among
19 CD4, CD5, and CD6 in the 2025 map and the prior congressional
20 maps?

21 A. That's correct.

22 Q. Not every redistricting consideration can be a top
23 priority when drawing a redistricting map?

24 A. That's right.

25 Q. There may be instances where two considerations come

1 to tension?

2 A. Yes.

3 Q. Redistricting can involve a lot of trade-offs?

4 A. Of course.

5 Q. And we can agree that there's no universally optimal
6 mathematical redistricting plan?

7 A. Couldn't have said it better myself. And I think I
8 did say it myself.

9 MS. HUNKER: You, in fact, did. Thank you very much,
10 Dr. Stern. That concludes my cross-examination and I pass
11 the witness.

12 **CROSS-EXAMINATION**

13 BY MR. ELLINGER:

14 Q. Good afternoon, Dr. Stern.

15 A. Good to see you again. Likewise.

16 Q. I'm going to try to be very brief. Can we pull
17 Plaintiff's Exhibit 21, please? Page 12. I'd like to take a
18 look at paragraph 34. Do you see where I'm at on that?

19 A. There's three.

20 Q. Do you see where out in the middle it says cracking
21 communities display? Do you see that sentence that starts that
22 way?

23 A. Yes, I do.

24 Q. Okay. I think you had some inquiry about cracking
25 earlier. You see that in your sentence there it says cracking

1 communities display also deludes political power of residents
 2 by making both pieces, even the larger of the two too small for
 3 the community to form an effective block in either district; is
 4 that correct?

5 A. Yes, that's what I said.

6 Q. And you were using the term effective block, not as a
 7 term of art, but kinda to describe the ability of a community
 8 to have its interest represented by the congressional
 9 representative in one of the districts; correct?

10 A. That's correct.

11 Q. And that's important that they have that community of
 12 interest reflected by their congressional representation?

13 A. This would be my general opinion. Yes.

14 Q. You can take that down now. In your report you
 15 referenced that Jackson County has 701,167 persons in the
 16 combined CD4 and CD5; is that correct?

17 A. That's correct.

18 Q. Do you know what the overall population of Jackson
 19 County is?

20 A. I don't recall what the number is including CD6?

21 Q. Can you pull up Intervenor's Exhibit 212, please?
 22 And go to page 25 -- page 29, please. If you can focus in on
 23 the Jackson County portion. Do you see that the county
 24 population of Jackson County 716,162?

25 A. Yes, I see that.

1 Q. So the vast majority of the Jackson County population
2 is in the CD4 and CD5 combined district; correct?

3 A. That's correct.

4 Q. Okay. The remainder portion is in CD6; correct?

5 A. That's right.

6 Q. Do you know what the next largest county that is
7 partly or entirely in CD5 is?

8 A. I do not.

9 Q. Okay. Do you know if Boone County is in CD5?

10 A. I believe it is, yes. It's part of it.

11 Q. Would you go to page six of this same document?

12 Boone County has a population of 189,463, do you see that?

13 A. I do see that.

14 Q. Okay. And Boone County is split between

15 Congressional District five and Congressional District three in

16 the Missouri First Map; correct?

17 A. That's my understanding, yes.

18 Q. And the bulk of the Columbia population ends up being

19 in CD3; is that correct?

20 A. I haven't evaluated that.

21 Q. The Jackson County population according to your

22 report under the ideal ensemble map would you agree median

23 ensemble map is 370,868 in CD5. Does that sound correct to

24 you?

25 A. Can you repeat the question, please?

1 Q. In your median ensemble map, the Jackson County
2 population in CD5 is 370,868. Does that sound right to you?

3 A. No, that's the number in the Missouri First Map.

4 Q. Excuse me. Thank you for correcting me. The Jackson
5 County population in CD5 in the Missouri First Map is 370,868;
6 correct?

