1   IN THE DISTRICT COURT OF WYANDOTTE COUNTY, KANSAS
          IN THE TWENTY-NINTH JUDICIAL DISTRICT
2   CIVIL DEPARTMENT

3   FAITH RIVERA, et al.,   )
)
4   Plaintiffs,)
)
5   vs.   ) Case No. 2022-CV-89
)
6   SCOTT SCHWAB, et al.,   )
)
7   Defendants.)

8   TRANSCRIPT OF BENCH TRIAL

9   VOLUME 2

10   PROCEEDINGS had before the HONORABLE BILL

11   KLAPPER, Judge of Division 6 of the District Court

12   of Wyandotte County, Kansas, at Kansas City, Kansas,

13   on the 6th day of April, 2022.

14   APPEARANCES:

15   The plaintiffs, FAITH RIVERA, ET AL., appeared in

16   person and by BARRY R. GRISSOM, Attorney at Law,

17   GRISSOM MILLER LAW FIRM LLC, 1600 Genessee Street,

18   Suite 460, Kansas City, MO 64102.

19   ABHA KHANNA AND JONATHAN P. HAWLEY, Attorneys at

20   Law, Elias Law Group, LLP, 1700 Seventh Avenue,

21   Suite 2100, Seattle WA 98101.

22   LALITHA D. MADDURI, HENRY J. BREWSTER, SPENCER W.

23   KLEIN, AND JOSEPH N. POSIMATO, Attorneys at Law,

24   Elias Law Group, LLP, 10 G Street NE, Suite 600,

25   Washington, DC 20002.

1   APPEARANCES CONTINUED:

2   AND

3   The plaintiffs, THOMAS ALONZO, et al., appeared

4   in person and by SHARON BRETT, JOSH PIERSON, KAYLA

5   DELOACH, American Civil Liberties Union Foundation

6   of Kansas, 6701 West 64th Street, Suite 210,

7   Overland Park, KS 66202.

8   AND

9   MARK P. GABER, KEVIN HANCOCK, SAM HORAN,

10   CHRISTOPHER LAMAR, AND ORION DE NEVERS, Attorneys at

11   Law, Campaign Legal Center, 1101 14th Street, NW,

12   Suite 400, Washington, D.C. 20005.

13   ELISABETH S. THEODORE, R. STANTON JONES, JOHN A.

14   FREEMAN, Attorneys at Law, Arnold & Porter Kaye

15   Scholer, LLP, 601 Massachusetts Avenue, NW,

16   Washington, D.C., 20001.

17   AND

18   RICK REHORN, Attorney at Law, Tomasic & Rehorn,

19   P.O. Box 171855, Kansas City, KS 66117-0855.

20   The plaintiffs, SUSAN FRICK, et al., appeared in

21   person and by MARK P. JOHNSON, STEPHEN R.

22   MCALLISTER, AND CURTIS E. WOODS, Attorneys at Law,

23   Dentons US LLP, 4520 Main Street, Suite 1100, Kansas

24   City, MO 64111-7700.

25

1   APPEARANCES CONTINUED:

2   The defendants, SCOTT SCHWAB AND MICHAEL ABBOTT,

3   appeared in person and by ANTHONY F. RUPP, Attorney

4   at Law, Foulston Siefkin, LLP, 32 Corporate Woods,

5   9225 Indian Creek Parkway #600, Overland Park, KS

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7   AND

8   GARY AYERS AND CLAYTON KAISER, Attorneys at Law,

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11 AND

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1   THE COURT: We are now on the record in

2   Alonzo, excuse me, Rivera, and Frick versus Schwab.

3   The appearances are the same, except Steve has

4   joined us. Other than that pretty much the same

5   players are here.

6   Mark made a statement about a witness he

7   was going to call prior to coming on the record so,

8   Mark.

9   MR. JOHNSON: Sure. Thank you, Your Honor.

10   The Frick plaintiffs have decided not to call Darrel

11   Lea as a witness. He was listed in the witness

12   list. We will have him testify by declaration and

13   file that within the next couple days.

14   And I've represented to the defense that

15   his declaration will not exceed in factual form the

16   declarations that we've previously filed for two of

17   our other plaintiffs.

18   MR. RUPP: That's acceptable.

19   THE COURT: Thank you, Tony. All right

20   then. Any other things we need to take up here

21   before we get to the defendant's motions? Taking

22   that as a no. Tony, when you're ready.

23   MR. RUPP: Thank you very much, Your Honor.

24   I'm here to present a motion for judgment at the

25   close of the plaintiffs' evidence. As the Court is

1   well-aware and has indulged with us, and we with the

2   Court on the very unusual nature of this case, which

3   is the first time in Kansas history somebody has

4   challenged under the Kansas Constitution a political

5   or racial gerrymandering case.

6   And this case has involved a suspension of

7   every rule known to the Kansas Rules of Civil

8   Procedure, no preliminary, no injunction motion, no

9   pretrial conference, no definition before the trial

10   of what the burden of proof would be.

11   Mr. Laue argued a motion to dismiss before

12   the trial, and it was denied without comment on what

13   the burden of proof would be in the case; and we

14   would renew that motion and stand on that motion and

15   Mr. Laue's arguments as to that portion.

16   What I'm here today or what I will do at

17   the moment is to address a couple of additional

18   issues based on where we are in this case at the

19   close of the plaintiffs' evidence.

20   We have heard from six experts, none of

21   whom I have identified a standard of care by which

22   the legislature must act in order to comply with any

23   sort of Constitutional gerrymandering concepts.

24   Each of them have testified to some version

25   of their opinion that there's improper racial or

1   political gerrymandering, but they've each

2   acknowledged that there are no standards by which

3   they have deemed that or, you know, gauged that

4   testimony.

5   And, likewise, there has been no

6   identification in this case and we're now through

7   the plaintiffs' case as to what the burden of proof

8   is. What must the plaintiff prove to prove their

9   case?

10   They did not identify that burden of proof

11   because they couldn't. It is not because they've

12   done anything wrong, but because they couldn't in

13   their opening statement, certainly have not

14   elucidated that through any testimony of any

15   experts.

16   So, we are faced with a fundamental element

17   of a justiciable case that simply does not exist and

18   that or, two, what is the burden of proof and what

19   is the standard of care?

20   And in the absence of those -- that

21   identification the case must fail as a matter of law

22   and they are here, the plaintiffs, to do the

23   extraordinary. They are here to ask a single member

24   of the judicial branch in one of 105 counties to

25   overturn the collective Legislative judgment of the

1   Kansas Legislature to perform an obligation given to

2   them under the United States Constitution.

3   Under Kansas Law at the conclusion of the

4   case the defendants are entitled to come before this

5   Court and say, here are the element of the case.

6   The burden of proof, and we believe that the

7   plaintiff has failed to meet that burden and,

8   therefore, the case must be dismissed.

9   And, in a case involving experts, the

10   plaintiffs must come before or we are entitled to

11   stand before the court and say, the plaintiffs,

12   there is a following standard of care, and the

13   plaintiffs have offered the following testimony, and

14   they did not identify a standard of care, and they

15   did not identify how that was breached.

16   And I know it's an unusual case, but it's

17   too late after the plaintiffs' case is over to come

18   -- to create a standard of care or a burden of

19   proof.

20   We stand here not knowing what the rules

21   are as to whether it is unconstitutional or whether

22   it is Constitutional to divide Johnson County. We

23   do not know the standard by which that would be

24   measured. We do not know the element of packing

25   that is allowed to go into the First District by

                Rosemarie A. Vieth, Official Court Reporter

1   moving only republican voters into the First

2   District.

3   We do not know -- we've heard two witnesses

4   Professor Miller and Professor Collingwood, in

5   essense, describe that racial and political

6   gerrymandering or that democrats prefer minority

7   voters and, therefore, essentially that democratic

8   districts must be preserved and more or less that

9   because Kansas only has 40 percent of folks who vote

10   for democratic candidates that somehow the rules

11   require or the standard is that you must pack all

12   the republicans into the First District, but you

13   cannot make a decision on a map that moves any

14   democratic cities into or any portions of any

15   democratic cities into a different district.

16   And there's simply no burden of proof or no

17   standard of care that has been or can be identified

18   for that standard.

19   In any other case that would come before

20   this Court, you would have jury instructions. Take

21   contract, for example. The essential elements of an

22   action based on a contract are, one, the existence

23   of a contract between the parties; two, sufficient

24   consideration to support the contract; three, the

25   plaintiffs performance or willingness to perform in

1   compliance with the contract; four, the defendants

2   breach of the contract; and, five, the damage to the

3   plaintiff caused by the breach.

4   We have tried this case without anyone

5   knowing what the elements of the case are and,

6   accordingly, it is an impossibility for the

7   plaintiffs to have to prove their case without

8   knowing what the elements of that case are.

9   And it's seems to me to be Constitutionally

10   impermissible to overturn the will of the Kansas

11   Legislature without knowing what the standards are

12   and to kind of divine them after the case has been

13   submitted to the Court.

14   Expert witnesses are supposed to help the

15   Court or help the fact-finder to determine whether a

16   standard of care has been breached measured against

17   a known standard and each witness said they didn't

18   have a standard.

19   And what we have heard, for example, is

20   that Professor Chen has run this algorithm that he

21   created, and he's found that this map is an outlier

22   on his algorithm.

23   That can't possibly be the standard of care

24   under -- to set aside the decisions of the Kansas

25   Legislature.

1   Professor Smith acknowledged with regard to

2   the guidelines that there are no acceptable

3   quantitative guidelines for virtually every element

4   of the Kansas guidelines upon which the plaintiffs'

5   case seems to be based.

6   Nobody has measured how you quantitatively

7   determine an acceptable social community of interest

8   and nobody has determined what is an acceptable

9   cultural community of interest and nobody has

10   defined under the guidelines how you determine when

11   there is tension between those guidelines.

12   Ans that's exactly why the United States

13   Supreme Court has said Courts ought not to place

14   themselves into this political thicket.

15   There are no standards by which any of this

16   can be decided, and it surely cannot be that one

17   branch of the government, the judicial branch, can

18   second guess or collaterally attack another branch

19   of the government by bringing in or by having

20   testimony that was not before the Legislature and is

21   heard for the first time in a different courtroom.

22   None of these six experts were before the

23   Legislature. The Legislature had no opportunity to

24   consider them.

25   How can it be that one branch of the

1   government can overturn the Legislative discretion

2   that is specifically given to the Legislative

3   branch?

4   And so, we are sitting here at the

5   conclusion of the case with evidence that never was

6   before the Legislature that was with no burden of

7   proof standard, no standard of care standard, no

8   guidance in the Kansas Constitution, which is silent

9   on all of these issues, and it surely cannot turn on

10   algorithms written by plaintiffs' experts.

11   It surely can't turn on collateral attack

12   of judgments. We would never allow a collateral

13   attack of a judicial decision without, you know,

14   that was not based on the judicial record but was

15   rather, in fact, based on a bunch of people coming

16   in and testifying all the things the judge did

17   wrong.

18   And I don't think that it's appropriate

19   under Kansas Law to allow this sort of a collateral

20   attack on the judgment of the Legislature.

21   We have no guidance on what constitutes

22   racial gerrymandering in Kansas. We've heard that

23   the Voting Rights Act certainly is not at issue, and

24   I agree with that.

25   The Voting Rights Act is a Federal Statute,

1   not part of Kansas Law, but there is no Kansas Law

2   with regard to racial gerrymandering, and none has

3   been identified.

4   And it is at this point the reason why

5   there's no justiciability of these claims in Kansas.

6   And these claims cannot stand.

7   Finally, I would note, Your Honor, that the

8   extent in the Third District that anybody has been

9   able to establish is that this district is a little

10   more republican, in terms of partisan

11   gerrymandering, is a little more republican than it

12   once was.

13   It can't be the law that no district can be

14   a little more republican than it once was or I mean

15   that that's a Constitutional violation. That simply

16   can't be the law.

17   And the consequence, Your Honor, of keeping

18   the -- because it is a jigsaw puzzle as Professor

19   Smith stated -- the consequence because every act of

20   moving a county moves another county or changes

21   something else.

22   It can't be the law that every -- that you

23   can -- that the First District has to be sacrificed

24   for democratic voters and only republicans can move

25   into the First District so that we can preserve the

1   Third District and the Second District in a way that

2   the plaintiffs would prefer. That cannot be the

3   law.

4   And, Your Honor, with that I will stand on

5   my arguments and the motion that Mr. Laue filed

6   beforehand and that you did deny that I would renew

7   that motion at this point in time based on the

8   evidence that we've heard introduced in this case.

9   Thank you very much.

10   THE COURT: Thank you, Tony.

11   MR. JONES: Your Honor, Stanton Jones for

12   the plaintiffs. We made our affirmative points

13   about our claims and the Kansas case law supporting

14   them in our written opposition to the defendant's

15   earlier motion to dismiss; the threshold motion to

16   dismiss and at the prior argument before the Court

17   on that motion to dismiss.

18   The motion to dismiss was, of course,

19   denied. The Court at that time, I believe, said on

20   the record that we had identified appropriate

21   standards for our claims, and so we just rely on all

22   of the prior arguments in the written opposition and

23   that we made at the previous argument.

24   I want to respond to a few of the specific

25   arguments put forward by the defendants during the

1   trial during our evidence and also in the argument

2   just now, and there's a common theme running through

3   their argument, and the common theme is that there

4   are no rules.

5   They say there can't be any limitation at

6   all on partisan gerrymandering no matter how

7   extreme, because there is no one bright line rule

8   that everyone in the world agrees on.

9   They say that the guidelines, the written

10   guidelines that were used in both chambers of the

11   Legislature to draw and try to justify this map

12   were, essentially, meaningless, because they're not

13   in the Kansas Constitution or a statute.

14   They say that the efficiency gap is

15   well-recognized standard used to evaluate

16   gerrymandering by political scientists and courts

17   alike. It doesn't work in Kansas because some one

18   has raised a question about it.

19   They say that there's no way to measure the

20   partisanship of districts or predict likely

21   electoral outcomes, essentially, because no one has

22   a crystal ball.

23   They even go so far as to say that there's

24   no way in Kansas to measure racially polarized

25   voting.

1   They say that the ecological inference

2   methodology that is universally recognized as the

3   gold standard by American political scientists and

4   courts to measure racial polarization in elections

5   isn't good enough for Kansas.

6   To hear the defendant's tell is there are

7   no rules for redistricting in Kansas at all. The

8   Legislature can do anything it wants, and the Kansas

9   Courts and the Kansas Constitution have nothing to

10   say about it.

11   They say they don't know what the rules

12   are, but the realty is they just don't think there

13   are any rules. They say that if a particular claim

14   or case hasn't been litigated before, it can't be

15   litigated ever, but that's not how the law works.

16   Kansas Courts are perfectly capable, like

17   courts in other states around the country, are

18   perfectly capable of doing what we've asked this

19   court to do, which is to hear all the evidence, make

20   the factual findings and adopt the standards to

21   protect the Constitutional rights of Kansas voters.

22   And the courts can do this, and the courts

23   have to do this, because in this case four

24   democratic principles hang in the balance, and

25   racial justice for minority voters in Wyandotte

1   County hang in the balance.

2   The Kansas Constitution secures these

3   democratic principles and protects against racial

4   vote dilution, and as we explained in our written

5   motion to dismiss opposition and at the prior

6   argument the Kansas Courts have both the power and

7   the duty to say so.

8   We have proved our claims by overwhelming

9   evidence. This is not -- it's not a complicated

10   case, and it's not a close case factually.

11   Anyone who has sat through this trial knows

12   that this map cracks Wyandotte County's democratic

13   and minority voters between District 2 and 3 to

14   ensure that they will not comprise a majority in

15   either.

16   And the map, then, surgically carves the

17   City of Lawrence democratic voters out of the Second

18   District and places them in The Big First with

19   Kansas counties bordering Colorado that they have

20   absolutely nothing in common with other than we're

21   all in Kansas.

22   That is obvious, and I think it is fair to

23   say that anyone who has sat through the evidence

24   understands that that's what this map is.   It's

25   what this map does. Our experts showed it by a host

1   of reliable mathematical and statistical measures.

2   The map was drawn intentionally and it will

3   have the effect of maximizing republican advantage,

4   maximizing the likelihood that there will be

5   consistently four republican Congress people

6   representing Kansas's four Congressional Districts

7   and intentionally and effectively diluting the votes

8   of both Kansas democrats and also racial minority

9   voters.

10   Mr. Rupp said that this case is

11   extraordinary; and, in a sense, I suppose that's

12   true. It's an important case. There's much at

13   stake, but in another key respect there's nothing

14   extraordinary about this.

15   There's nothing extraordinary about a court

16   hearing a Constitutional challenge to a

17   discriminatory voting law and striking down the law

18   if the court finds that the law was enacted both

19   intentionally and effectively to discriminate

20   against some voters on the basis of their political

21   beliefs and to discriminate against minority voters.

22   That is sadly quite ordinary.

23   This is not a collateral attack on the

24   Legislature. This is a -- we're asking the court to

25   exercise a basic function of judicial review. Since

1   Marbury v. Madison courts have had the power to

2   review the validity of acts of the Legislature under

3   the Constitution, and that's equally true under the

4   Kansas Constitution.

5   So, we would ask that their motion for a

6   defense judgment be denied and get to the defense

7   evidence this afternoon. Thank you, Your Honor.

8   THE COURT: Thank you, Stanton.

9   MR. JOHNSON: Just very briefly. May it

10   please the Court, just briefly.

11   THE COURT: Mark, you don't have to hurry.

12   I think you have a separate independent claim on

13   behalf of the people of Douglas County.

14   MR. JOHNSON: We do. Thank you. We heard

15   several times from the defense that this just can't

16   be the law. It can't be the law that you can attack

17   a Legislative judgment made by the full Legislature.

18   Well, that assumes, as they say, a fact not

19   in evidence that this was a Legislative judgment

20   made by the full Legislature.

21   As I said in my opening statement, one of

22   the tasks we have as lawyers is to tell a story. I

23   think that story has been told in a compelling and

24   perhaps overly persuasive fashion.

25   The testimony of Senator Corson showed that

1   the Legislature failed in a basic task and that is

2   something I tell everyone, all the young lawyers in

3   my office, honor the process.