7 A. That's correct.

8 Q. And we can pull up your table if it makes it easier
9 for you.

10 A. I've got it in front of me now.

11 Q. Page 13, table one?

12 A. Yes.

13 Q. Okay. Do you know what the population of Cole
14 County, Missouri is?

15 A. I do not.

16 Q. Okay. Cole County, Missouri's entirely CD5 under the
17 Missouri First Map; correct?

18 A. I would need a map with county lines and the district
19 lines in front of me, and I don't have it.

20 Q. We have that as -- can we do Plaintiff's Exhibit 41,
21 please? My apologies. Can you see that?

22 A. Yes, I can.

23 Q. In Cole County -- do you see where Cole County is?

24 A. Yes, I do.

25 Q. And it's entirely in CD5, is it not? The Missouri

1 First Map.

2 A. It appears to be.

3 Q. Okay. And do you know what the population of Cole
4 County is?

5 A. I do not.

6 Q. Okay. And I can pull back Intervenor's Exhibit 212
7 and go to page 17. Take a focus on Cole County?

8 A. Yes.

9 Q. It's population is 77,278; is that correct?

10 A. That's what it says, yes.

11 Q. Okay. You don't have any reason to dispute that, do
12 you?

13 A. I don't have any reason one way or another.

14 Q. Okay. Based upon the fact that Cole County's
15 population is 77,278 and is entirely in Congressional District
16 five, the Jackson County portion that's in congressional
17 district five would be five times larger than that; correct?

18 A. That's about right, yes.

19 Q. And even if all of Boone County was in CD5, which
20 we've acknowledged it's not, the Jackson County population at
21 370,000 would be almost twice as much as the entire Boone
22 County population of 189; correct?

23 A. Yes, that's right.

24 Q. Do you know what the largest county in CD4 is except
25 in Jackson County?

1 A. I do not.

2 Q. Could you pull up page 12 of that document?

3 Intervenor's Exhibit 212. Focus in on Cass County. Does the
4 population of 109,638; is that right?

5 A. Yes, I can see that now.

6 Q. And do you know what the population of Jackson County
7 under the Missouri First Map is that's in CD4?

8 A. I'm sure I have that number somewhere in my report.

9 Q. We can also do it -- you're a mathematics professor
10 look at it the mathematics way. If the total amount that's in
11 CD4 and CD5, is 701,167 and 370,868 are in CD5 than 330,299
12 would be in CD4. Did my math work out there?

13 A. It did.

14 Q. Okay. So Jackson County would be three times the
15 size of Cass County's population in CD4; correct?

16 A. What was that number again? It's not on the screen.

17 Q. 109,638?

18 A. Yeah. So it would be that CD4 piece of Jackson

19 County would be about three times that of Cass County?

20 Q. Let's take down 212. I think you said that in your
21 report that the Kansas City total population in CD4 and CD5 is
22 300,523. Sound right to you?

23 A. That's right.

24 Q. Okay. And 174,515 of that populations in CD5; is
25 that correct?

1 A. Yes, that's right.

2 Q. And do you know what the total population of Kansas
3 City is?

4 A. I don't have the number right off the top of my head.

5 Q. Pull up Intervenor's Exhibit 213, page nine, please.

6 Focus in on Kansas City. And then it's a little small print
7 there 508,090 that's 2020 census. Does that sound right to
8 you?

9 A. Yeah, that sounds right. I would've guessed about
10 500,000. I didn't want to guess.

11 Q. So out of 508,090 people if 300,523 are in combined
12 CD4, CD5, then 207,567 are in CD6? Math add up.

13 A. That sounds about right.

14 Q. Okay. Do you know if that's the largest portion of
15 population in CD6 of any city?

16 A. I don't know. I didn't evaluate that question.

17 Q. Okay. You didn't look at CD6, did you?

18 A. Except insofar as I was responding to claims in my
19 rebuttal about the three-way split. Generally not.

20 Q. Well, let's look at cities that are in CD5 then. If
21 you're still on page nine could you just go up a few lines to
22 Jefferson City. Jefferson City has 430,228. Do you see that?