4   They created the process. They adopted

5   guidelines, however they did it. It's not in the

6   Constitution, yes, but that doesn't matter.

7   They adopted their own rules, and then they

8   proceeded to ignore them. They dishonored the

9   process.

10   We hear that they didn't hear from the

11   expert witnesses that you've had the opportunity to

12   hear from. I think it's fair to say given what

13   Senator Corson had to say that they wouldn't have

14   cared that expert testimony would not are been

15   considered because, quite candidly, Your Honor, I

16   think we've shown that they didn't consider any of

17   the testimony provided by 100 plus witnesses or more

18   from the listening tour and from witnesses who

19   testified before the Redistricting Committee after

20   the Congressional map was introduced as a finished

21   product.

22   As Mr. Jones ably said, this is not a

23   collateral attack. This is candidly a direct attack

24   on an unconstitutional act by the Legislature and

25   that falls clearly within your purview, clearly

1   within the powers of the judicial branch.

2   The Legislature simply can't be allowed to

3   act in a completely unfettered fashion, and that is

4   what I hear the defense arguing here that there are

5   no rules. There are no limits. There are no

6   standards by which they must act or more to the

7   point by which they must follow.

8   So it's not a collateral attack. When one

9   branch of the government acts unconstitutional, it's

10   up to the judicial branch to take action itself.

11   That's what we asked you to do when we

12   filed our case, asked the judicial branch to do, and

13   my cocounsel, Mr. McAllister so ably argued the

14   motion to dismiss, which you correctly denied the

15   law that applies to that hasn't changed in, the last

16   three days.

17   We think that you should, again, deny the

18   motion. This would be sort of the equivalent of a

19   directed verdict at the close of the plaintiffs'

20   case.

21   We think we have introduced to you -- shown

22   to you sufficient evidence to prove that the

23   Legislature acted improperly, improvidently, and

24   unconstitutionally. Thank you.

25   THE COURT: Thank you, Mark.

1   MR. RUPP: May I have one last comment?

2   THE COURT: Certainly you may, Tony.

3   MR. RUPP: The argument that they have made

4   is that the Legislature cannot act in an unfettered

5   manner. What they have not suggested to the court

6   before the case, during the case, by any standard of

7   care or elements of the cause of action, which I

8   didn't hear in response to the motion what the cause

9   of action elements are or what the standard of care

10   is, if the Court or if the Legislature cannot act in

11   an unfettered manner, what is the burden of the

12   proof to establish how far can the Legislature go?

13   How clear must the violation be? What is too much?

14   What is just right?

15   And where -- and in the absence of

16   standards and elements, the concept that we can

17   divine the law after the case is tried rather than

18   before the case is tried is a complete failing of

19   the justice system and that reflects why this case

20   should be dismissed and there is no justiciability

21   of this case. Thank you, Your Honor.

22   THE COURT: Thank you, Tony. Defendants in

23   this case raise some compelling arguments what is

24   the standard to be applied? What are the elements

25   that the court should use in determining whether

1   that standard has been met by the plaintiffs or not?

2   This is a motion to dismiss at the close of

3   the plaintiffs evidence.

4   The Court has previously ruled on the

5   motion to dismiss saying that it was not a violation

6   of the election clause under the U.S. Constitution,

7   and it wasn't a violation of the Kansas

8   Constitution, and that the Court's power was not

9   somehow limited by the fact that the Kansas

10   Constitution, Article 1, excuse me, Article 1

11   Section 1 noted that the Legislature is to

12   specifically set the guidelines for Senate and House

13   seats.

14   And in a state contest regarding those

15   districts the Supreme Court is to review it and

16   since it was silent about what to do on a federal

17   congressional race, the implication was that the

18   court should not do it.

19   This court has already dealt with that

20   issue, and a ruling has been made, and we will not

21   revisit that anymore than we already have today.

22   So having said that there are issues here

23   that are difficult, a motion to dismiss at the close

24   of the plaintiffs' evidence is a routine matter

25   brought before this court in every case it's ever

 1   tried and the standards that are set there are quite

 2   simple, counsel. No one argued them and I assume

 3   that's because everybody knows what they are.

 4   The Court is required to view the evidence

 5   in the light most favorable to the plaintiff, is to

 6   draw all reasonable inferences from the evidence,

 7   and to let the case continue.

 8   What are the reasonable inferences that the

 9   court could draw from the case that is before it?

10   There has been lay testimony saying that there will

11   be a chilling effect at best.

12   It may was a complete absence of some

13   voters even participating in the process, if the

14   court allows the Legislature to redistrict the State

15   of Kansas in the manner in which it has done so.

16   There's proof from the plaintiff that

17   there's an effect about what has happened.

18   The plaintiffs have then gone further and

19   brought six independent experts into testify. Some

20   of that testimony has been overlapping, but it is

21   exceptionally interesting to note that most of the

22   experts use different measures to determine whether

23   or not there had been racial or political partisan

24   gerrymandering, and under of of the tests applied,

25   and we can call them E gap or EI or the other

1   measures that were introduced by the court by the

2   experts.

3   Dr. Rodden said I created two maps of my

4   own to see how it might work with the Ad Astra 2

5   map.

6   In each one of those analysis, there was

7   overwhelming evidence that the Kansas Legislature

8   engaged in both political and racial gerrymandering

9   to the point that racial minorities votes would be

10   diluted.

11   Counsel, this isn't a close call. Putting

12   aside for a moment that it's a struggle, because

13   this is new, and it is, and, Tony, your comments as

14   I started this conversation about so name the

15   elements and name the standard of care make this a

16   more difficult case to precisely define.

17   The question before this court is did the

18   Legislature of Kansas intentionally or

19   unintentionally violate the Constitution of the

20   State of Kansas?

21   And, if the ultimate resolution of this

22   case is that the Kansas Legislature has unlimited

23   power to redistrict this state in any way that they

24   want to and the courts have no power to say, that's

25   unconstitutional, then folks that's not what good

1   government is all about.

2   One would question perhaps why there is

3   even the need for this type of gerrymandering. Is

4   one democratic voice in the Legislature one too

5   many? There have been times when there have been

6   none. Do we dislike so much that there is a

7   democrat that is serving in the Legislature or do we

8   more abhorrently not like the particular democrat

9   that is serving in the Third District?

10   The Court doesn't resolve that issue today.

11   The Court simply notes under the standard to be

12   applied in any motion to dismiss at the close of the

13   plaintiffs evidence, the plaintiffs have met their

14   burden. Motion denied.

15   Okay. Tony, ready to go? Gary?

16   MR. RUPP: We are.

17   THE COURT: All right.

18   MR. AYERS: Professor Lockerbie.

19   THE COURT: Very agile, professor, in

20   getting around that.

21   MR. LOCKERBIE: As you get older, it gets

22   hard.

23   THE COURT: Get somewhere close here, if

24   you would stop and raise your right hand, please,

25   sir.

Rosemarie A. Vieth, Official Court Reporter

1   BRAD LOCKERBIE,

2   called as a witness, having been first

3   duly sworn, testified as follows:

4   THE WITNESS: I do.

5   THE COURT: And please be careful getting

6   up there, because that's a bit of a challenge as

7   well.

8   THE COURT: How do you prefer to be

9   addressed, sir?

10   THE WITNESS: Brad.

11   THE COURT: Thank you, Brad. I appreciate

12   that.

13   MR. AYERS: May it please the Court.

14   THE COURT: When you're ready, Gary.

15   DIRECT EXAMINATION

16   BY MR. AYERS:

17   Q. Good afternoon.

18   A. Good afternoon.

19   Q. Professor Lockerbie, can you give us your name, and

20   where you work, and what do you do there?

21   A. Brad Lockerbie. I'm a professor of political

22   science at East Carolina University.

23   Q. Where is that located?

24   A. That is located in Greenville, North Carolina.

25   Q. Where did you do your undergraduate work?

1 A. At the University of Georgia.

2 Q. And what degree do you have from the University of

3 Georgia?

4 A. A Bachelor of Arts in political science.

5 Q. Do you have any advanced degrees?

6 A. Yes, I do.

7 Q. And what are those and where did they come from?

8 A. I have a PhD in political science from the

9 University of Iowa.

10 Q. Do you teach courses at the university?

11 A. Yes, I do.

12 Q. And what are some of the courses you teach?

13 A. I teach voting behavior and public opinion. I teach

14 research methods, statistics for political science,

15 intro to American politics and religion in politics.

16 Q. Do you do any teaching regarding the study of public

17 opinion and political attitudes?

18 A. Yes, I do.

19 Q. And do you do any teaching regarding the voting

20 behavior and public opinion?

21 A. Most certainly.

22 Q. And any teaching on racialized polarized voting?

23 A. Yes, I do.

24 Q. Have you written in any peer reviewed publications

25 in your field of study and teaching?

1   A.   Yes, I have.

2   MR. AYERS: I see on page 3 of your CV,

3   which is Exhibit -- you think I can hear you, but I

4   can't.

5   PARALEGAL: 1058.

6   Q.   (By Mr. Ayers) 1058.

7   A.   That's Professor Alford's CV.

8   THE COURT: Off the record.

9   (Recess)

10   THE COURT: Back on the record, Rose.

11   MR. AYERS: Jami and I were doing this

12 about a year ago, and I came to trust her

13 completely.

14   THE COURT: She seems to have done an

15 excellent job thus far right up to that point, Gary.

16   MR. AYERS: Page 4, what's that?

17   PARALEGAL: 1060.

18   MR. AYERS: I can't hear you.

19   PARALEGAL: 1060.

20   MR. AYERS: Thank you, everybody.

21   THE WITNESS: You have my sympathy. I have

22 the hearing aids too.

23   MR. AYERS: Yeah, I know.

24   MR. JONES: Sorry. Could you put it on the

25 screen as well?

Rosemarie A. Vieth, Official Court Reporter

1   THE COURT: Counsel, while we're taking

2   care of those logistical issues, I left the

3   defendant's reports back in my office, and I want to

4   have them, so give me just a moment please.

5   (Recess.)

6 Q. (By Mr. Ayers) Professor, have you listed some of

7   those peer reviewed studies? Do I have the right

8   page 4?

9 A. That is where some of my listing, yes.

10 Q. Have you participated in redistricting litigation

11   before?

12 A. Yes, I have.

13 Q. And was that at least the Arkansas NAACP versus the

14   Arkansas Board of Apportionment, you testified in

15   that?

16 A. That is correct.

17 Q. Were you qualified as an expert in that case?

18 A. I believe so.

19 Q. And that had to do with race and voting behavior?

20 A. Yes.

21 Q. Opportunity districts?

22 A. Yes.

23 Q. You've also published some books on race and

24   religion; is that correct?

25 A. Article on race and religion.

1 Q. Okay.

2 A. And race and book from Cambridge University Press.

3 Q. And do you teach gerrymandering in your courses?

4 A. Yes, I do.

5 Q. Do you teach voter dilution?

6 A. Yes, I do.

7   MR. AYERS: So, Your Honor, we would offer

8 Professor Lockerbie in the fields of racialized

9 polarized voting, minority majority voter cohesion

10 or polarization, impermissible gerrymandering, or

11 whether it be racial or partisan and voter dilution.

12   THE COURT: Plaintiffs, I'm not sure who

13 I'm looking at for a response?   Stanton.

14   MR. JONES: I will be doing this one.   Can

15 I ask Gary to just read the topics again? I was

16 trying to take them down, but I don't think I got

17 all of them.

18   MR. AYERS: Racially polarized voting,

19 minority majority voting cohesion or polarization,

20 impermissible gerrymandering, whether it be racial

21 or partisan, and voter dilution. Basically

22 responding to experts reports.

23   MR. JONES: Yeah. I don't think that

24 Professor Lockerbie -- while I was prepared to say

25 no objection to qualifying him in some different

  1   topics, I don't believe that Professor Lockerbie has

  2   the expertise in those topics.

  3   I can voir dire him or I am happy to just

  4   hold it for cross-examination, which is what I was

  5   planning to do.

  6   THE COURT: Preference one way or the

  7   other, Gary? He'd like to voir dire your witness.

  8   And he plans on just doing it in cross-examination,

  9   which seems like a better idea at this point, and

 10   I'm prepared to make a ruling.

 11   MR. AYERS: You're prepared to make a

 12   ruling now or after cross-examination?

 13   THE COURT: Right now.

 14   MR. AYERS: Go ahead then.

 15   THE COURT: All right then. The Court

 16   finds that subject to something that the Court

 17   discovers on cross-examination, he is qualified to

 18   testify as an expert in each of those areas.

 19   MR. AYERS: Thank you, Your Honor.

 20 Q. (By Mr. Ayers) Were you contacted recently in this

 21   case to provide expert testimony?

 22 A. Yes, I was.

 23 Q. Do you remember when that was?

 24 A. March 10 or 11.

 25 Q. A couple of weeks ago, a little over two weeks ago?

1 A.   A little over two to three weeks ago.

2 Q.   And what were you asked to do?

3 A.   I was asked to review several reports from the

4   plaintiffs and offer commentary on them.

5 Q.   And did you do that?

6 A.   Yes, I did.

7 Q.   And, Jami, if we could have Exhibit 1059. Did you

8   put your discussion of the plaintiffs' expert

9   reports, the ones you reviewed, in your report that

10   is now labeled Exhibit 1059?

11 A.   Yes, I did.

12 Q.   And do you have a copy in front of you?

13 A.   Yes, I do.

14 Q.   At a very high level, having reviewed the

15   plaintiffs' expert reports that are in your Exhibit

16   1059 and based upon your experience and your

17   education, you are reading and you are teaching, did

18   you draw any conclusions with regard to Ad Astra 2,

19   the 2022 Kansas Redistricting Plan?

20 A.   Yes, I did.

21 Q.   And what were those conclusions?

22 A.   That it comported with the guidelines it had been

23   outlined in the plaintiffs' exhibits.

24 Q.   Did you think that there had been racial

25   gerrymandering?

1 A. I saw no evidence of it.

2 Q. Or impermissible partisan gerrymandering?

3 A. Saw no evidence.

4 Q. Did you have any opinions on whether or not any

5   particular minority group was sufficiently large and

6   compact enough to constitute a majority in any

7   reasonably configured district in Kansas?

8 A. I did not see evidence that you could have a

9   majority minority district in Kansas.

10 Q. Did you review Dr. Chen's report?

11 A. Yes, I did.

12 Q. And with regard to Dr. Chen's report, he indicated

13   that the Kansas plan was an outlier of sorts, do you

14   remember that?

15 A. Yes, I do.

16 Q. Did you draw any conclusions about whether or not

17   the Kansas plan was an outlier?

18 A. Looking at his simulations, it was out at the edge

19   of some of the Ad Astra 2 was at the edge compared

20   to his plans.

21 Q. And then with regard to his testimony on compactness

22   scores, did you draw any conclusions?

23 A. Yes, I did.

24 Q. And what were they?

25 A. That the compactness scores presented by Professor

1   Chen were I think mathematically correct, but that

2   he concluded they were not compact enough, and I

3   concluded that the Polsby-Popper --

4 Q. It's P-O-L-S-B-Y hyphen P-O-P-P-E-R, Polsby-Popper.

5 A. I apologize. Though I was raised in the south I was

6   raised by northerners, and we tend to speak at a

7   rapid clip.

8 Q. Polsby-Popper is not easy to say or to get down.

9 A. But the Polsby-Popper scores for Kansas were well

10   above the average across the nation, which I took to

11   be evidence that the state did try to make districts

12   as compact as possible.

13   I also noted that there are many other

14   compactness scores that are not discussed in any of

15   the reports that occasionally lead to different

16   interpretations of compactness, that there's -- I

17   didn't report it in my test report here, but Dick

18   Niemi in his article with Bernie Grofman found I

19   think over 30 to 100 -- I forget the exact number --

20   but either one is rather large of compactness

21   scores.

22   MR. JONES: Your Honor, I am going to move

23   to strike. He prefaced his answer there by saying

24   that's not in his report, and it's not in his

25   report.

1   THE COURT: Gary?

2   MR. AYERS: He's an expert. He's drawing

3   on his knowledge to answer the question.

4   THE COURT: So this case, in general, seems

5   to be about a level playing field. Can we all agree

6   on that? In general, just the whole point of why

7   we're all here, do we have a level playing field for

8   redistricting in Kansas or not? And so would that

9   hold true with expert reports as well?

10   MR. AYERS: Of course, Your Honor. And I

11   didn't even anticipate his answer so I wasn't trying

12   to work something into it in any way.

13   THE COURT: No incrimination meant, Gary.

14   It's just -- it seems to the Court that some of the

15   issues that you all raise as being novel are not to

16   a Trial Court.

17   In other words, if an expert submits a

18   report then an expert testifies about what is in his

19   report. And I realize you didn't solicit that from

20   Brad, and I'm not sure that Brad meant to do

21   anything intentional, but the objection is sustained

22   and that part of his testimony stricken, and he

23   needs to testify about his reports and the reports

24   of those that he reviewed. Despite the fact he may

25   well be true, it's not admissible evidence here

1   today.

2   THE WITNESS: I apologize for any

3   miscommunication.

4   THE COURT: No problem at all, Brad. I

5   understand.

6 Q. (By Mr. Ayers) You did testify about the use of

7   exogenous election data Dr. Chen and others used to

8   make predictions about the Third District in Kansas;

9   is that correct?

10 A. That is correct.

11 Q. All right. And did you draw any conclusions about

12   the use of statewide election scores that were other

13   than the election for the district that we are

14   examining?

15 A. My conclusions dealt with the fragility of the

16   measures of partisanship that Dr. Chen and

17   Dr. Miller, I believe it was, had given that. Other

18   organizations have attempted to right these district

19   in terms of partisanship that I referenced in my

20   report, and they came away with different

21   conclusions.

22 Q. And what is is the impact of having fragility in

23   these election results applied to a redistricting

24   plan like Ad Astra 2 to predict the future of the

25   Third Congressional District?

1   A.   The problem is that, if different strategies give

2   different results, it makes it hard to put much

3   credence necessarily in one particular measure of

4   partisanship for a State or a Congressional

5   District.

6   If one measure predicts that a republican

7   will win and one measure predicts that a democrat

8   will win, the conclusion I would draw from that is

9   that it is, first of all, a very competitive

10   district, and it was nonpartisan groups some would

11   argue leaning to the left that predicted the

12   democratic candidate would win the Third

13   Congressional District under the enacted plan.

14 Q.   Dr. Chen predicted that the enacted plan would

15   result in a four-zero seat margin in favor of the

16   republicans. In your analysis, did you find that to

17   be true or something else to be true?