23 A. I do.

24 Q. Okay. And it's entirely in CD5 where the population
25 is; correct?

1 A. I would have to refer to my data. I don't know it
2 off the top of my head.

3 Q. Do you recall there's a piece across the river in
4 Jefferson City that has no population?

5 A. I didn't look at this specifically, so I can't offer
6 a knowledgeable opinion one way or another.

7 Q. Well, do you know what the population of the city of
8 Columbia is?

9 A. I don't.

10 Q. Could you go to page four, please, of Intervenor's
11 213? Focus on Columbia. And that population is 126,254; is
12 that correct?

13 A. Yeah, I can see that.

14 MR. ELLINGER: Judge, I don't know if you can see it
15 or if you'd like it blown up for you?

16 THE COURT: I'm sad to say my eyes aren't good
17 enough.

18 MR. ELLINGER: I can't read it up there if I didn't
19 have it written down I couldn't read it either.

20 THE WITNESS: I've got the monitor in front of me I
21 have an advantage.

22 THE COURT: Now I can.

23 MR. ELLINGER: It does make it much easier, doesn't
24 it?

25 THE COURT: Thank you.

1 Q. (BY MR. ELLINGER) And the city of Columbia is split;
2 is that correct, between CD5 and CD3 in the Missouri First Map?

3 A. That's my understanding.

4 Q. Okay. Do you know that most of it's in CD3, both
5 population of the city of Columbia?

6 A. I believe you've mentioned that before.

7 Q. Does that sound correct to you?

8 A. That sounds right.

9 Q. So the population of Kansas City in CD5 is 174,000,
10 that's a little over four times the population of the city of
11 Jefferson City, right, 43,000?

12 A. That's right.

13 Q. And it's about assuming all of Columbia were in CD5
14 it would still be about 48,000 people more than the population
15 of the city of Columbia?

16 A. That's right.

17 Q. Looking at CD4, do you know what the largest city
18 outside of Kansas City is that's in CD4?

19 A. I do not off the top of my head, no.

20 Q. Would it surprise you that's Sedalia, Missouri?

21 A. I'm not surprised one way or another.

22 Q. If you go to page 16. Sedalia's got 21,725 it's
23 smaller than everything else?

24 A. Indeed.

25 Q. Does that look like the right population to you?

1 A. I'm reading that off the screen without looking at my
2 own data and independently forming an opinion, I can agree that
3 that's what it says.

4 Q. Let's look at what the population of Kansas City
5 that's in CD4. we're back to math again. Sorry.

6 A. That's fine.

7 Q. There's 300,523 persons in the combined CD4 and CD5.
8 And 174,513, are in CD5 than 126,008 are in CD4; correct?

9 A. Correct.

10 Q. Which would make it roughly almost barely less than
11 six times the size of the city of Sedalia 21,700; correct?

12 A. That's about right.

13 Q. So you're aware that part of the city of Kansas City
14 is in CD6; correct?

15 A. Yes.

16 Q. And it's a fairly large number of people 287,000,
17 right?

18 A. That's right.

19 Q. So about 40 percent?

20 A. That's correct.

21 Q. And I think in your report you claim that the
22 Missouri First Map cracks Kansas City and your ensemble maps do
23 not; is that correct?

24 A. What portion of the report are you referring to?

25 Q. I think we're talking about the cracking. It was on

1 page 12 paragraph 34 I believe is when you were talking about
2 cracking. I think there's some discussions there.

3 A. So in my ensemble analysis I'm only speaking to the
4 portion of Kansas City in CD4 and CD5, so I'm not talking about
5 changing the boundary line in CD6 or even including that. But
6 considering only the population that's within the CD4, CD5
7 region, yes, I described Kansas City as being cracked between
8 CD4 and CD5.

9 Q. Okay. And I think you said this but I want to make
10 sure I'm clear. Your ensemble maps do not attempt to unite the
11 population of Kansas City, do they?

12 A. No. My ensemble maps seek to keep counties intact to
13 avoid split counties, but aside from that there's no additional
14 preference to specifically avoid splitting municipalities.