18 A.   The evidence I found was mixed on that particular

19   question as to what they expect, what people expect

20   to happen in that particular Congressional District.

21   I believe Dr. Chen and Dr. Miller forecast

22   a republican victory, but not overwhelming

23   republican victory. In preparation of my report, I

24   reviewed the Princeton Gerrymandering Project, which

25   forecast that the democratic candidate would win

1   that district, and also the PlanScore group, which

2   is partly staffed by Dr. Warshaw, predicted a

3   democratic victory in that district.

4 Q. You mentioned the PlanScore document. Did it give a

5   percentage of the likelihood of a democrat winning

6   the Third District under the Ad Astra 2 plan?

7 A. I believe the likelihood victory for a democratic

8   candidate was, in excess, of 60 percent.

9   MR. AYERS: I think we have all that in

10   evidence, so I'm not going to replow that ground. I

11   get some credit.

12   THE COURT: And notice I'm on my feet so

13   you can call that a standing ovation.

14   MR. AYERS: Appreciate that, Your Honor.

15 Q. (By Mr. Ayers) Did you look at Dr. Miller's report

16   when it came to his opinions on communities of

17   interest?

18 A. Yes, I did.

19 Q. And did you draw any conclusions from your review of

20   Dr. Miller's report and his opinions on communities

21   of interest?

22 A. Yes, I did.

23 Q. And what were they?

24 A. That he had not convinced me, as a reader of his

25   report, that he had identified definitive

1   communities of interest for the State of Kansas, nor

2   had he laid out a methodology by which one could go

3   in and replicate and come up with the same

4   conclusions he did. That, in short, it is a

5   judgment call as to communities of interest.

6 Q.   Do you remember what his focus was on communities of

7   interest?

8 A.   As I recall it was on an urban rural split in the

9   State of Kansas.

10 Q.   Are communities of interest more or less nuanced

11   than that?

12 A.   They're decidedly more nuanced than that. There are

13   a myriad of potential communities of interest.

14   Kansas, as with any state, could be sliced in

15   numerous ways.

16 Q.   What would some of those be?

17 A.   One might think about manufacturing industries

18   within a state, whether it is agricultural,

19   automobile manufacturing, farm implement

20   manufacturing, whether it is a service industry

21   district. Those would all be economic communities

22   that one could think of.

23   You could think of different types of

24   businesses that aren't manufacturing, for example,

25   universities, hospitals. You could think of, you

1   know, like I said universities. Those are the ones

2   that come to mind immediately.

3 Q.   With regard to your review of Dr. Miller's report

4   and you're background, experience, and experience in

5   litigating and redistricting, did you draw any

6   opinions with regard to whether or not the Ad Astra

7   2 plan was or was not consistent with the goal of

8   recognizing communities of interest?

9 A.   My conclusion that the Ad Astra 2 plan is a

10   recognized community of interest came by negation in

11   that I did not believe Professor Miller had

12   communicated that there was a definitive standard of

13   communities of interest.

14   Given that he was trying to make that

15   argument, I didn't find it persuasive, that I

16   concluded that the state did pay attention.

17 Q.   You've done quite a bit of study, have you not, on

18   partisanship as a factor that influences voting

19   behavior?

20 A.   Most certainly.

21 Q.   It's kind of special area for you, isn't it?

22 A.   That's one of my main areas of research over the

23   years.

24 Q.   And Dr. Miller in his report draws some conclusions

25   about partisanship and voting in Kansas. Did you

1 draw any opinions from reviewing his report on

2 partisanship being either was it is or is not a

3 control factor in the influencing voting behavior in

4 Kansas?

5 A. I would argue that it is an important factor in

6 explaining voting behavior, but there are other

7 variables that would be important in explaining why

8 people vote the way they do.

9   I believe it was in Professor Miller's

10 report. He showed the range of votes for the

11 democratic candidates was somewhere between 33

12 percent and 48 percent, and if you look at all

13 votes, and if it's two party vote the democratic

14 share in the last gubernatorial election was 52 and

15 half.

16   Going from 33 to 52 percent indicates to me

17 that there has to be something other than

18 partisanship that influences voting behave I don't

19 remember.

20   If it was partisanship we would so the same

21 vote share for democrats in each of those elections.

22 Q. The Court in this case has heard a number of times

23 that the current democratic member of the United

24 States House of Representatives, Sharice Davids, was

25 endorsed by the Chamber of Commerce, a Democrat

1   endorsed by the Chamber of Commerce. Would that be

2   a factor that might influence a vote in the third

3   Congressional district?

4 A. I would imagine that if a democrat is endorsed by

5   the Chamber of Commerce it might be derisive but the

6   quote Country Club republican might be more inclined

7   to support her.

8 Q. You do know Johnson County then, don't you? That

9   was supposed to be a joke, a joke aimed at my

10   partner. The ultimate -- no, I won't put that on

11   the record. Just kidding. The rest of you can

12   participate in the joke if you want.

13   Dr. Miller indicated in his report that

14   registration is really not a factor in determining

15   voting behavior. Do you agree with Dr. Miller. I

16   think the party registration is a factor but not the

17   only factor.

18 Q. Why is it a factor in terms of trying to predict

19   voting behavior under the Ad Astra 2 plan?

20 A. I think, if one looks at party registration, we can

21   get a general sense to the inclination of voters.

22   I would not argue that everybody does vote their

23   party label as evidenced by my comment earlier but

24   if we look at elections we do see a high

25   correspondence between the two.

1 Q. Is the correspondence of party vote anything Kansas

2   as great as it is nationally or is it less than it

3   is nationally?

4 A. I do not know the answer to that question.

5 Q. Dr. Miller indicates that he thought that race was

6   foundational, a foundational element in Kansas

7   politics. Did you review that part of his report?

8 A. Yes, I did.

9 Q. Did you draw an opinion about his comment that he

10   thought that race was foundational in terms of

11   Kansas politics?

12 A. Looking over his report, I would see the argument as

13   being more plausible if we went back in time 100

14   years or so that race might be an important factor

15   in politics, but as I recall the evidence in his

16   report largely stops in the the 1920s where he's

17   talking about the role of race in politics in the

18   State of Kansas. So I concluded that it was not

19   part of the foundation of politics today.

20 Q. Dr. Miller used a 2020 Fox News poll with regard to

21   trying to measure race and ethnicity in terms of

22   trying to protect voter behavior. Did you draw an

23   opinion based upon his use of that exit polling?

24 A. As I recall he compared it to the census data on the

25   racial makeup of the state and then look at turnout

1   based on those exit polls.

2   It is not clear from the report that Fox

3   News and the Census Bureau used the same definition

4   of race and ethnicity, so it is difficult to throw

5   all those conclusions.   May I refer to my report?

6 Q. You may. I'm on page 8 and 9.

7 A. On page 8 at the bottom I note that the exit polls

8   show that electorate is 87 percent white, which

9   Dr. Miller said the redistricting report, I believe

10   the redistricting showed white 78.2. So, he argued

11   that whites were overrepresented in the electorate.

12   Miller didn't note in that report that some

13   Hispanics might have picked white as a response to

14   the exit poll. In fact, the census says white

15   percentage in the state is 86 percent, which is very

16   close to the vote share or the voting population in

17   that past election and as the Census Bureau noted

18   people can identify both as Hispanic and white, and

19   that's not differentiated in the Fox News AP poll.

20 Q. This seems a little out of order, but would you

21   agree with Dr. Miller when he says that quote there

22   is no single way to define a community of interest?

23 A. Would could you repeat the question, please?

24 Q. Would you agree with Dr. Miller when he said there's

25   no single way to define a community of interest?

1 A. Yes.

2 Q. So, in conclusion, Dr. Lockerbie, did you or did you

3   not find that the enacted plan was demonstrated by

4   plaintiffs' experts to de discriminatory in either a

5   partisan or racial manner?

6 A. I saw no convincing evidence that it was

7   discriminatory.

8 Q. And did you, in reviewing the report and applying

9   your education and experience, did you determine

10   whether or not you believed that there was racial

11   polarization or racially polarized voting in Kansas?

12 A. I concluded from the evidence presented and

13   Professor Miller's report that there was racial

14   voting in the State of Kansas.

15   Given that whites and blacks did vote or do

16   vote differently, I did, however, further conclude

17   that the level of racial voting is substantially

18   less in Kansas than it is across the Nation.

19   If we look at minority voting at, say, the

20   presidential level for the last 50 years, whites

21   have voted republican in every presidential election

22   other than 1964 in my lifetime African-Americans

23   have voted democratic in every one of those election

24   by a substantially larger margins than the 60-40 or

25   65-35 margin that he had in his report.

1 Q. And did you determine from the reports that you read

2   whether or not -- did you form an opinion as to

3   whether or not you believe those reports showed that

4   there have been dilution of minority voting

5   strength?

6 A. I did not see support for that contention.

7 Q. And did you conclude either way, either that the

8   enacted plan was or was not within -- well within

9   the bounds of acceptable? Did you conclude one way

10   or the other?

11 A. Based on the evidence I saw, I concluded that it was

12   consistent with what is appropriate.

13   MR. AYERS: Thank you, no more questions.

14   THE COURT: Thank you, Gary.

15   THE WITNESS: Excuse me. Can I get a

16 bottle of water or a glass of water, please.

17   THE COURT: Absolutely you may. Gary, do

18 you all have bottled water, because I certainly

19 would give him a drink. Well thank you, Stanton.

20   THE WITNESS: Thank you.

21   CROSS-EXAMINATION

22 BY MR. JONES:

23 Q. Good afternoon, Professor Lockerbie. Stanton Jones.

24   I represent the plaintiffs. We met recently at your

25   deposition. How are you?

1 A. I'm doing well today.   I hope you're having a good

2   day.

3 Q. Your expert report in this case addresses the

4   analyses of plaintiffs' experts, Dr. Chen,

5   Dr. Miller, and Dr. Collingwood but not the other

6   the plaintiffs other experts, right?

7 A. That is correct.

8 Q. It says on page 2 in your report that you are asked

9   to address all six of plaintiffs' experts, but, in

10   fact, you offered opinions about only three of them,

11   right?

12 A. That is correct.

13 Q. Okay. Let's talk about your critique of Dr. Chen.

14   Dr. Chen conducted a redistricting simulation

15   analysis in this case, right?

16 A. That is correct.

17 Q. You have never conducted a redistricting simulation

18   analysis, correct?

19 A. That is correct.

20 Q. You do not have any published works regarding

21   redistricting simulation analysis, correct?

22 A. That is correct.

23 Q. You have never taught about redistricting simulation

24   analysis, correct?

25 A. That is correct.

1 Q. Your academic work has not focused on redistricting

2   simulation analysis, correct?

3 A. That is correct.

4 Q. You have been an expert in redistricting cases

5   before, but you did not perform any redistricting

6   simulation analysis in any of those prior cases,

7   right?

8 A. That is correct.

9 Q. You also did not analyze any other expert's

10   redistricting simulation analysis of the sort

11   performed by Dr. Chen here in any of those prior

12   cases, correct?

13 A. I'm not certain I understand the question. I did

14   review the work of others, but, if you're asking

15   that I do analysis in those other cases, no.

16 Q. Professor Lockerbie, you are not an expert in

17   redistricting simulation analysis, correct?

18 A. That is correct.

19 Q. More generally, none of your published works focus

20   on redistricting, correct?

21 A. That is correct.

22 Q. None of your published works focus on partisanship

23   in redistricting, correct?

24 A. On partisanship and redistricting, that is correct.

25 Q. None of your published works focus on measuring the

1 partisanship of districts in redistricting plans,

2 correct?

3 A. That is correct.

4 Q. Okay. Let's talk about your critique of Dr. Miller

5 next. Dr. Miller -- you are here for his testimony

6 yesterday afternoon, correct?

7 A. I believe so.

8 Q. Okay. Dr. Miller testified about Kansas political

9 geography, right?

10 A. Yes.

11 Q. Okay. You do not have any published works about

12 Kansas political geography, right?

13 A. That is correct.

14 Q. You have never taught about Kansas political

15 geography, right?

16 A. That is correct.

17 Q. You are not an expert in Kansas political geography,

18 right?

19 A. That is correct.

20 Q. Dr. Miller for the plaintiffs also analyzed Kansas

21 politics and Kansas political history. You heard

22 his testimony on those subjects?

23 A. Yes, I did.

24 Q. Okay. You are also not an expert in Kansas politics

25 or Kansas political history, right?

1 A.   That is correct.

2   THE COURT: Stanton, forgive me for just

3   one moment, please.

4   (Recess.)

5   THE COURT: Thank you. Excuse the delay.

6 Q.   (By Mr. Jones) Okay. Professor Lockerbie, I believe

7   you said you are not an expert on Kansas politics or

8   Kansas political history, which are subjects that

9   Dr. Miller testified about, correct?

10 A.   That is correct.

11 Q.   Dr. Miller also testified about Kansas communities

12   of interest; do you recall that?

13 A.   Yes.

14 Q.   You are not an expert in Kansas communities of

15   interest, right?

16 A.   That is correct.

17 Q.   And Dr. Miller also testified about the history of

18   race relations in Kansas, and you are not an expert

19   in the history of Kansas race relations, right?

20 A.   Other than referencing it occasionally in my

21   classes, no.

22 Q.   You've taught your students about the Brown v. Board

23   of Education decision?

24 A.   Yes.

25 Q.   Other than teaching your students about Brown v.

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 1        Board, you don't have any expertise in the history

 2        of Kansas race relations, do you?

 3   A.   Other than a little bit on the fights in the early

 4        years of the statehood and bloody Kansas so to

 5        speak.

 6   Q.   Okay.  Other than maybe passing through the airport,

 7        you've been to Kansas only one time before about 10

 8        to 12 years ago, right?

 9   A.   I believe that is right.  I may have visited

10        contrary to what I said at my deposition.  I may

11        have visited a second time with my wife when she was

12        up here receiving medical treatment, but that was

13        it.

14   Q.   Let's talk about your critique of Dr. Collingwood

15        who testified earlier today for the plaintiffs.

16        Dr. Collingwood analyzed issues of race in

17        redistricting in Kansas, right?

18   A.   That is correct.

19   Q.   Okay.  You do not have any published works regarding

20        race in redistricting, right?

21   A.   That is correct.

22   Q.   Your academic work has not focused on race in

23        redistricting, right?

24   A.   That is correct.

25   Q.   Dr. Collingwood conducted a racially polarized
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 1        voting or RPV analysis.  Your academic work has not

 2        focused on RPV analysis, right?

 3   A.   Not my academic work.  That is correct.

 4   Q.   You have no published works regarding RPV analysis,

 5        right?

 6   A.   That is correct.

 7   Q.   You did not conduct an RPV analysis in this case,

 8        correct?

 9   A.   That is correct.

10   Q.   Okay.  Other than analyzing the reports of the

11        plaintiffs' experts in this case you did not do any

12        independent work to determine whether there is or is

13        not racially polarized voting in Kansas, correct?

14   A.   As I did not have a lengthy period of time, that is

15        correct, no, I did not.

16   Q.   You didn't conduct an ecological inference analysis

17        to try to determine racially polarized voting,

18        right?

19   A.   That is correct.

20   Q.   But you do understand that ecological inference is a

21        widely recognized methodology to analyze the

22        presence or absence of racially polarized voting in

23        the context of American elections, right?

24   A.   Yes, it is more acceptable.

25   Q.   Do you have any view on whether ecological inference
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1   is an appropriate methodology in the field of

2   epidemiology or public health?

3 A. Epidemiology? My expertise there is very limited to

4   put it charitably.

5 Q. Okay. That's not what we're talking about today,

6   right?

7 A. As far as I know.

8 Q. Very good. You didn't -- and beyond ecological

9   inference, you didn't use any other methodology or

10   statistical or mathematical tool of any kind to try

11   to determine the presence or absence of racially

12   polarized voting in Kansas, right?

13 A. Other than reviewing the reports and commenting, no.

14 Q. Okay. Your report contains two criticisms of Dr.

15   Collingwood's analysis. I don't believe you

16   testified about them at all today, but they're in

17   your report, which is in evidence, so I'm just going

18   to ask you a couple questions about them. Okay?

19 A. Certainly.

20 Q. Okay. So your first criticism was that

21   Dr. Collingwood's report didn't show the statistical

22   significance levels or confidence intervals for his

23   racially polarized voting analysis, right?

24 A. I think I heard you say for confidence or I would

25   say or significance levels.

 1 Q. Correct. Let's just do it again. Your first

 2   criticism was that Dr. Collingwood's report did not

 3   show the statistical significance levels or

 4   confidence intervals for his RPV analysis, right?

 5 A. That is correct.

 6 Q. You now know that Dr. Collingwood, in fact, had

 7   provided the statistical significance levels and

 8   confidence intervals for his RPV analysis in the

 9   back up materials to his report, which were provided

10   to the defendant's counsel, right?

11 A. As I understand it, yes. I saw the confidence

12   intervals subsequent to our meeting. I had not

13   found the significance levels in that pile of

14   information that was sent to me, but the confidence

15   intervals were sent after I had gotten a good ways

16   into my report, so I did not see them.

17 Q. Okay. Do you recall that the spreadsheet you looked

18   at showing the confidence intervals has two columns,

19   one that says lower 95 and the other that says upper

20   or higher 95?

21 A. That is correct.

22 Q. You understand that to mean that the statistical

23   significance level is 95 percent, right?

24 A. Well, technically speaking, the significance level

25   would be .05. It would be a 95 percent confidence

1   interval.

2 Q. Okay. Very good. Your other criticism of

3   Dr. Collingwood was that you weren't sure how many

4   elections he examined, because in some places in his

5   report he said nine but in one place he said 10,

6   right?

7 A. That is correct. I believe we talked about that.

8 Q. You now know that that reference to 10 was just a

9   typo and Dr. Collingwood had already explained at

10   his deposition that that was just a typo. He used

11   nine elections that are listed in his report. You

12   understand that, right?

13 A. I believe you informed me of that, yes.

14 Q. That resolves the concerns or criticisms that you

15   had of Dr. Collingwood in your report, right?

16 A. That is correct.

17 Q. Okay. Let's talk about your specific critiques of

18   Dr. Chen and you wrote that Dr. Chen overstates the

19   outlier nature of the Polsby-Popper score for the

20   Kansas Congressional Districts, right?

21 A. Yes.

22 Q. Polsby-Popper is a measure of the geographic

23   compactness of districts, right?

24 A. Yes, they are the same measure.

25 Q. You've never measured Polsby-Popper scores, right?

1 A. That is correct.

2 Q. You're not an expert in measuring the compactness of

3   districts using the Polsby-Popper or any other

4   measure of compactness, right?

5 A. As I've only relied on what others have reported

6   with regard to compactness, no, I'm not an expert in

7   constructing them.

8 Q. When you wrote that Dr. Chen overstates the outlying

9   nature of the Polsby-Popper score for the Kansas

10   Districts, what you meant there is that the

11   Polsby-Popper score for the Ad Astra 2 districts is

12   not an outlier compared to districts in other states

13   besides Kansas, right?

14 A. That is part of it, yes.

15 Q. Okay. And you understand other states are different

16   shapes, they're not the same shape as Kansas, right?

17 A. That is correct.

18 Q. Some of them are significantly different shapes than

19   Kansas. Take Florida as one example that we

20   discussed at your deposition, right?

21 A. That is correct.

22 Q. Okay. You're familiar with the Kansas guidelines

23   and criteria for the 2022 Congressional

24   redistricting that were used in the Legislative

25   process here, right?

1 A. I'm aware of them from the reports, yes.

2 Q. Okay. You understand that these are the guidelines

3   for drawing the four Congressional Districts for

4   Kansas in 2022, right?

5 A. That's what I took them to be, yes.

6 Q. Okay. And I can pull them up if need be, but I'm on

7   the clock so trying to save time. Do you recall

8   that paragraph 4-A of the guidelines says that

9   districts should be as compact as possible; do you

10   recall that?

11 A. Yes.

12 Q. Okay. That guideline doesn't make any reference to

13   any other states besides Kansas, correct?

14 A. That is correct.

15 Q. It doesn't say -- this guideline doesn't say that

16   the Kansas districts in 2022 that their compactness

17   should be above average or better compared to other

18   states? It doesn't say anything like that, right?

19 A. That is correct.

20 Q. Okay. When it says that the districts in Kansas

21   should be as compact as possible, you understand

22   that means as compact as possible for districts in

23   Kansas, right?

24 A. That is correct.

25 Q. Okay. You did not do any analysis to determine

1   whether the districts in the Ad Astra 2 plan are or

2   are not as compact as possible for districts in

3   Kansas, correct?

4 A. My conclusion is drawn from looking at that along

5   with the other criteria and recognizing that there

6   have to be or there in all likelihood will be trade

7   offs amongst criteria.

8 Q. I asked you the same question at a deposition about

9   a week ago. Let's just take a look at your answer

10   there. Can we go to page 62 of the deposition

11   please and actually can we do pages 62 and 63 side

12   by side?

13   Okay. Professor Lockerbie, starting on

14   page 62 on the left on starting on line 23 I asked

15   you, you did not do any analysis to determine

16   whether the four districts in the Ad Astra 2 plan

17   are as compact as possible for districts in Kansas,

18   right? And what was your answer at deposition?

19 A. That is correct.

20 Q. Okay. And that was a true answer, right?

21 A. Yes.

22 Q. Great. You understand that the -- we can pull that

23   down. Thanks. You understand that the Ad Astra 2

24   districts compactness is an outlier compared to Dr.

25   Chen's simulated Congressional plans for Kansas,

1   right?

2 A. As much as by that particular score, yes.

3 Q. And you understand that the Ad Astra 2 districts

4   compactness is an extreme outlier in that those Ad

5   Astra 2 districts are less compact than all 1,000 of

6   the simulated plans.

7   The enacted districts are less

8   geographically compact than 100 percent of Dr.

9   Chen's simulated plans, right?

10 A. That is my recollection as measured by

11   Polsby-Popper.

12 Q. Okay. As measured by Polsby-Popper and Reock, too,

13   right?

14 A. I believe so.

15 Q. So as measured by either Polsby-Popper or Reock or

16   both of them all 1,000 of Dr. Chen's simulated

17   Congressional plans for Kansas in 2022 are more

18   compact than the Ad Astra 2 plan; you understand

19   that, right?

20 A. Yes.

21 Q. The remainder of your analysis regarding Dr. Chen

22   was about measuring the partisanship of districts or

23   evaluating likely election outcomes, right?

24 A. That is correct.

25 Q. Okay. And you understand that to measure

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 1      partisanship of districts in the enacted and

 2      simulated plans Dr. Chen used a composite of recent

 3      statewide election including president, governor,

 4      attorney general, and U.S. Senate, right?

 5  A.  That is correct.

 6  Q.  Okay.  You did not measure the partisanship of any

 7      districts either enacted districts or simulated

 8      districts using any different metric, other than Dr.

 9      Chen's, right?

10  A.  No independent measure of my own, but I did review

11      as we've gone over other forms of partisanship or

12      measures partisanship.

13  Q.  You don't have any partisan scoring metric that you

14      believe is better than Dr. Chen's, right?

15  A.  No.  My point is that the variety of measures show

16      different results, which would indicate to me a

17      certain frailty or fragility to the measurement of

18      partisanship.

19  Q.  Okay.  You noted that Dr. Chen didn't use or that

20      plaintiffs' experts didn't use party registration

21      data to measure the partisanship of districts,

22      right?

23  A.  I noted one of the plaintiffs' experts had negative

24      review of using that, and I was pointing out that

25      Kansas is different than some of the other states,
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 1      which would make it at least more likely to be

 2      important here than in, say, other states where you

 3      have open primaries.

 4  Q.  Okay.  You also did not use any party registration

 5      data to measure the partisanship of the enacted Ad

 6      Astra 2 districts or any simulated Kansas Districts,

 7      right?

 8  A.  That is correct.

 9  Q.  Okay.  So you sitting here you have no idea what the

10      results would be if someone used party registration

11      to measure the partisanship of either the enacted or

12      simulated districts, right?  You do not know that?

13  A.  That is correct.

14  Q.  Okay.  You do know, though, that American political

15      scientists well agree that party registration is a

16      lagging indicator of party affiliation across the

17      United States, right?

18  A.  That is correct.

19  Q.  Okay.  And you also understand this this phenomenon

20      that party registration is a lagging indicator of

21      party affiliation across the United States is a

22      problem if you want to -- if someone tries to use

23      party registration to measure the partisanship of

24      districts, right?

25  A.  That is correct.
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1 Q. Okay. You did no work to determine whether party

2   registration is or is not a lagging indicator of

3   party affiliation in Kansas as American political

4   scientists recognize that it is across the nation,

5   right?

6 A. That is correct.

7 Q. Okay. If you, yourself, were going to measure the

8   partisanship of districts, one thing you would use

9   is recent elections, right?

10 A. Yes.

11 Q. Okay. And one advantage of using recent statewide

12   elections as opposed to district elections is that

13   in statewide races ever voter faced the same

14   candidate, right?

15 A. Yes.

16 Q. Okay. There can also be an advantage to including

17   relatively lower profile races where the candidates

18   weren't as well-known, if you want to use recent

19   statewide elections to measure the partisanship of

20   districts, right?

21 A. That is correct.

22 Q. Okay. Of the races in Dr. Chen's composite partisan

23   scoring metric, the composite of nine elections, the

24   A.G. race was the lowest profile with the others

25   being president, governor and U.S. Senate, right?

1 A.   That's my recollection.

2 Q.   Okay.

3 A.   No, I would backtrack. I don't know how low profile

4   the attorney general race is in here. In general,

5   it's less of a high profile race.

6 Q.   Okay. Great the Princeton Gerrymandering Product

7   and PlanScore, which you discussed in your report,

8   they don't include the attorney general race, they

9   only include the races that are typically higher

10   profile, right?

11 A.   I didn't hear Princeton Gerrymandering Project or

12   product?

13 Q.   The Princeton Gerrymandering Project.

14 A.   Okay. You said product before, so I didn't know if

15   you were talking about something else. Neither of

16   those use the A.G. races, as I recall.

17 Q.   Okay. So it's possible in your mind that Dr. Chen's

18   metric is better than the Princeton Gerrymandering

19   Project metric, because Dr. Chen used the lower

20   profile attorney general race and the Princeton

21   Project did not, right?

22 A.   It is possible.

23 Q.   Okay. And the same is true of PlanScore. Dr.

24   Chen's metric might be better than PlanScore, right?

25 A.   That is right. It might be better.

1 Q. You did no work of your own to determine which

2   metric is better or worse, right?

3 A. No. My point to and my comment was that different

4   groups came up with a metric that led to different

5   predictions.

6 Q. Okay. One thing you told me that you said is that

7   -- I'm sorry. Strike that. One thing that you said

8   Dr. Chen could have done to measure district

9   partisanship is to measure it using each of the nine

10   statewide elections in his composite individually

11   one at a time to see how the results compared to

12   each other, right?

13 A. Yes, I recall that discussion we had.

14 Q. Okay. And you believe that if the results measuring

15   the district partisanship under each individual

16   election showed the same thing as his composite you

17   believe that that would bolster Dr. Chen's

18   conclusions, right?

19 A. That would make his argument stronger, yes.

20 Q. And, specifically, if the enacted District 3 in the

21   Ad Astra 2 plan was a partisan outlier using each of

22   the nine elections in Dr. Chen's composite

23   individually that would bolster his conclusion about

24   enacted District 3 being a partisan, a

25   pro-republican partisan outlier, right?

1 A. That is correct.

2 Q. Okay. And you understand now that Dr. Chen, in

3   fact, did do that analysis and included it in the

4   appendix to his report those figures A-1 through A-9

5   where he measured the partisanship of the enacted

6   and simulated districts using each of the nine

7   statewide elections individually, right?

8 A. Yes. As I recall, we went through that at the

9   deposition.

10 Q. Okay. And what those figures show is that using

11   each of the nine statewide elections from Dr. Chen's

12   composite individually District 3 in the enacted Ad

13   Astra 2 plan is always a partisan outlier in

14   comparison to the Chen simulations, right?

15 A. That is correct.

16 Q. Okay. In 100 percent of those nine statewide

17   elections enacted District 3 shows up as a

18   pro-republican partisan outlier compared to the

19   simulations, right?

20 A. That's my recollection.

21 Q. And you agree that this supports Dr. Chen's

22   conclusion then that the enacted District 3 in the

23   Ad Astra 2 plan is a partisan outlier in comparison

24   to the Chen simulations, right?

25 A. In comparison to the simulated districts he created,

1   yes.

2 Q. Let's talk about your specific criticisms of

3   Dr. Miller. You criticized Dr. Miller's analysis of

4   Kansas communities of interest, right?

5 A. That is correct.

6 Q. You said before you are not an expert in Kansas

7   communities of interest, right?

8 A. That is correct.

9 Q. One thing you said is that the plaintiffs should

10   have put forward more experts, multiple experts to

11   evaluate communities of interest in Kansas

12   independently, and see if they reached the same

13   conclusions, because, in your view, just having one

14   expert for our side is not enough, right?

15 A. My argument was that that would be a way of doing it

16   though given what I've heard here the judge did not

17   want tons and tons of experts showing up and after

18   three days I can appreciate that more.

19 Q. You also wrote that Dr. Miller's analysis of Kansas

20   communities of interest isn't empirical and by that

21   you just meant that it's not measurable or

22   replicable, right?

23 A. That is correct.

24 Q. One thing that Dr. Miller noted is that Wyandotte

25   County and Johnson County have been historically

Rosemarie A. Vieth, Official Court Reporter

1   unified, meaning they've been in the same

2   Congressional District for 90 of the last 100 years.

3   That's something that's measurable and replicable.

4   You could just go check if it's correct, right?

5 A. That the counties are in the same Congressional

6   District, yes, you could measure that.

7 Q. Dr. Miller also provided data about economic ties

8   between Wyandotte and Johnson counties including

9   about intermingled work forces, both the number and

10   percentage of Johnson County residents who come work

11   in Wyandotte County and vice versa, right, you read

12   that in Dr. Miller's report?

13 A. That is correct.

14 Q. It has a bunch of numbers about intermingled work

15   forces between the two counties?

16 A. Yes.

17 Q. That's something that is measurable and replicable.

18   You could check if all of that is correct, right?

19 A. For those specific counties, yes.

20 Q. Okay. Dr. Miller also provided information about

21   transportation connections between Wyandotte and

22   Johnson including that RideKC has hubs in both

23   counties.

24   The Kansas City area transportation

25   authority includes Wyandotte and Johnson Counties

1   and Wyandotte and Johnson Counties are in the same

2   service district for the Kansas Department of

3   Transportation.

4   Do you recall reading those connections in

5   Dr. Miller's report?

6 A. Yes. My point wasn't that Dr. Miller came up with

7   ludicrous communities of interest or anything of

8   that nature. I don't think he did.

9   My point was that it is a judgment call and

10   that others could come up with different communities

11   of interest, and he didn't convince me his was the

12   only way of doing it.

13 Q. Okay. Well, the criticism that you offered in your

14   report was that his analysis of community of

15   interest wasn't empirical, which you said means

16   measurable or replicable.

17   All the things that I justified, historically

18   unified, intermingled work forces, transportation

19   connection. Dr. Miller documented all those things

20   in his report with numbers and citations and they

21   could be measured and replicated, right?

22 A. But to look at communities of interest one would

23   want to look across the state not just at one

24   isolated component and assess and they may well be

25   assess whether those work force exchanges were

1   unique to that area or other counties should be

2   moved into other districts, because of similar work

3   force exchange.

4 Q. Got it and you wouldn't have any opinion on that

5   because you don't have any expertise in Kansas

6   communities of interest, right?

7 A. Nor did Dr. Miller present it in his report for

8   other counties.

9 Q. But my question is you couldn't speak to the

10   question of whether there are any other counties

11   that share communities of interest with folks in

12   Wyandotte or Johnson counties here in Kansas because

13   that's just outside of your expertise, right?

14 A. That is correct.

15 Q. Okay. You noted that Dr. Chen and Dr. Miller used

16   slightly different sets of prior statewide elections

17   to measure district partisanship, but you agree that

18   their conclusions are consistent with each other

19   about the partisan impact and intent of the Ad Astra

20   2 plan, right?

21 A. Yes.

22 Q. Okay. You wrote that Dr. Miller didn't sufficiently

23   consider what might be potential competing

24   communities of interest in Kansas; do you recall

25   that?

1 A. Yes.

2 Q. But you can't name any other potential communities

3   of interest in Kansas, because you don't have

4   expertise in that topic, right?

5 A. That is correct. I wrote that in some respects like

6   a reviewer of a manuscript would for a journal, and

7   it would be, in my opinion, incumbent on somebody

8   making the argument to convince the reader.

9 Q. You're just saying that you're not convinced?

10 A. That is correct.

11 Q. But you didn't do any independent analysis to

12   evaluate the question?

13 A. That is correct.

14 Q. Pull up Defendant's Exhibit 1059. This is Professor

15   Lockerbie's report. Can we scroll to page 9

16   paragraph 30, please.

17   Professor Lockerbie, this is in the section

18   of your report discussing Dr. Miller and you write,

19   Dr. Miller states -- I think it should say cites --

20   but anyway Miller states newspaper reports to mark

21   the history of racially motivated violence from 1861

22   to 1927.

23   We are not provided any corroboration of

24   these newspaper accounts and then it goes on. Do

25   you see that?

 1 A. Yes.

 2 Q. In his report, Dr. Miller actually cited a book that

 3   was published by a historian, Professor Brent

 4   Campney, that collected newspaper accounts over a

 5   period of decades regarding dozens of incidents of

 6   racially motivated violence in Kansas, right?

 7 A. That's my understanding.

 8 Q. Okay. And do you understand that in the book that

 9   Dr. Miller cited it includes newspaper accounts of

10   37 lynchings, 105 threatened lynchings, 42 racially

11   motivated homicides, 26 racially motivated killings

12   by Police, 26 race riots, and 22 mobbings; do you

13   recall seeing that?

14 A. That sounds correct.

15 Q. Okay. You didn't read or even get a copy of

16   Professor Campney's book, which is titled, This is

17   not Dixie: Racist violence in Kansas 1861 to 1927,

18   right? You never saw the book?

19 A. That is correct.

20 Q. Did you ever look up Professor Campney to evaluate

21   his credentials or learn anything about his book?

22 A. No.

23 Q. Okay. Can we pull up Professor Campney's CV, which

24   is publicly available on the website of his

25   university on the Internet. Dr. Lockerbie, this is

1   Professor Campney's CV on the Internet. You haven't

2   seen that before?

3 A. Correct.

4 Q. Professor Campney has a PhD from Emory. He's also

5   got a Master's Degree from KU here in Kansas in

6   Lawrence, both in American studies, right?

7 A. Yes.

8 Q. And you can see, if you scroll down a little bit,

9   faculty professions, faculty positions. He's a

10   professor now at one of the satellite campuses of

11   the university of Texas in the History Department,

12   right? He's a historian?

13 A. Yes.

14 Q. Okay. And, if you scroll down a little more, you

15   see his book, the book about racial violence in

16   Kansas won a couple of awards. It won an award for

17   the Prairie Heritage Book Award; do you see that?

18 A. Yes.

19 Q. And it also won another award for Outstanding

20   Academic Title from the American Library

21   Association; do you see that?

22 A. That is correct.

23 Q. If you scroll down a little more under career

24   honors, do you see that Professor Campney gave a

25   lecture at the State Library of Kansas at the Kansas

1   Legislature in Topeka when a copy of his book about

2   racial violence in Kansas was formally entered into

3   the Kansas State Library; do you see that?

4 A. Yes.

5 Q. Okay. With respect to all of those -- you can pull

6   that down. With respect to all of those news

7   accounts of racially motivated lynchings, race

8   riots, murders, all the rest, that are collected in

9   Professor Campney's book, you're not questioning

10   whether those accounts are accurate or not or

11   whether those things actually happened?

12   You were just saying that Dr. Miller didn't

13   corroborate the news of accounts by going and

14   pulling things like arrest records or records from

15   criminal trials to confirm what the newspapers have

16   reported.

17   That was your critique of Dr. Miller,

18   right?