15 Q. Okay. Including the city of Kansas City?

16 A. Correct.

17 Q. And you're not aware of how many other municipalities
18 were split between CD4 and CD5 in your ensemble maps?

19 A. Yes, I do. I've got that on page 15, table two of my
20 report.

21 Q. And do you know what cities those are that are split?

22 A. So it's a different number of cities. It's a
23 different set of cities in each map essentially.

24 Q. So you don't know which cities are split?

25 A. The question doesn't make sense. I think I gave an

1 analogy in my deposition it would be like saying if you took an
2 average height person what color are their eyes.

3 Q. Okay.

4 A. This is the same question. Here we're looking at
5 this four is an average of the number of split municipalities,
6 but it doesn't mean that there's the same four or there's a
7 particular map or I could -- in any given map I could tell you
8 what municipalities are split. But it doesn't make sense to
9 talk about the statistical average that way.

10 Q. In your five ensemble maps that you pulled out what
11 municipalities are split?

12 A. I don't believe I reported that separately.

13 MR. ELLINGER: No further questions, Judge.

14 **REDIRECT EXAMINATION**

15 BY MR. CHEUNG:

16 Q. Good afternoon, Dr. Stern. Ms. Hunker asked you
17 about the congressional boundaries other than CD4 and CD5 if
18 they have compliance with traditional redistricting. Do you
19 recall that?

20 A. I do.

21 Q. To an extent that the legislature intended to comply
22 with any traditional redistricting principles of when drawing
23 in those boundaries would your analysis account for that?

24 A. Yes, it would.

25 MS. HUNKER: I have to object, Your Honor. It's

1 speculation. And he's talking about the districts he
2 stated that he has not done analysis for.

3 THE COURT: I think if you have an objection it be
4 limited to four and five for that.

5 MS. HUNKER: I don't have objection if he limits to
6 four and five. My objection speaks that's beyond four and
7 five.

8 THE COURT: Fair enough.

9 MR. CHEUNG: Your Honor, on direct Dr. Stern
10 testified that he controls more considerations outside of
11 four and five by using those lines.

12 THE COURT: I don't know that I remember that, but
13 you all are paying for transcript so somebody will tell me
14 if I'm right or wrong tomorrow. So you can ask it, and
15 then I think if you want to recross under that, that's
16 certainly fine.

17 MS. HUNKER: Thank you, Your Honor.

18 Q. (BY MR. CHEUNG) So Dr. Stern, to the extent that the
19 legislature intended to comply with traditional redistricting
20 principles when drawing any congressional boundaries other than
21 the boundary lines between CD4 and CD5 would your analysis
22 account for that?

23 A. Yes. It accounts for that by keeping all six
24 districts the same besides CD4 and CD5 and, therefore, all the
25 same decisions were made and the exact same other six districts

1 were drawn in every one of the ensemble maps.

2 Q. Ms. Hunker also asked you about your algorithm having
3 a natural preference for compact maps. Do you recall that?

4 A. I do.

5 Q. How do you know that that natural preference for
6 compact maps does not give too much weight to compactness?

7 A. Well, if compactness were overweighted than, again, I
8 would expect to see greater compactness in the ensemble but

9 worse performance on one of the traditional redistricting
10 criteria and no such a trade-off is observed. So I concluded

11 from that that the compactness is not overweighted in the
12 ensemble.

13 Q. Would it have made sense to create an ensemble that
14 matches the compactness of the 2025 maps for purposes of

15 comparison?

16 A. Not to answer questions of compactness. If I
17 calibrated the ensemble to have the same compactness as the

18 Missouri First Map it would be unable to make that comparison
19 at all. You can't calibrate something to what you're trying to

20 measure.

21 Q. Ms. Hunker also asked you about whether your
22 conclusions under certain section of Roman Numeral V of your

23 report relate specifically to your ensemble with a plus or
24 minus one percent population tolerance. Do you recall that?

25 A. Yes, I do.

1 Q. Does appendix three of your initial report Exhibit 21
2 contain your analysis of those same metrics for the ensemble
3 with a plus or minus .1 percent tolerance? Not an Official Court Document

4 A. Yes, it does. Not an Official Court Document

5 Q. Did you find a meaningful difference in the results
6 you calculated for the one-percent ensemble versus the
7 .1 percent ensemble? Not an Official Court Document

8 A. No, I did not. The differences were very slight. Not an Official Court Document

9 Q. You testified earlier that the Kincaid memo did not
10 inform your conclusions. Do you recall that? Not an Official Court Document

11 A. I do. Not an Official Court Document

12 Q. What did you mean by that? Not an Official Court Document

13 A. I meant that I didn't rely on any assertions in the
14 Kincaid memo for my conclusions. But I did look at the Kincaid
15 memo to determine some considerations that may -- to ensure
16 that I was considering some of the factors that were mentioned
17 in that report, such as state senate district lines. And to
18 ensure that my compactness metrics were at least as
19 comprehensive as the ones that were in the memo and might have
20 been available to the map drawers. Not an Official Court Document

21 Q. Do the conclusions in your reports rely on the
22 accuracy of claims made in the Kincaid memo? Not an Official Court Document

23 A. No.

24 Q. Ms. Hunker asked you about the claim made in the
25 Kincaid memo about congressional lines following state senate

1 district lines. Do you recall that?

2 A. I do.

3 Q. Did you evaluate the claim that state senate lines
4 justify the congressional boundary between CD4 and CD5?

5 A. I did evaluate that claim.

6 Q. And what did you find?

7 A. I found that it did not. I found that, in fact, this
8 was the Missouri First Map preserves State Senate Districts
9 overall worse than about 90 percent of the ensemble maps.

10 Q. I believe you were also asked about whether you
11 examined the treatment of particular cities or counties like
12 Columbia. Do you recall that?

13 A. Yes, I do.

14 Q. To the extent that those cities or counties are
15 located in congressional districts other than CD4 and CD5 under
16 the 2025 map does your ensemble treat them the same way as the
17 2025 map?

18 A. That's right. Everything outside of CD4 and CD5 is
19 the same as in the 2025 map, including the things you
20 mentioned.

21 Q. If you turn to page 13 of your initial report Exhibit
22 21. Do you see table one?

23 A. I do.

24 Q. What did you report at the largest piece of Jackson
25 County that is kept intact? In the Missouri 2025 map, yes.

1 A. In the 2025 map, the largest piece of Jackson County
2 kept intact as a population of 370,868.

3 Q. And is 370,868 a minority of a congressional
4 districts population?

5 A. Yes, it is. It's less than half of the ideal
6 districts size of 769,000 and change.

7 Q. And if you turn to table two, page 15. Do you see
8 that table two?

9 A. Yes, I do.

10 Q. What is the largest piece of Kansas City that is kept
11 intact between CD4 and CD5 under the 2025 plan?

12 A. In the 2025 plan, the largest intact piece of
13 Kansas City between CD4 and CD5 has a population of 174,515.

14 Q. And is the 174,515 a minority of a congressional
15 district population?

16 A. Yes, it is.

17 Q. For both of those figures you just discussed the
18 largest piece of Jackson County and the largest piece of

19 Kansas City how do they compare to the ensemble?

20 A. They keep less population intact than over 99 percent
21 of the ensemble maps.

22 Q. Counsel asked you about redistricting involving a
23 trade-off -- do you recall that?

24 A. Yes, I do.

25 Q. Are you aware of any trade-off that justifies the

1 non-compactness of CD4 and CD5 under the 2025 plan?

2 A. I'm not aware of any, no.

3 MR. CHEUNG: Thank you, Dr. Stern.

4 THE COURT: Additional questions?

5 MS. HUNKER: Give me one minute, Your Honor.

6 THE COURT: Sure.

7 MS. HUNKER: No questions, Your Honor, from the
8 State.

9 MR. ELLINGER: None from the intervener.

10 THE COURT: Okay. You can step down.

11 THE WITNESS: Thank you.

12 THE COURT: Thank you. If you all want to call your
13 next witness.

14 MS. MENG MORRISON: Yes, Your Honor. Plaintiff's
15 call Reverend Mindy Fugarino. Good afternoon, Your Honor. My
16 name is Tina Meng Morrison on behalf of the Healey side.