19 A. That was part of the critique in that newspaper

20   accounts, quality of newspapers have changed

21   dramatically over the last 150 years ago or so with

22   regard to whether they were purposely inflammatory,

23   yellow press so to speak, or they have become more

24   nonpartisan, nonideological newspapers.

25 Q. Do you know anything about any of the newspapers

1   even one of them that's collected in Professor

2   Campney's book?

3 A. No, I have not read them.

4 Q. You did no work to figure out anything about any of

5   those newspapers, right?

6 A. No. I've relied on the report and the lack of

7   support for them in the report.

8 Q. Do you have any degree in history? Are you a

9   historian?

10 A. No, I'm a political scientist.

11 Q. Okay. Professor Campney is a historian, right?

12 A. That's what I gleaned.

13 Q. Okay. Can we pull back up the report that's Exhibit

14   1059, and go to page 7, paragraph 22. At the end of

15   paragraph 22, the last sentence, the last two lines,

16   sorry, three lines, the last three lines of

17   paragraph 22, this is a paragraph that you testified

18   about during your direct.

19   You wrote applying a fair and reasonable

20   interpretation of the terms of the Redistricting

21   Committee's Guidelines, I believe Ad Astra 2 is

22   consistent with the goals that the Redistricting

23   Committees set and does not offend any prevailing

24   norm in the field; do you see that?

25 A. Yes.

1 Q. You did not conduct any individual analysis of Ad

2   Astra 2 against each of the criteria in those

3   guidelines, right?

4 A. As I think I said, I relied on the reports provided

5   by the plaintiffs.

6 Q. Okay. I'm just going to -- I think my question may

7   be a little different.

8 A. Okay.

9 Q. You did not conduct any independent analysis of Ad

10   Astra 2 against each of the criteria in those

11   Redistricting Committee Guidelines, right?

12 A. No independent analysis. That's correct.

13 Q. When you say there that you believe Ad Astra 2 is

14   consistent with the goals and the criteria, with

15   respect to the communities of interest factor, all

16   you're saying is that reasonable people can

17   disagree, right?

18 A. And that Professor Miller did not provide compelling

19   evidence that he had identified the one set of

20   community interest that ought to be taken into

21   account.

22 Q. One of the other criteria you know from the

23   guidelines is that the new districts should preserve

24   the core of the existing Kansas Congressional

25   Districts when considering communities of interest,

1   right?

2 A. That is correct.

3 Q. Other than reviewing the reports of the plaintiffs'

4   experts that you critiqued, you did not do any

5   independent analysis to determine the extent to

6   which the core of the existing Kansas Congressional

7   Districts was preserved in the redistricting this

8   year, right?

9 A. The reports and the maps contained in those reports.

10 Q. Okay. Can we go to page 6 of the report and can we

11   blow up paragraph 21. Professor Lockerbie, in this

12   paragraph, which is in your -- this is in your

13   critique of Dr. Chen, you wrote that from the time

14   of the founding through 1840 a party could win

15   almost 50 percent of the vote in the house races for

16   a state and get zero wins as over one quarter of the

17   states had at-large elections; do you see that?

18 A. Yes.

19 Q. Okay. And you offered this observation as a

20   response to Dr. Chen's conclusion that in Kansas

21   under Ad Astra 2 democrats could win a substantial

22   percentage of the statewide vote, say, 40 percent or

23   more yet win zero seats in Kansas, right?

24 A. Yes.

25 Q. And what you're saying here is, well, okay, that's

 1   happened before. It happened in some states from

 2   1789 to 1840, right?

 3 A.   Yes.

 4 Q.   Okay. During that period Kansas was not a state

 5   yet, right?

 6 A.   That is correct from my understanding as of late.

 7 Q.   Okay. During that period women largely couldn't

 8   vote in much of the United States including in

 9   Congressional elections, right?

10 A.   Much of the United States. I don't know the exact

11   numbers of states, but, yes, women were not given

12   the right to vote nationwide until 1920.

13 Q.   And during this period, which is your comparison,

14   black people also largely couldn't vote in

15   Congressional elections in much of the United

16   States, right?

17 A.   That is correct.

18 Q.   Okay. And during that period, the Congressional

19   seats, that is the seats that you're talking about

20   in this comparison in paragraph 30, those seats were

21   apportioned among the states with African-Americans

22   being counted as three-fifths of a person, right?

23 A.   Through 1840, yes.

24 Q.   And you actually note here in the paragraph that one

25   of the reasons why this phenomenon could occur that

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 1      a party could win almost half the votes in the house

 2      races in the state and still get zero seats is

 3      because over a quarter of the states at that time

 4      held at-large Congressional elections, right?

 5   A. That is correct.

 6   Q. And at-large elections there that means statewide

 7      elections for seats in Congress, not using districts

 8      at all, right?

 9   A. Unless you consider the state a district, you're

10      correct.

11   Q. It's statewide.  It's electing members of Congress

12      in a statewide election, right?

13   A. Correct.

14   Q. That's what you meant by at-large elections there,

15      right?

16   A. Yes.

17   Q. Okay.  So, in a state that has at-large statewide

18      elections for Congress, which at that time was over

19      a quarter of the states, a party could win 49.9

20      percent of the vote in each of the statewide

21      at-large elections and that would mean that they

22      lose all of them, right?

23   A. That is correct.

24   Q. Okay.  And that's because those states didn't have

25      districts for members of Congress at all.  They
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1   elected them from statewide elections, right?

2 A. That is correct.

3 Q. Okay. So your point here in paragraph 30 is that --

4 A. Paragraph 30.

5 Q. Sorry, paragraph 21. Your point here in paragraph

6   21 is that some 200 years ago at a time when Kansas

7   wasn't a state, when women largely couldn't vote,

8   and black people largely couldn't vote, and when

9   over a quarter of the states held their

10   Congressional elections without using districts at

11   all, that you observed this phenomenon of a party

12   winning a substantial percentage of the vote and

13   losing all the seats.

14   That was your comparison, right?

15 A. The only point I would make in response to that is I

16   made no reference to the states that had at-large

17   elections, and I don't know whether they allowed

18   women and/or African-Americans to vote, but that,

19   yes, it occurred through 1840.

20 Q. Would you agree that that period of American history

21   was not a shining era for democracy, and we

22   shouldn't want to go back to it?

23 A. There are definitely important aspects that I do not

24   want to go back to.

25 Q. Okay.

1 A.   But I would also hasten to add one of the classics

2   on the American democracy was written by de

3   Tocqueville during that time period.

4   MR. JONES: Okay. I have no further

5   questions. I'm going to move to disqualify

6   Professor Lockerbie on a couple of the topics that

7   he was designated for, but I can wait until after

8   the redirect, if that's preferable.

9   MR. AYERS: I don't have any redirect.

10   THE COURT: We don't have redirect so let's

11   do it now.

12   MR. JONES: Okay. So, Your Honor, we're

13   going to move to disqualify Professor Lockerbie on

14   the topics of I believe all the topics that he was

15   offered, certainly racially polarized voting, racial

16   polarization. I believe there was a reference to

17   partisan gerrymandering.

18   Professor Lockerbie has credentials and

19   does have expertise in American politics, political

20   science, generally, but I believe what you heard

21   during the cross-examination is he doesn't have any

22   expertise in the -- to offer the specific opinions

23   that he's offered in this case or to testify or

24   opine about the topics for which he was designated.

25   He critiques Dr. Chen's redistricting

1   simulation analysis, but he says he's not an expert

2   and has no relevant qualifications or experience

3   with simulating redistricting analysis.

4   He critiqued Dr. Miller's analysis of

5   Kansas political geography, Kansas political

6   history, politics, race relations, communities of

7   interest, but Professor Lockerbie has admitted he's

8   not an expert in any of those topics and has no

9   relevant qualifications or expertise; and he, I

10   guess, he critiqued Dr. Collingwood's analysis, too.

11   I think those critiques were sort of

12   withdrawn. They weren't mentioned during the direct

13   examination, and he testified that they're basically

14   resolved now, because his critiques were,

15   essentially, mistakes, but, in any event, he doesn't

16   have expertise or qualifications to opine about

17   racially polarized voting analysis or race in

18   redistricting having no published works or academic

19   work on those topics at all.

20   THE COURT: Gary?

21   MR. AYERS: Your Honor, I think all this

22   goes to the weight of the testimony and not whether

23   or not Professor Lockerbie is or is not qualified to

24   talk about the four topics that we introduced, and

25   just because we talked about it in a different way

1   than counsel talked about it on cross-examination

2   doesn't make Professor Lockerbie unqualified to talk

3   about those four subjects in the way we offered him.

4   In other words, he's done a lot of work in

5   terms of voter attitudes how people vote, whether or

6   not there's racial polarized voting, voter dilution,

7   that sort of thing.

8   Most of his work is in race and politics,

9   and he's taught on all these subjects and so he's an

10   expert. So, we talked about it one way with

11   Professor Lockerbie.

12   Counsel avoided the way we talked about it,

13   but the topics were the same and it goes to the

14   weight of the evidence.

15   THE COURT: Thank you. Certainly Brad is

16   not as qualified as Drs. Collingwood, Chen, and

17   Miller, nonetheless the Court determines that he is

18   still an expert witness qualified to testify today

19   and I think your cross-examination speaks for

20   itself.

21   MR. JONES: Thank you, Your Honor.

22   THE COURT: And I don't know if he is here

23   subject to subpoena.

24   MR. AYERS: Voluntarily.

25   THE COURT: So free to go, free to stay,

1   not calling him again, Gary?   Gary, you will not be

2   calling him again?

3   MR. AYERS: I will not be calling him

4   again.

5   MR. JONES: Free to go to.

6   THE COURT: I'm sorry. Really we haven't

7   put the rule in effect, so it doesn't matter. Brad,

8   thank you so much for your testimony today, and you

9   are free to leave if you wish and welcome to stay.

10   THE WITNESS: As I have an airline flight

11   in two hours, I think I will hit the road, sir.

12   THE COURT: Thank you, again, professor.

13   Afternoon break, 15 minutes everybody good with

14   that? All right. We'll see you back in 15 minutes.

15   (Recess.)

16   THE COURT: Raise your right hand for me.

17   ALAN DANIEL MILLER,

18   called as a witness, having been first

19   duly sworn, testified as follows:

20   THE WITNESS: I do.

21   THE COURT: All right. Back on the record

22   in the same case we've been trying for the last

23   three days, and it looks like the appearances are

24   the same actually, and we are ready for your next

25   witness.   I've already sworn Dr. Miller in so ready

1   when you are.

2   MR. AYERS: Thank you, Your Honor.

3   DIRECT EXAMINATION

4   BY MR. AYERS:

5   Q. So, could you please give us your full name for the

6   record.

7   A. Alan Daniel Miller.

8   Q. And you are a professor; is that correct,

9   Dr. Miller?

10 A. That is correct.

11 Q. And where do you teach?

12 A. Western University also known as the University of

13   Western Ontario in London, Ontario, Canada.

14 Q. Where did you do your undergraduate work?

15 A. University of California, Berkeley.

16 Q. And what was your area of study there?

17 A. History.

18 Q. Then did you obtain a law degree?

19 A. Yes, I did.

20 Q. From where?

21 A. Northwestern University.

22 Q. In Chicago, correct?

23 A. That's in the City of Chicago.

24 Q. And then did you obtain a master's degree?

25 A. I did a few years later in social science from the

1   California Institute of Technology.

2 Q. Did you obtain a degrees beyond your master's at

3   Caltech?

4 A. I also received a few years later a PhD in social

5   science from Caltech.

6 Q. And what is your area of study or what was your area

7   of study?

8 A. My main focus is in economic theory and law and

9   economics.

10 Q. And are you involved in the study of axiomatic

11   measurement?

12 A. Yes. So my main focus within the areas of economic

13   theory and law and economics is primarily on

14   axiomatic analysis of methods of aggregation and

15   methods of measurements.

16 Q. Have you published in any leading economic theory

17   journals?

18 A. Yes. I've published in several of them including

19   theoretical economics, American Economic Journal,

20   microeconomics, the Journal of Economic Theory and

21   games and economic behaviors.

22 Q. Have you published in the -- did you say the Journal

23   of Law and Politics?

24 A. Also, that's not an economic theory journal so --

25 Q. My mistake.

1 A.   That's a separate category.

2 Q.   Have you published in the Journal of Law and

3   Politics.

4 A.   I have. I published one paper in 2017.

5 Q.   And do you remember the name of that paper?

6 A.   Flaws in the Efficiency Gap.

7 Q.   And what was your argument in the Journal of Law and

8   Politics in 2017 with regard to the efficiency gap?

9 A.   The argument that I and my coauthors made in that

10   article is that the efficiency gap has very serious

11   flaws as a measure, in general, and that it would be

12   a very bad idea to apply it as part of a judicial

13   test for partisan gerrymandering.

14 Q.   In terms of your writing, you said you were involved

15   with axiomatic measurement. Does that involve

16   axiomatic characterizations of different methods of

17   ranking?

18 A.   It does.

19 Q.   Could you, please, explain that to me and anyone

20   else in the courtroom who doesn't understand.

21 A.   So, I have several papers where we look at different

22   methods of measuring or ranking various objects of

23   concern to economists, social scientists, or

24   scientists in general.

25   So, for example, we might be concerned with

1   how we measure the efficiency of an economy. There

2   are a lot of different methods that are possible.

3   We might be concerned with how we measure

4   scholarly productivity, and there is something

5   academics care about there's something called the

6   h-index, for example.

7   And so what this area of work seeks to do

8   is to analyze measures very carefully by breaking

9   them down into the component properties that they

10   satisfy and, ideally, if possible, showing that a

11   measure is often the unique measure that satisfies a

12   set of desirable or potentially desirable

13   properties.

14 Q. Is the -- can you analyze the efficiency gap with an

15   axiomatic flavor?

16 A. Yes. So the way we would do that, and the way we

17   did it in that article is a little bit less formal.

18   The main idea is to take the basic ideas from the

19   axiomatic approach, look at properties that we might

20   want a good measure.

21   After all the efficiency gap is a measure

22   to satisfy, and then we analyze the question of

23   whether or not it satisfies that -- those

24   properties.

25   It's sort of a long -- there's, I think, a

1   long tradition of doing this in terms of various

2   measures.

3   A classic example would be from the late

4   1980s Peyton Young had a very famous article where

5   he used a similar approach the analyze measures of

6   compactness.

7 Q. And so with regard to, and you're not here to

8   necessarily talk about compactness, but just in

9   terms of your background and expertise, what is the

10   axiomatic characterization or flavor with regard to

11   compactness measures?

12 A. So, Peyton Young in -- I think the article is

13   published in 1988, but I could be off by a year,

14   looked at a large number of compactness measures

15   that had been floating out up to that time; and what

16   he did was he basically looked at, okay, here are

17   some measures.

18   Here are properties that we would like to

19   see in a measure. Which map measure satisfies these

20   properties? And at the time -- new measures have

21   been developed since then, but at the time he was a

22   able to go through and basically say here are some

23   basic properties we want to measure to satisfy and

24   none of the existing measures satisfies these.

25   So it made its year for scholars, one, to

 1   identify the potential problems with the existing

 2   measures, and, two, to set a bit of a guideline as

 3   to what we might look for in a better measure of

 4   compactness.

 5   Q. Is the efficiency gap the kind of measure?

 6   A. It is certainly, I mean.

 7   Q. Can you describe generally what the efficiency gap

 8   is and what it's supposed to measure?

 9   A. So the efficiency gap was introduced in a paper by

10   Eric McGhee in 2014 and later popularized more in a

11   paper by Eric McGhee and Nicholas Stephanopoulos in

12   the Chicago Law Review in 2015.

13   It is or at least tries to be a measure of

14   partisan gerrymandering. It works by counting up

15   something called wasted votes. Wasted votes are for

16   a party that wins all of the votes above the

17   majority plus one threshold required to win or the

18   party that loses it is all of their votes.

19   So, according to this measure, these are

20   summed up across districts, so we add up the

21   republican wasted votes from District 1, 2, 3 and so

22   on.

23   We add up the democratic votes from the

24   same wasted votes from the same districts. We

25   subtract the democratic wasted vote number from the

1   republican wasted vote number and we divide it by

2   the total two-party vote and that gives us a number

3   between minus 50 percent and 50 percent, which they

4   argue is a way to measure the level of partisan

5   gerrymandering in a district. I'm sorry, in a

6   state.

7 Q.   And in 2017 when you wrote your article for the

8   Journal of Law and Politics, you were not

9   specifically analyzing Kansas, were you?

10 A.   No.

11 Q.   So, in terms of this case, were you hired by

12   defendants or their counsel to give an opinion in

13   this case?

14 A.   Yes, I was.

15 Q.   And, generally, what were you asked to do?

16 A.   So, I was asked to revisit my analysis of the

17   efficiency gap. We think to see whether criticisms

18   are still valid, whether I still subscribed to the

19   criticisms, asked whether or not the efficiency gap

20   is applicable in a state like Kansas, and in

21   addition I was given a copy of Professor Warshaw's

22   report and asked to look at that as well.

23 Q.   So, do you consider -- do you believe that you have

24   expertise in axiomatic measurement, and it's

25   application of axiomatic ideas to law and legal

1   institutions?

2 A. I've been working on the application of the

3   axiomatic method and the axiomatic approach to law

4   and legal institutions since I was a graduate

5   student.

6   I've published a number of papers. The

7   efficiency gap is a measure. I study measures.

8   More to the point it claims to be and on some level

9   it is a mathematical measure, and I study

10   mathematical measures, right, measures from the

11   perspective of mathematics. And, so, from my

12   perspective this is fully within my domain.

13   MR. AYERS: So, Your Honor, we would offer

14   Dr. Miller as an expert in the area of axiomatic

15   measurement related to the application of axiomatic

16   ideas to law and legal institution, including the

17   efficiency gap and its application to partisan

18   gerrymandering in Kansas.

19   THE COURT: John?

20   MR. FREEDMAN: Thank you, Your Honor.

21   Following Mr. Jones's lead we have no objection to

22   the first part of the qualifications on axiomatic

23   measurement or the application of axiomatic

24   measurement.

25   We do have some questions that we'll bring

1   out I'll defer to cross about the application of

2   such measures to the efficiency gap.

3   THE COURT: All right. Thank you. He is

4   qualified in the issue of axiomatic measurement

5   particularly as it applies to the EGAP.

6   MR. AYERS: Jami, can I have Exhibit 1062,

7   please.

8 Q. (By Mr. Ayers) Do you recognize Exhibit 1062?

9 A. I do.

10 Q. Do you also have a copy in front of you?

11 A. I do.

12 Q. That's great. And you indicated that you examined

13   the efficiency gap and how Dr. Warshaw used the

14   efficiency gap to measure partisan or racial

15   gerrymandering in Kansas?

16 A. Just partisan gerrymandering. I've not analyzed

17   racial gerrymandering.

18 Q. That's right but partisan gerrymandering. Thank you

19   for that correction. So did you do that?

20 A. Yes, I did.

21 Q. Did you draw any conclusions?

22 A. I drew conclusions reminiscent of those in my

23   article from 2017 that the efficiency gap is not a

24   good measure of gerrymandering by any reasonable

25   definition of gerrymandering; and, furthermore, it

1   would be unwise, and I think probably the word I

2   should use is a bit stronger than that, but it would

3   be deeply problematic to apply it as part of a legal

4   test in Kansas.

5 Q. So, I think you've told us, generally, what the

6   efficiency gap is and, generally, how it's supposed

7   to work in terms of the wasted votes. Are there

8   assumptions that are made with regard to the

9   application of the efficiency gap to elections to

10   discern whether or not partisan gerrymandering has

11   been done?

12 A. So, the efficiency gap is built on a very simple

13   story of gerrymandering. In that story, there are

14   two types of people. There are republicans and

15   democrats. All republicans are the same. All

16   democrats are the same. Everybody votes. Everybody

17   votes as expected for their party.

18   And the problem of gerrymandering or,

19   sorry, the problem with districting is simply

20   drawing lines around these people. There's no

21   uncertainty.

22   There's no difference between Joe Biden and

23   Alexandria Ocasio-Cortez and Mitt Romney and Donald

24   Trump. Everyone is perfectly identifiable.

25   So, I think that's the basic story under

1   which the efficiency gap makes the most sense.

2 Q. And is there anything about those assumptions that

3   you take issue with?

4 A. So several of the assumptions are problematic.

5   There's the assumption of that everybody turns out

6   to vote. There's the assumption that there's

7   certainty as to who will vote for whom, and I think

8   there can be significant negative implications. I'm

9   sorry, problems that arise from not considering the

10   diversity of beliefs, opinions, and preferences of

11   the voters.

12 Q. Are there several versions of the formula that

13   constitutes the efficiency gap?

14 A. There are.

15 Q. Let me bring up three demonstrative exhibits, if you

16   would, Jami. And do you want the focus on the

17   numbers or the focus on the formulas?

18 A. Formulas, if you could.

19 Q. And what is described in the formulas one, two and

20   three?

21 A. Okay.

22   THE COURT: Hold on just a second, if you

23   would, Doctor. Is this an exhibit, Gary?

24   MR. AYERS: It is a demonstrative of what

25   was in Warshaw one and two, and then he's corrected

1   for number three.

2   THE COURT: Just identify what it is, if

3   you would, please.

4   MR. AYERS: Right. These are the

5   efficiency gap formulas that Dr. Warshaw testified

6   to and Dr. Miller is going to give his testimony as

7   to why Dr. Warshaw's formulas one and two are

8   problematic.

9   THE COURT: I'm sorry. Gary, bad question

10   on my part. Does it have an exhibit number?

11   MR. AYERS: It does not.

12   THE COURT: It does not. It's just

13   demonstrative exhibit what?

14   MR. AYERS: Yes.

15   THE COURT: Does it have a number?

16   MR. AYERS: Jami is going to look.

17   PARALEGAL: 1066-E.

18   THE COURT: All right. So, we're going to

19   call it 1066-E as demonstrative.

20   MR. AYERS: Thank you.

21   THE COURT: John, I see that may be

22   problematic.

23   MR. FREEDMAN: No objection to the

24   demonstrative coming in. I just would like to say

25   future objection while there is discussion of

1   formula one in Dr. Miller's report, I do not believe

2   that there's discussion of either the second or

3   third formulas on his slide. So, they're beyond the

4   scope of his report.

5   THE COURT: Gary, do you want to respond to

6   that, because, if true, then that would make two and

7   three irrelevant.

8   MR. AYERS: Well, there's a little bit of a

9   goose and a gander.

10   THE COURT: Okay.

11   MR. AYERS: The goose and the gander are

12   that we had witnesses like Dr. Chen who you remember

13   testified. I came up on cross, and I couldn't

14   figure out what he was talking about, because he had

15   supplemented his -- he had gone back and done

16   research to answer a question I'd asked him during

17   his deposition, and then he came out with something

18   new that I never heard before.

19   These are actually the formulas, and he can

20   do this without the chart, but it is so much easier

21   with the chart, because he's going to describe

22   Warshaw one and two and then correct the formula,

23   and, again, he can do it through testimony, but as

24   the demonstrative it's so much easier to follow his

25   testimony with the demonstrative.

1   THE COURT: The chart is not problematic.

2   So, as I understand the plaintiffs' objection, Dr.

3   Chen, used or discussed formula one.

4   MR. AYERS: Dr. Warshaw.

5   THE COURT: Warshaw, excuse me. Thank you,

6   but he didn't have anything to say about two or

7   three. Is Dr. Miller going to discuss that he

8   should have used two or three?   How do two and

9   three fit into our case today?

10   MR. FREEDMAN: Can I clarify, Your Honor?

11   THE COURT: Yes, please help me.

12   MR. FREEDMAN: Dr. Warsaw's report

13   certainly talks about one and two. Two is the main

14   formula he uses, and we spent some time yesterday

15   walking through it.

16   Dr. Miller's report only discusses formula

17   one, doesn't discuss formula two. I've never seen

18   formula three before ever in my life.

19   THE COURT: Okay. So perhaps to make it

20   simple so that even the Trial Court Judge can

21   understand it, one and two are formulas used by Dr.

22   Warshaw, and Dr. Miller can discuss them without a

23   problem.

24   MR. FREEDMAN: The question is whether he

25   can discuss formula two, because it's not in his

1   report. Dr. Warshaw clearly relies on formula two

2   in his report. Dr. Miller had ample opportunity to

3   analyze and discuss it in his report and be deposed

4   on it. He never disclosed anything today about his

5   opinions on formula two.

6   THE COURT: Okay. We'll get to that in a

7   moment. As formula three exists, that was not used

8   by Dr. Warshaw.

9   MR. FREEDMAN: Correct.

10   THE COURT: What is Dr. Miller going to

11   testify about three?

12   MR. AYERS: He's going to explain to, Your

13   Honor, the problem with the efficiency gap as used

14   by Dr. Miller, but he's going to do it visually as

15   opposed just to his spoken word, and it's going to

16   be easier for all of us to understand, if we have

17   the formula in front of us as opposed to just his

18   words.

19   THE COURT: With you as far as the

20   demonstrative nature of the exhibit. What does

21   three have to do with anything?

22   MR. AYERS: He's going to tell us what's

23   wrong with number one.

24   THE COURT: Okay.

25   MR. AYERS: And why when Dr. Warshaw

1   testified yesterday and Dr. Miller was in the room

2   why number two does not correct the problem with

3   number one.

4   THE COURT: Okay.

5   MR. AYERS: And to correct -- to fully

6   correct number one, Dr. Warshaw thought he corrected

7   number two. Dr. Miller is going to say, no, number

8   two does not correct. You need to do one more thing

9   which is number three.

10   THE COURT: All right. Okay. So he's

11   going to say three is applicable, because that's

12   what should have been used?

13   MR. AYERS: He's going to say that if Dr.

14   Warshaw wanted to correct number one, he went part

15   way. He did not go the whole way.

16   THE COURT: Yeah, got it. And the problem

17   that you're having, John, if I understand it is that

18   Dr. Miller in his expert report did not discuss two

19   or three?

20   MR. FREEDMAN: That's correct, Your Honor.

21   THE COURT: Okay. We've got it and let's

22   get started and then make your objections as we get

23   there if necessary. Perhaps to head off some of

24   these issues, do you agree with that that Dr. Miller

25   discussed one, but he did not discuss two or three

1   in his expert report?

2   MR. AYERS: Your Honor, to be honest I

3   don't know that I know, because this was Clayton's

4   witness.

5   THE COURT: Let me solve the problem for

6   you.   Dr. Miller, in your expert report that you

7   submitted, did you use formula two or three or

8   reference them?

9   THE WITNESS: I used formula two; however,

10   where it says S marg margin, rather than use that

11   exact notation, I used a different formula for the

12   exact same quantity. I put it in this formula,

13   because this is the one used by Professor Warshaw.

14   So I thought it would be easier to understand.

15   Number three is discussed in my report. So

16   there's some examples that go with it. Those

17   examples and calculations are all in the report, but

18   what I did not do in the report is write it out what

19   to me is a simple equation just to make it easier to

20   follow.

21   THE COURT: All right. So, John, if you

22   want to add something, do. If not, I'm under the

23   impression we'll cover it when we get there.

24   MR. FREEDMAN: Yes, Your Honor. If we

25   could ask the witness to actually identify exactly

1   where in his report he discusses it, because I don't

2   see two or three in the report.

3   THE COURT: Can you do that, Dr. Miller?

4   THE WITNESS: Can I look at my report?

5   THE COURT: Absolutely.

6   THE WITNESS: All right.

7   THE COURT: Just refer us to the portion of

8   your report where you discussed two and used three

9   without the formula.

10   THE WITNESS: Okay. So page 13 of the

11   report there is a simplified efficiency gap in favor

12   of that party. The seat margin is also known as the

13   proportion of seats minus one-half. The vote margin

14   is the proportion of votes minus one-half.

15   So, if you simply change the notation, the

16   equation, or the notation on page 13 is equivalent

17   to figure two and to what is in the equation two in

18   the Warshaw report.

19   With respect to the third one, let me find

20   it here. So, I believe it's on page 23. There

21   is -- I think it's the second and third full

22   paragraphs I discussed the problem of turnout

23   independents.

24   I don't put the formula. I only explain

25   what I believe turned out independents would imply,

1   and I put up the examples, and the formula is simply

2   the way to notate it, because I thought it would be

3   better to have three things to compare after I

4   listened to the testimony yesterday, and realized

5   that this still might be a matter of concern.

6   THE COURT: Thank you, Dr. Miller.

7   MR. FREEDMAN: Your Honor, there's a basic

8   notice issue. So with regard to formula three, you

9   can look at 23. There's no formula. There's

10   nothing that resembles what is being proposed in the

11   demonstrative.

12   If you look at page 13, formula two, not

13   the same. So, if they want to use a demonstrative

14   based on what's actually in the report or discuss

15   what's actually in the report, that's one thing, but

16   to come in here and present formulas that were not

17   in the report violates basic disclosure requirements

18   under the Kansas rules of procedure.

19   THE COURT: John, maybe I didn't understand

20   what Dr. Miller said. I thought he told me that the

21   formula used in 13 is equivalent to the formula in

22   number two in the example that Gary is starting to

23   use. Did I misunderstand what you said?

24   THE WITNESS: That's what I said.

25   THE COURT: Okay. So and as to number or

1   on page 23, you indicated that you did not actually

2   write the formula out, that the analysis that you

3   did is based upon that formula?

4   THE WITNESS: Correct.

5   THE COURT: Okay. So, I'll take it that

6   you and Dr. Miller disagree about that. I don't

7   find it so problematic that he cannot testify about

8   it today but note your objection for the record and

9   expound on it if you feel like you need to.

10   MR. FREEDMAN: Thank you, Your Honor.

11   THE COURT: I take it you don't need to

12   expound on it?

13   MR. FREEDMAN: Not at this time. I'll wait

14   until it comes up and then we will measure closely

15   whether it actually tracks what's in his report.

16   THE COURT: Thank you. All right. Gary,

17   have any idea where you were before we started down

18   that path?

19   MR. AYERS: We put 1066-E, the

20   demonstrative, up, and I hope that Dr. Miller can

21   explain it without a lot of questions. So,

22   Dr. Miller.

23   THE COURT: Are you talking about from me

24   or from you?

25   MR. AYERS: From me.

1   THE COURT: Off we go.

2   MR. AYERS: I know that you understand.

3   Q. (By Mr. Ayers) So, in terms of the demonstrative

4   exhibit, please explain to the Court and to all of

5   us how you would correct the efficiency gap formula

6   used by Dr. Warshaw?

7   A. Okay. If I may, I would like to start by describing

8   equations one and two.

9   Q. Do that.

10 A. So equation one is the same, well, essentially, the

11   same as the equation in Professor Warshaw's report.

12   That is the original efficiency gap formula. It is

13   the difference of wasted republican votes and wasted

14   democratic votes divided by total two-party vote.

15   The only difference between that and what

16   is in Professor Warshaw's report is that I think he

17   might have denoted the denominator as simply total

18   vote, but I'm quite certain what he intended was

19   total two-party vote. That's giving him completely

20   the benefit of the doubt, but I think that's what he

21   meant.

22   The second formula is one that I believe,

23   again, I may have changed the notation slightly, but

24   I think it's more or or less this one. Seat margin

25   minus twice the vote margin. Seat margin is the

1   proportion of seats won minus one-half. Vote margin

2   is the proportion of votes won, again, minus

3   one-half. It's the margin by which you sort of win

4   or lose.

5   And, again, that's exactly the formula I

6   also had on page 13 of my report.

7   The problem I see with formula two is that

8   Professor Warshaw refers to it. He's not the only

9   one to refer to it, but he refers to it as the

10   turnout adjusted formula.

11   And the problem I have with referring to it

12   as the turnout adjusted formula is we have to think

13   carefully about what it means to be turned out

14   adjusted.

15   So, when I think about turnout adjusted, we

16   may have one district where 300,000 voters turnout,

17   and another where 150,000 voters turnout.

18   The way I would think that we would adjust

19   for turnout is we would keep the vote shares of the

20   two parties equivalent, but then increase the number

21   till we get to 300,000 votes or you could keep the

22   vote shares of the other districts and decrease the

23   number until you get to 150,000 votes.

24   Now, one doesn't have to follow this. You

25   might assume that, if turnout increased, you would

1   only get for democrats or you would only get more

2   republicans, but since there's no clear, consistent

3   way of making that determination, I think this is

4   the most natural way of adjusting for turnout.

5   And the point I want to make is that if you

6   adjust for turnout the way I've just described that

7   is consistent with this property that you adjust for

8   turnout by equalizing population while keeping vote

9   share constant, you get formula three and not

10   formula two.

11   And so that would be the correct turnout

12   independent formula.

13   The rest of what was on this page of the

14   demonstrative was a simple example to work through

15   why it really -- why it can make a difference.

16 Q. How would that make difference in terms of

17   calculating the efficiency gap in Kansas?

18 A. Is there a way to see the whole page?

19 Q. Yes. Here we go.

20 A. Perfect. Okay. So sorry.

21 Q. She'll be back in a second. There you go.

22 A. I want to make sure I explain the example, first of

23   all, because I tend to work with stylized examples.

24   It's the easiest way for me to understand basic

25   concepts.

1   In the First District, we have 10

2   republicans and 30 democrats. The republicans have

3   a vote margin of minus 25 percent.

4   In the Second District, there are 90

5   republicans and 30 democrats. Now, note that 90 and

6   30 is exactly three times 10 and 30. I've simply

7   switched the parties.

8   So each party would win one district and

9   they're equal proportions. Turnout independents in

10   the way I view it would imply that each of these --

11   that this is not biased in favor of one party or

12   another.

13   And, if we apply the formula at the bottom,

14   that's exactly what we get. We add up the vote

15   margins, not the number of votes. If we were to add

16   up the number of wasted republican votes and the

17   number of wasted democrat votes, we would get in

18   District 1 10 wasted republican votes and nine

19   wasted democratic votes.

20   In District 2, we would have 29 wasted

21   republican votes and 30 wasted democratic votes.

22   And in both cases we'd have 39 wasted votes.

23   So, again, by formula one, we would have an

24   efficiency gap of zero percent, but, if we do what

25   Professor Warshaw does, and we add up republican

1   votes and we add up democratic votes, we end up with

2   100 republican votes, 60 democratic votes. That

3   gives us a seat margin of zero, because each one

4   wins one seat and a vote margin of 20 over 160 or

5   12.5 percent. Multiply that by two, we get minus 25

6   percent. This example was in the report.

7   And afterwards, I applied this to get a

8   sense of the extent to which it affected the results

9   for Kansas. That's what was on the other page of

10   the demonstrative.

11 Q. Let's see that.

12 A. Okay. So, I want to make a couple notes. For the

13   2014 election, it would have made very little

14   difference. Turnout was, approximately, a very

15   close to equal in all of the districts.

16   In 2018 and 2020, I'm not including the

17   other races, and I did not include them in the

18   paper, because there was a problem with uncontested

19   races, but in 2018 and 2020, there's a difference.

20   Professor Warshaw noted in his report that

21   by using figure two, you're not likely to get more

22   of a difference than two percent in favor of the

23   democrats, but here you can see very clearly that

24   first of all, when you move to figure two, equation

25   two to equation one, it shows about a five percent

1   change in favor of the republicans.

2   When I was able to correct using the proper

3   turnout adjusted formula, it goes down by two

4   percent, and two percentage points, which in the

5   case of 2020 is actually 25 percent difference.

6   So, how much matters is going to depend a

7   lot on the state on the election on the turnout

8   distribution, but the point I want to make is that

9   these assumptions can have a significant difference,

10   and if one is going to use a turnout adjusted

11   figure, it needs to be figured three, equation three

12   and not equation two.

13   Equation one, two, and three are equivalent

14   when turnout is exactly equal in all districts, but,

15   when they are not equal, you can make an argument

16   for equation one. That's the original efficiency

17   gap formula.

18   You can make an argument for equation

19   three, but there is no theoretical foundation for

20   equation two. The only advantage of it is it's

21   simple to calculate, but even by the logic of the

22   proponents of the efficiency gap equation two is not

23   valid.

24 Q. Now, Professor Warshaw claimed that the efficiency

25   gap behaves as one would expect if the party gains

1   seats without getting votes; is that true?

2 A. So, there's always the question of what it means to

3   say one would expect, but what I believe he was

4   referring to is a claim made by Stephanopoulos and

5   McGhee, that is Nicholas Stephanopoulos and Eric

6   McGhee that the efficiency gap satisfies the

7   efficiency principle.