17 **MINDY FUGARINO,**

18 having been first duly sworn by the Court; testified:

19 **DIRECT EXAMINATION**

20 BY MS. MENG MORRISON:

21 Q. Good afternoon, Reverend Fugarino.

22 A. Good afternoon.

23 Q. Before we get started can you please state your full
24 name and spell it for the record as well?

25 A. Mindy Janelle Wills Fugarino. M-i-n-d-y is the first

1 name. Last name F as in Frank, U-G-A-R-I-N-O.

2 Q. Reverend Fugarino, where do you currently reside?

3 A. 1240 Sumner Avenue, Kansas City, Kansas. 66102.

4 Q. And what county is that in?

5 A. Wyandotte County.

6 Q. How long have you resided there?

7 A. About ten-years.

8 Q. Reverend Fugarino, where are you currently employed?

9 A. Independence Boulevard Christian church.

10 Q. And what is your title at the church?

11 A. Senior pastor, and then also executive director of
12 Intersect KC. A nonprofit that manages the building and all of
13 the community wide non-religious programming.

14 Q. And how long have you been pastor at the Independence
15 Boulevard Christian church?

16 A. Pastor a little over five-years.

17 Q. And have you held that role your entire time at the
18 church?

19 A. Yes.

20 Q. How long have you been executive director of
21 Intersect KC?

22 A. A little over a year, almost two-years, I guess.

23 Q. And prior to your role at the church have you held
24 any other roles in the Kansas City area?

25 A. Yes. I'm the Co-chair for our denominations

1 antiracism team Becoming Beloved Community team and I'm the
2 Tri-chair for the Missouri Poor People's Campaign.

3 Q. And how long have you held each of those roles? Do

4 A. For the Poor People's Campaign about three-years and
5 for the antiracism team about eight-years?

6 Q. And can you briefly describe your position as the
7 co-chair of the Becoming Beloved team as you were saying?

8 A. So one of our goals is to help our congregations
9 better understand the impacts of racism and how we can work for
10 antiracism. So we do a variety of different things. We help
11 different congregations who are doing significant work in their
12 communities, but we also have an annual Kansas City Racial
13 Justice Summit that we do every fall and bring in partners and
14 people doing the work in community organizing group around the
15 Metroplex and at workshops and various things for the larger
16 community. We also prepare and create different devotionals
17 for various seasons in the christian year, and then currently a
18 podcast out that's called Justice Sickles.

19 Q. And whats your position as tri-chair?

20 A. So we coordinate a little bit with the National Poor
21 People's Campaign and when they have actions that are
22 nationwide, and we participate that. And so we've lead some
23 rallies at Jefferson City on behalf of the Poor People's
24 Campaign. And largely though we connect our constituents with
25 other organizations locally that are doing the work that

1 overlap with the same causes that we have so that we're all
2 reconnecting.

3 Q. And can you briefly describe how you found yourself
4 the pastor of the Independence Boulevard Christian church?

5 A. Yes. So like do you want to hear -- well, I had a
6 lot of different background experiences.

7 Q. Sure. Can you describe --

8 A. So I've been a chemical addiction and recovery
9 chaplain and other chaplaincy as well in this area, also worked
10 in the federal penitentiary in Leavenworth as a facilitator for
11 a life change program that's 18-months long. I was there for
12 three and half years. And then did case management for a local
13 nonprofit to help unhoused families find housing, and then I
14 pastored to congregations in the area as well. And I did a lot
15 of community organizing and training over the last decade. And
16 so when this position became available five-years ago it was
17 something that actually integrated all of the different things
18 that I've been doing.

19 And our regional minister for the denomination was
20 asking me you should really consider this position.

21 Q. And at a high level can you describe what your role
22 at the church entails?

23 A. In addition to things like preaching and pastoral
24 care, which I've done at other congregations this one also
25 includes managing a lot of programming, particularly a lot of