8   Matter of face Stephanopoulos, Professor

9   Stephanopoulos and McGhee claim this is the main

10   thing that sets their measure apart.

11   It was shown -- the efficiency principle

12   basically says that, if a party gains seat share

13   without getting vote share, there are a couple

14   versions of it, but that's the simplest one, it

15   should show an advantage to that party.

16   A mathematician named, Ellen, I'm not going

17   pronounce her name unfortunately, but I think it's

18   Veomett wrote a paper in Election Law Journal in

19   2018 showing that fails when turnout is not equal.

20   The same logic can be applied to show that

21   it fails in the case of equation three, the properly

22   turned out adjusted formula.

23   Now, I don't know if that's what one would

24   really expect, but that's the claim that's been made

25   by proponents of the efficiency gap, and it does not

1   satisfy that criterion.

2   Q. What is counterfactual analysis?

3   A. So, counterfactual analysis is that when we look at

4   how well, say, it's commonly used in the partisan

5   gerrymandering literature is that when we want to

6   see how well -- I'm sorry, how biased, say, a

7   district is in favor of one party or the other, we

8   have to look at what would have happened had things

9   been done differently.

10   Professor Stephanopoulos and McGhee claim

11   that one of the big advantages of their measure is

12   that it does not require counterfactual analysis.

13   It can be applied simply with the numbers from the

14   election itself. Right.

15   All we need to do is look at what happened

16   in an election. We take the numbers. We apply

17   them, and so the great thing is we don't have to

18   make assumptions, which could be good. They could

19   be less good. It depends on the context, but they

20   could certainly be questionable about how things

21   would have happened otherwise.

22   Q. So, does the efficiency gap require counterfactual

23   analysis?

24   A. So, in some simple elections, it can be calculated

25   without counterfactual analysis, but the

1   practitioners who use it pretty much always use

2   counterfactual analysis.

3   And we heard that yesterday Professor

4   Warshaw's testimony, when he described the

5   imputation procedure. The imputation is a type of

6   counterfactual analysis.

7   It's a view or a prediction of what would

8   have happened, for example, had races been contested

9   in the state.

10   Now, there's not anything necessarily wrong

11   with using counterfactual analysis. This is done

12   quite often in economics, but it's very important to

13   keep in mind that, if we do counterfactual analysis,

14   there are lots of different ways of doing it.

15   The way we do it can affect the results.

16   So, we like to use methods that are very clearly

17   known, and understood, and studies, and evaluated

18   when we're doing this kind of analysis, so that

19   other people can check our work; and so, without too

20   much difficulty, we can look and we a have a bench

21   mark, and we can see whether or not it makes sense.

22 Q. Would you put up Exhibit 58, page 27, please, Jami,

23   Exhibit 58, page 27. This is a -- I need the next

24   table five. It's the bottom table, yeah. Do you

25   recognize table five?

1 A. No, I do not.

2   MR. AYERS: Who is Exhibit 58? I can look.

3 I probably have the wrong exhibit.

4   THE COURT: Gary, if you don't mind, in

5 order to speed things along, what if we just ask

6 Dr. Miller what it is that he wants and then you can

7 publish it?

8   MR. AYERS: I'm sorry. No, it's okay. No,

9 I have the wrong one. It's Professor Alan Miller's

10 Exhibit 1061, sorry. I had the wrong Miller

11 exhibit, page 27.

12   THE COURT: Help him.

13   THE WITNESS: Try page 41.

14 Q. (By Mr. Ayers) I'm sorry, page what?

15 A. 41.

16 Q. 41.

17 A. Right.

18   THE COURT: Thank you, Dr. Miller.

19   MR. AYERS: Good suggestion, Your Honor.

20 Q. (By Mr. Ayers) So, do you recognize table five

21   there?

22 A. I do.

23 Q. Okay.

24 A. Believe it or not.

25 Q. Yes. So, what does Miller table five tell us?

1 A.   Okay. So, here I wanted to just try to point out

2   why the counterfactual analysis is needed. It's

3   possible that had I heard Professor Warshaw's

4   testimony first, I might not have put it in, but

5   because his report did not mention imputation, it's

6   mentioned in the papers that he refers to, but not

7   the report itself, I wanted to try to just get a

8   sense of how important these counterfactuals are by

9   trying to compute the 2012 Kansas Congressional

10   races without any counterfactual.

11   And to be clear, I think Professor Warshaw

12   would agree with me that it would lead to an absurd

13   result, but I just want to point out what happens

14   and why it does that.

15   In the First District, we have a completely

16   uncontested race, right? Without an imputation, we

17   would have to assign half or almost half of those

18   wasted votes for the republicans.

19   Second District is a contested race. We

20   would apply in the usual way.

21   In the Third District, it is a contested

22   race, but it is not contested by democrats. And so,

23   again, we would treat it as an uncontested race,

24   because the way the efficiency gap is used, not

25   parties other than democrats and republicans are

1   treated as no turnouts.

2   And, in the Fourth District, it's contested

3   again.

4   So, when you do this, you get a result that

5   I think we can all agree is absurd. The republicans

6   win every seat and the efficiency gap says that's a

7   8.25 percent margin for democrats.

8   What Professor Warshaw did is he ended up

9   running a counterfactual. He calculated imputed

10   votes.

11   Now, I don't have his table. That is I

12   only was able to see his total vote and not that he

13   assigned to the two parties and not the imputation

14   line by line district by district; however, there

15   were a few thing that I found to be interesting.

16   One, the number of republican votes

17   dropped, and the number of democratic votes went up

18   significantly.

19   Now, the increase in the number of

20   democratic votes going up significantly makes sense,

21   if you have a district that's uncontested, certainly

22   like the First District, you're going to get a

23   decrease, at least, I mean, I can't say for certain

24   what will happen, but it is reasonable to expect you

25   will get a decrease in turnout certainly in the

1   number of democrats who are voting, quite possibly

2   in the number of republicans. It's less clear, but

3   quite possibly simply because there's one less thing

4   to vote for, one less reason to go to the polls.

5   Now, this was 2012. It was a presidential

6   year. It was the reelection of Obama, so it may

7   have not been the most important year, but it was a

8   presidential year that would have brought people

9   out, but something I notice is that in Professor

10   Warshaw's imputation, the total number of republican

11   votes ended up dropping, which, again, isn't

12   necessarily wrong, but it's just very important to

13   understand why it happens this way, because

14   decisions like this can affect the results, and I

15   think those are quite important.

16   MR. FREEDMAN: Your Honor, I would move to

17   strike that last response. It was both a narrative

18   response, not called for by the question, and it's

19   not in his report.

20   I think we would have noted based on

21   yesterday's testimony if there was a criticism of

22   Dr. Warshaw's imputation and Dr. Warshaw made quite

23   clear yesterday he did not impute for these

24   Congressional races, because he used statewide

25   analysis.

1   So, I'm quite confident that is not in

2   Dr. Miller's report. So, we would move to strike

3   that last response.

4   THE COURT: Gary.

5   MR. AYERS: My partner reminds me that

6   they've been asking their witnesses all through this

7   trial to respond to our reports when it wasn't in

8   their report, just respond to so and so, respond to

9   somebody else, respond to somebody else.

10   So, it's all within the scope of what our

11   experts have been talking about.

12   THE COURT: Okay. We've crossed this

13   bridge the other day. The mere lack of objection

14   from another party or about another witness doesn't

15   obviate the other side being able to make

16   objections, and, if they're valid, me sustaining

17   them.

18   So, what I'm more concerned about here, and

19   I understand you can say in the interest of fair

20   play, we didn't object, and so they shouldn't

21   object, but you both know the rules of evidence, and

22   that's not how it works.

23   What the Court is more concerned about was

24   this information contained in Dr. Miller's report,

25   if you know?

1   MR. AYERS: I don't know.

2   THE COURT: Shall we ask Dr. Miller?

3 Q. (By Mr. Ayers) Was this contained in your report,

4   Dr. Miller? So, the one thing that was not

5   contained in my report, just straight from the data

6   I did not put in the report, was the change in the

7   republican number of wasted votes. The rest was in

8   the report.

9   THE COURT: All right.

10   THE WITNESS: To my recollection.

11   MR. FREEDMAN: To be clear, Your Honor.

12   THE COURT: Wait just a second. Are you

13   done, Dr. Miller?

14   THE WITNESS: I just want to make one other

15   point.

16   THE COURT: Please do.

17   THE WITNESS: Which is that for the

18   calculation of the data set, which involved imputed

19   votes, right, because Professor Warshaw at one point

20   compared his estimated efficiency gap score for

21   Kansas across the efficiency gap scores of every

22   major Congressional race in the United States for

23   the past 50 years, give or take, I don't know 30 or

24   so of them.

25   For that what I understood him to say

1   yesterday was that there were -- that he used

2   imputation to calculate those numbers.

3   And because I believe it was used in

4   something like 39 percent of the races, I view that

5   as relevant. And I think the 39 percent figure was

6   in my report.

7   MR. FREEDMAN: Your Honor, to be clear,

8   this table itself is in the report. The criticisms

9   we just heard about Professor Warshaw and

10   purportedly not doing an imputation right nowhere in

11   his report. So, that's why I stood to strike.

12   THE COURT: All right. Your objection is

13   overruled. I am not striking that testimony, and,

14   John, I'm sure you'll cover that on

15   cross-examination. Go ahead, Gary.

16   Q. (By Mr. Ayers) I think Dr. Warshaw's exhibit is 114

17   and figure nine. Do you recognize this exhibit from

18   Dr. Warshaw's report?

19   A. I do. I saw it also yesterday.

20   Q. And is this the figure that you were just discussing

21   in terms of the nationwide elections and imputation

22   or is this a different figure?

23   A. This figure covers the imputation of nationwide

24   elections and it compares it to his estimated

25   scores, efficiency gap scores, for the various plans

1   that have been proposed in the current redistricting

2   cycle.

3 Q. Is the efficiency gap comparable across the 50

4   states across the years?

5 A. So, when I look at this graph, what I notice is that

6   Kansas had plans that were introduced by democrats

7   and introduced by republicans. All of them are on

8   the left side of that graph.

9   What that tells me is presuming that the

10   democrats weren't trying to optimize the map in

11   favor -- also in favor of republicans -- it seems

12   unlikely, but please tell me if you think I'm wrong,

13   what I think it means is that the range of plausible

14   efficiency gap scores for Kansas might be

15   constrained, might be different than the range of

16   possible efficiency gap scores for a different

17   state, possibly because of factors like geography.

18   This is one of many factors that would make

19   it hard to compare the efficiency gap across states.

20 Q. So, is the efficiency gap a good measure of

21   efficiency or relative inefficiency?

22 A. So, I think we need to define our terms, right,

23   efficiency can mean lots of different things.

24   Professor Warshaw also used the phrase relative in

25   efficiency as far as I recall yesterday.

1   And so, I'd want to think about what a

2   measure of relative inefficiency would be. They

3   talk about wasted votes. I think most of us would

4   agree that nobody likes waste.

5   Waste is a bad thing. Waste is a cost that

6   comes without a benefit, but most of us don't really

7   try to minimize waste. We don't try to minimize

8   costs. We try to balance costs with benefits.

9   So, when economists talk about this, we use

10   terms like marginal costs and marginal benefit. And

11   here we might want to talk about what the marginal

12   cost of a vote is, and what the marginal benefits of

13   a vote is for a party.

14   Now, normally what we would do as

15   economists, we would measure these things in terms

16   of dollars, but that's really difficult and it's

17   also unnecessary, because we don't have to use

18   dollars as a yard stick instead or we can measure

19   them in terms of votes.

20   Now, the cost of a vote is really easy.

21   The cost of a vote in terms of vote is a vote. Each

22   vote costs one vote.

23   The hard part is measuring the benefit.

24   And this is where we have to be a little careful

25   when we think about the efficiency gap. So, the

1   benefit that the efficiency gap ascribes to the

2   first vote is zero and that makes it a wasted vote,

3   because there's a cost of one vote. There's no

4   benefit, and it's zero.

5   The benefit of the second vote is zero. So

6   on and so forth all the way until you get to the

7   50th percentile, and, if you have, say, an even

8   number of vets, if you've got 100 votes, and you get

9   up to the 50th vote, it's still zero, but then the

10   first vote that crosses the threshold resets the

11   counter of waste.

12   And, now, no votes are wasted again until

13   you get to the next vote, and it sets it -- the way

14   the benefit of the next vote is zero, again, and so

15   on and so forth until you have all the votes in the

16   state.

17   So this means that the benefit is of a vote

18   is, sorry, the benefit of a seat is equal exactly to

19   50 percent plus one give or take a half a vote of

20   the votes.

21   That's a measure of benefit. As a

22   cost-benefit measure you can call that a measure of

23   relative inefficiency and that would define the

24   efficiency gap, but it has some problems. I don't

25   know if you want me to go into this now or --

1   Q.   Go ahead.

2   A.   The problem with it or the problem that I see, and

3   my coauthor saw in 2017 is that, if it's a measure

4   of relative inefficiency, it has to be the case --

5   two things have to be true.

6   One thing that has to be true is that the

7   measure has to be zero whenever there is no

8   gerrymandering, because this measure of relative

9   inefficiency is meant to be a measure of

10   gerrymandering.

11   If there's no partisan gerrymandering, the

12   measure has to be zero.

13   Now, if you have a case, it's not a

14   realistic example. I know that and for some people

15   that matters. For economic theorists, because of

16   the way our methodology works it does not, but if

17   you a case where all the republicans win all the

18   seats and the democrats win none, the cost of the

19   democrats is zero. The benefit of the democrats is

20   zero. So their net cost is zero.

21   That implies, because the overall measure

22   has to be zero, that the net cost of the republicans

23   in that case and the net benefit of the republicans

24   have to be equal.

25   Since republicans have got 100 percent of

1   the votes, their benefit of a seat must also be

2   equal to 100 percent of the votes.

3   I think this is very natural. It's very

4   natural, because if, I mean, I may have a bias here,

5   but if I hear that the republicans won a district by

6   60 percent, I don't think they suffered a loss in

7   winning by more votes than they needed.

8   I think they got a benefit by being able to

9   get all of the power with less than the full consent

10   of those voting.

11   And that's what this adjusted measure of

12   benefit, which I think is implied by the logic of

13   the efficiency gap would really be.

14   So, I don't think on those grounds that the

15   efficiency gap is a good measure of relative

16   inefficiencies.

17 Q. What is the unambiguous case in terms of

18   gerrymandering where we know what the right outcome

19   is?

20 A. So, there are a couple unambiguous cases. One that

21   I just mentioned, which I think is a very clear

22   case. It's not a realistic case, but we expect that

23   -- can I pause for a second and go back?

24   I just want to make a point that we care

25   about unambiguous cases, because measures are often

1   quite opaque. You can go out there and say I've got

2   a measure and this is what it is whether you can

3   claim its good and say we eyeball it or compare it

4   with other measures, but it's very hard for us to

5   really know what's going on with a measure.

6   So, what we want to do is we want to

7   compare the measure. We want to test the measure in

8   those cases where we know there's an unmistakable

9   right answer.

10   The unmistakable right answers, one of them

11   is the case that I just described where 100 percent

12   of the votes in a state go to one party in a model

13   where there's only two kinds of people and the

14   democrats, for example, don't exist; that cannot be

15   said to be gerrymandered. Right?

16   The second unambiguous case is one that

17   Professor Stephanopoulos -- sorry -- Warshaw

18   mentioned yesterday. A little bit tired. And

19   that's the case where there's only one district.

20   In the first case, the efficiency gap gives

21   what's agreed to be a nonsensical result, which is

22   that if everyone the state is republican, the state

23   is gerrymandered heavily in the favor of democrats.

24   In the second case, at least in the 25 to

25   75 percent range, the efficiency gap merely becomes

1   a measure of how close the race is, but in both

2   cases it gives the wrong answer.

3   Now, I think yesterday Professor Warshaw's

4   response was, well, we clearly don't use the

5   inefficiency gap in the place where it gives a

6   nonsensical response, but it's pretty good

7   everywhere else.

8   And that's not the approach that would be

9   taken by people in my field by economists who work

10   with measurements, because unless we have a very

11   well-stated, clear reason, and justified reason for

12   constraining the measure to only certain values, we

13   would have to look at whether the logic of the

14   measure implies something wrong in a clear case.

15   And those are the clear cases.

16 Q. Is there a best measure of relative inefficiency?

17 A. I think, if we're going to use a concept of relative

18   inefficiency, we would probably use the measure that

19   assigns the benefit of the seat to be equal to 100

20   percent of the votes.

21   That measure is also very intuitive,

22   because that measure is deviations from

23   proportionality.

24   Now, I'm not claiming this a good measure.

25   I don't think you're going to get the right answer

1   by looking at a measure of relative inefficiency.

2   It fails in the case of a one district state.

3   And we do not have -- if we wanted -- if we

4   believed that was the right system, we could just as

5   easily implement that by changing our political

6   system to what many other countries use, and what

7   I'm quite familiar with, having lived in one of

8   those countries as to a proportional system.

9 Q. This is not -- the efficiency gap is not

10   proportional?

11 A. No. No. What I would call the efficiency gap is

12   quasi-proportional.

13 Q. Go ahead?

14 A. So, it looks at the proportion of seats and the

15   proportion of votes at least in figure two, which

16   is, again, I don't think that's the right way to

17   view the efficiency gap except in the case where

18   there's pure turnout, but it's the version that

19   Professor Warshaw used.

20   And it's easier to think about this

21   sometimes, if we just assume equal turnout for the

22   sake of the thought experiment.

23   That I would call quasi-proportional,

24   because it looks at the comparison between the

25   proportion of votes and the proportion of seats, but

1   it contains a winner's bonus.

2   So, for every additional percentage of vote

3   share you get, you get your seat share goes up by

4   two percent. Sorry, the ideal seat share goes up by

5   two percent.

6   We could also just as easily adopt that in

7   a proportional system as well, right?

8   Rather than say we just count the number of

9   votes you get, and, if you have 55 percent, we would

10   give you 60 percent of the seats.

11   That might seem a little bit crazy, like, I

12   don't know any proportional system that's adopted

13   anything like that, but any objection we would have

14   to that form of a quasi-proportional voting system

15   would also apply in principle to the efficiency gap.

16 Q. So, what test do Stephanopoulos and McGhee advocate

17   for Congressional Districts?

18 A. So, they advocate that for Congressional Districts

19   we use a two-seat threshold, that is if the

20   efficiency gap is greater than -- if a party will

21   get more than two seats, sorry, two seats more than

22   an efficiency gap of zero effectively where an

23   efficiency gap would apply, then they argue it

24   should be held to be presumptively invalid subject

25   to a second stage of review.

1 Q. Hold that for a second. Jami, could I have

2   Dr. Miller's report 1061, page 18. We need the

3   figure two blown up. I think you just mentioned

4   figure two; is that correct?

5 A. What?

6 Q. Did you just mention this figure two?

7 A. No. Mentioned the two-seat threshold.

8 Q. Okay. Go ahead.

9 A. This is a good picture of it though. I'm proud of

10   it. I put some work into it. So, should I describe

11   the picture?

12 Q. Go ahead. Right. So, this is a picture I plotted.

13   I was trying the make sense of the two-seat

14   threshold. I want to be completely honest here.

15   When I first looked at this in 2017, this made no

16   sense to me why you would use a two-seat threshold,

17   because it treats big states differently than small

18   states?

19 Q. What is the two-seat threshold?

20 A. It was a test that was advocated by Professor

21   Stephanopoulos and McGhee. It's the only actual

22   clear test I've ever seen advocated for the use of

23   the efficiency gap in Congressional redistricting,

24   and it says that if you have more than -- if your

25   efficiency gap gives you a result that's more than

1   two seats away from what you would have got with an

2   efficiency gap of zero, then your district plan

3   should be held to be presumptively invalid.

4   On this chart, I've plotted two things.

5   One, I've plotted by using Professor Warshaw's data,

6   I've plotted the efficiency gap scores that he's

7   calculated using imputation for every major

8   Congressional race for the past 50 years.

9   There are a couple missing, because they're

10   few from Vermont, which, I think, is a one-district

11   state anyway that are in there.

12   For some reason the state of Louisiana was

13   left out of the data set. There are a couple points

14   that are clearly mistakes, because they are not

15   within the right range but for the most part that's

16   the picture.

17   I've used a very semiopaque shading, a

18   translucent shading for the dots so that dark areas

19   indicate areas of greater concentration, because

20   otherwise you would see sort of a blob.

21   This is also a figure that Professor

22   Warshaw replicated a version of yesterday and he

23   took off the first three rows to show the effect of

24   the others. I think he also made it completely

25   opaque, which removed the shading.

1   But when I saw this picture, I then plotted

2   the two-seat threshold, which the blue lines, and I

3   realized something here that I think because of the

4   general rule that variance is decreasing in the size

5   of a sample, which is just general rule in

6   statistics.

7   I'm not sure that applies in every single

8   case but gave me an intuition. Sample variance

9   tends to decrease of the size of a sample. I

10   realize that the efficiency gap scores might be

11   getting closer together as the number of districts

12   increase, and that's what we see pretty much in this

13   chart.

14   If you look at the shading, it becomes

15   pretty clear that the efficiency gaps have a

16   narrower range and less variance as you move to the

17   right.

18   It's not perfect, but there's a pretty

19   unmistakable -- what looks to me like a pretty

20   unmistakable trend. When I saw this, I realize

21   that two-seat threshold, while I don't accept that

22   the efficiency gap is a good measure at all, but, if

23   one were to use the efficiency gap, the two-seat

24   threshold makes more sense than I originally

25   anticipated. So, that's the blue line.

1 Q. Would that be applicable in Kansas?

2 A. Would it be applicable? You could apply it, except

3   that in Kansas it would imply that there could never

4   be a gerrymandered district. There can never be

5   partisan gerrymandering, because in any state with

6   four or fewer districts, every plan would be deemed

7   acceptable by this threshold.

8   I still think that's a weakness of the

9   measure and of the approach, not because I think

10   that you should use a different threshold for the

11   efficiency gap, but I don't think at least when this

12   was proposed to be used on the federal level.

13   Right?

14   The original goal of McGhee and

15   Stephanopoulos was to try to convince the median

16   justice on the U.S. Supreme Court, because of some

17   Federal Court decisions, which I guess I should

18   probably refrain comment on, because I'm not trying

19   to give a conclusion on Federal Law here.

20   I thought that was a problem, because in a

21   small state like Kansas it would imply that there's

22   no partisan gerrymandering, and I don't think that

23   would be the consensus of people in this room that

24   would be impossible for gerrymandering in Kansas,

25   but this is the only test that I know of that's been

1   proposed.

2   Professor Warshaw did not suggest a test in

3   his testimony or in his report, and that test by the

4   efficiency gap authors to suggest that's

5   inapplicable in Kansas.

6   I'm not convinced that what they -- I don't

7   want to speculate about their motives, but there are

8   basically two possibilities that I see here. One of

9   which is that they were to have thought that the

10   efficiency gap should not be applied in Kansas.

11   The other, which I think is more likely,

12   but you can draw your own conclusions is that they

13   didn't think carefully about small states when they

14   designed this measure.

15   The other reason to think they might not

16   have thought carefully about small states is, again,

17   the efficiency gap doesn't make sense, everyone

18   agrees, in a one-district state.

19   In a two-district state it is still pretty

20   clearly problematic, and we don't know exactly where

21   to draw the line. In a two-district state the

22   efficiency gap still looks something like a measure

23   of competitiveness where high scores indicate highly

24   competitive districts.

25   As a matter of fact, for actually any

1   number of districts, if you have a very, very, very

2   high efficiency gap score, so we only see them here

3   for one, two or three district cases.

4   So anyplace we have a high efficiency

5   score, a high score which means heavy gerrymandering

6   simply means a heavily competitive district. How

7   high it has to be varies from district to district.

8   We don't know where the cut off is. I

9   think that probably is a result of not thinking

10   carefully when designing the measure how it would

11   apply to Kansas.

12   Now, I don't want to go, you know, go

13   overemphasize this, because as I pointed out I also

14   don't think it applies to California, but I presume

15   that's not an issue here.

16 Q. Could I have figure three, please. It's on page 25

17   I think. What were you showing us in figure three?

18 A. So, figure three I put up because of a claim --

19 Q. And, to the extent that you can, I know it's late,

20   but our court reporter is going to die if we keep --

21 A. Oh, I'm sorry.

22   THE WITNESS: Is there any way I can get a

23   bottle of water from my bag?

24   MR. AYERS: Yeah. His bag is behind us.

25   (Inaudible discussion.)

1   THE WITNESS: Sorry. I've never done this

2   before.

3   THE COURT: Let us know if you need

4   anything.

5   THE WITNESS: Thank you.

6   THE COURT: I hope that came from your bag

7   because it was open.

8   THE WITNESS: Yeah, I'm pretty sure it came

9   from my bag.

10   MR. RUPP: It came from your bag, and I

11   assume it's you're bag.

12   THE WITNESS: I hope so. That's where I

13   put it. Okay. So, Professor Warshaw -- I'll try to

14   go slowly.

15   MR. AYERS: I understand. I'm trying to

16   build credit with the Court.

17   THE COURT REPORTER: Thank you.

18   THE WITNESS: Don't take this personally

19   but the Court are the people I care most about, not

20   the lawyers, as a lawyer myself.

21 A. So, I put this chart up for a reason. Professor

22   Warshaw had, I think, three points in his report

23   pointed out that his estimated efficiency gap for

24   the Ad Astra 2 plan was minus 22.7 percent, and he

25   pointed out what he wrote in the report, but

1   actually let me explain how I got here first.

2   He said that that is extreme, more extreme

3   than 95 percent of all districts and more

4   pro-republican than 98 percent of all districts is

5   all in his study from the past 50 years.

6   What I missed, because it only appears once

7   out of the three times its claimed is that he wrote

8   for all plans with at least three districts or all

9   states with at least three districts.

10   So, I tried computing it, and I got the

11   wrong result. And this is when I realized that

12   small states probably are going to have more

13   variants in their scores. In the whole range of

14   their scores, that I was able to come close to his

15   numbers with three. I got it exactly with four.

16   Yesterday he testified that it was a typo

17   and the right number is four, so that's all

18   consistent, but I wanted to see basically why choose

19   four?

20   Now, he said because it doesn't make a

21   whole lot of sense below four, but the thing I

22   wanted to point out is that if you choose four and

23   above, you're biassing your estimate.

24   So, I want to put aside the 98 percent

25   figure. I don't think the 98 percent figure is

1   meaningful at all.

2   I don't think the issue at this case that

3   Professor Warshaw or anyone else raises is that the

4   problem with the plan is that it's pro-republican.

5   Now, I'm not going to try to substitute my

6   views for over the Court. So, if the Court

7   disagrees with me, then please disregard what I'm

8   saying, but I think the allegation is that it's too

9   extreme.

10   We don't care about whether it's too

11   pro-republican or too pro-democratic in this

12   analysis. We care whether it's too extreme.

13   So the right number of his -- the only one

14   we should be concerned about at all is 95 percent,

15   but what I noticed is you get a 95 percent number,

16   if you consider four districts and above, if you

17   focus around four districts.

18   So, I actually just put in four districts,

19   because I wanted to try to keep it as close as

20   possible, and I got a number closer to 80 percent.

21   Professor Warshaw yesterday said that, if

22   you do four to seven or four to six, you get 90-91

23   percent. I checked that. It's 89 to 91 percent.

24   So it's close.

25   I also checked three to five or four to

1   five, and I got about 84-85 percent.

2   So, there may be something a little bit

3   different about four, but the general message is

4   that, when you only include larger districts, you're

5   biassing your results in favor of the results in

6   Kansas looking more extreme.

7   I don't think this was on purpose, but I

8   think it effectively this happens a lot in empirical

9   work, people actually put their thumbs on the scale,

10   and I think that's what happened here.

11   That's also probably why I stay away from

12   empirical work, because I would be afraid I would be

13   doing the same thing.

14 Q. If you could look at figure four on page 26. It's

15   the next page. What does figure four show us?

16 A. So here I just wanted to plot the same thing, but

17   slightly differently. I wanted to show the effect

18   or the relevance of the number of districts. So, I

19   took his 22.7 percent pro-republican threshold, and

20   I just plotted the proportion more bias towards

21   republicans, and the total proportion more bias in

22   general.

23   And here I think you you can see very

24   easily that it decreases quickly, and it drops off

25   pretty quickly after -- well, it drops substantially

1   after four. It drops even faster after five, six

2   and once you get to seven there are only a couple

3   cases where the proportion is higher. Often many of

4   those are simply single cases, except that the

5   proportionate number of districts goes down so

6   they're up a little higher.

7   So, this is basically just to illustrate

8   the point, that you're going to get the wrong result

9   or you're going to get a very biased result, if you

10 look at everything from four to 53.

11   I'm not claiming that these numbers would

12 be relevant one way or the other.

13   On the contrary I would claim that they're

14 not relevant, because there's been no claim of why

15 these numbers are relevant. There's no statistical

16 test, for example.

17   It's just a comparison, but if we're going

18 to do a comparison, if we think the numbers are

19 relevant, we do have to calculate them correctly.

20 Q. Does the efficiency gap assume uncertainty?

21 A. So the model that underlies the story of cracking

22 and packing on which the efficiency gap is based or

23 the story for that matter assumes no uncertainty.

24 If you were to assume uncertainty, I think that

25 would lead to different conclusions.

1 Q. And why does that matter?

2 A. Okay. So, there are a couple of reasons, but I

3   think the main one I'd like to focus on is that the

4   efficiency gap is touted as a measure of packing and

5   cracking. I don't have the words in front of me. I

6   do have the words in front of me, but I'm not

7   looking at the report.

8   So, what I believe Stephanopoulos and

9   McGhee said is it's basically a tally of all the

10   packing and cracking decisions made in creating the

11   district.

12   Under uncertainty the story that district

13   partisan districting committees would pack and crack

14   probably doesn't hold, and, when I say it probably

15   doesn't hold, there are a number of papers in the

16   economics literature that look at this, going back

17   from Owen and Grofman, which is a very well-known

18   paper from the 1980s and 1988, Friedman and Holden

19   in the AER in the American Economic Review in 2008.

20   There are several others.

21   They don't all come to the same conclusion,

22   because there are different ways of modeling

23   uncertainty and they lead to different results.

24   There's no clear consensus yet in the literature,

25   but in these papers, packing and cracking is no

1   longer optimal.

2   I'll give you a simple example, and that's

3   from what I believe was Owen and Grofman and that's

4   the story where, if what you want to do is, for

5   example, maximize control of a Legislature, what I

6   think even to some extent, if you want to maximize

7   seats, you don't actually want to get too close.

8   You don't want to hold the district by one vote.

9   There's going to be absurdity, and so you

10   want to build in a healthy margin, so that outside

11   of completely big swings, you get to keep your

12   seats. And you may give up some seats just to have

13   a higher probability of holding onto your other

14   seats. This depends on a lot of assumptions.

15   I'm not claiming that any one of these

16   models is right and any one of these models is

17   wrong, but in those stories, packing and cracking is

18   not the right answer.

19   So, the story where you have 51 to 49

20   districts, which under the efficiency score would be

21   horribly biased would be more than likely an

22   indication of a competitive race. And, so it

23   wouldn't be a useful measure of how much partisan

24   gerrymandering is going on there.

25 Q. The efficiency gap relies on two types?

1 A.   Right.

2 Q.   And why does that matter?

3 A.   Okay. So, the efficiency gap story is a story where

4   you only have democrats and republicans. You don't

5   have Trumpers and never Trumpers. You don't have

6   progressives or moderate democrats, I guess, and so

7   it misses -- well, it ignores -- I'm going to get to

8   misses in a moment -- but it ignores why this might

9   matter, and the reason I think it might matter is

10   that in a large number of economic and political

11   science models that study political behavior the,

12   sorry, one second -- in a large number of these

13   models these kinds of differentiations are what

14   drive the result.

15   Now, we care a lot about how people will

16   respond to the efficiency gap, right? We care a

17   lot about how people will reply to any constraints

18   that's imposed, and since I think people call

19   gerrymandering is something that I would probably

20   refer to as optimization, which is a less loaded

21   term.

22   I don't mean to imply that for anyone who

23   dislikes gerrymandering you should like

24   optimization. I'm not trying to make any normative

25   statement but since what we call gerrymandering is I

1   think optimization by partisans trying to do the

2   best for themselves subject to constraint, we need

3   to understand what would happen if we adopted a

4   different constraint.

5   So, in the paper, I put in a very simple

6   you could almost call it a toy model based off of

7   the median voter theorem, which is a work horse

8   result, a very standard based result.

9 Q. That would be, I think, page 31 of his report; are

10   we there?

11 A. Yeah, that's it.

12 Q. Okay. Go ahead. Sorry to interrupt.

13 A. All right. So, as I was saying, there's a result in

14   political science due to a Scottish economist named

15   Duncan Black. I think it's one of the classic most

16   basic results in political economy.

17   It's closely related to a model in an

18   industrial organization created by Harold Hotelling

19   in 1929 -- sorry. I'm speaking too quickly. I

20   apologize.

21   And the model basically looks at voters who

22   are on a left right dimension. As you can tell,

23   it's very simple. Everybody is either at one point

24   on the spectrum. They don't like getting further

25   away from their point. They want to be as close as

1   possible to their point on some level and the winner

2   in this model under some basic hypotheses is that

3   it's going to be the voter in the middle who wins or

4   the policies that will be enacted are the voters in

5   the middle.

6   And, so what I wanted to do was compare

7   five district states in one five-district state all

8   of the districts are five democrats and four

9   republicans. You have for each district three

10   leftists or progressives maybe, two center left, two

11   center right, two rightists, trying to be generic

12   with the names, and the winner in each district is a

13   center left candidate, because that's the median,

14   and because each district has a winner who is a

15   center left candidate, the Legislature is made up of

16   center left candidates and adopts center left

17   policies.

18   In plan, two, however there are safe

19   districts. Safe districts are safer from the risk

20   of having your plan rejected, because of its

21   efficiency gap score. And here, in the safe

22   democratic districts, you have five leftists each,

23   because they're the median, they control the

24   district.

25   In the republican districts, you have --

1   they're controlled by rightist candidates, but at

2   the end of the day it's the leftists who are the

3   three leftists in the Legislature, and as a

4   consequence you end up with leftist policies

5   enacted.

6   Now, I don't want to claim this is what

7   will happen in practice. It's a model. It's a

8   simple way that economists and formal political

9   theorists think about these problems.

10   There is some contention in the literature

11   that this is in practice safe seats don't

12   necessarily lead to more conservative districts.

13   MR. FREEDMAN: Your Honor, the witness has

14   been talking six minutes without a question, so I

15   would object it's a narrative. He's breaking into a

16   narrative.

17   THE COURT: Gary?

18   MR. AYERS: No, I think we were talking

19   about the median voter theorem, and the impact that

20   Dr. Warshaw had talked about in terms of he thought

21   the larger the efficiency gap the more extreme the

22   results, and Dr. Miller is trying to respond to

23   that.

24   THE COURT: The objection, though, is that

25   almost his entire testimony, all though no one has

1   objected to it until now, has been narrative. In

2   other words, you kind of say and take a look at

3   table three, and then he starts talking, and so

4   what's your response to that?

5   MR. AYERS: My response is I asked him to

6   take a look at table three and explain it.

7   THE COURT: Objection sustained. The

8   problem with that, Gary, is that if he says anything

9   objectionable, there's not really a question and

10   answer going on here. He's just talking, and so ask

11   him questions, and let him answer them, and,

12   Dr. Miller, it's clear to me that you have a lot of

13   ideas about this, but, in order for this process,

14   and what I mean the court process to work, your

15   attorney needs to ask you questions, and you need to

16   respond from there to them.

17   I don't mean you can't have some narrative.

18   You can, but, for example, look at table three and

19   you talk for six minutes is problematic. Okay.

20   Let's give it a shot, Gary.

21 Q. (By Mr. Ayers) I'm going to move on from this table

22   and ask you, you indicated or Dr. Warshaw indicated

23   that the efficiency gap has by empirically tested.

24   Does this alleviate all of your concerns about the

25   efficiency gap?

1 A. No.

2 Q. Why not?

3 A. So, when he says it's empirically validated or

4   empirically tested, what I understand that to mean

5   is that it's been tested against other metrics.

6   Now, if we think those other metrics are correct,

7   you can also just use the other metrics, but it

8   hasn't been tested against any absolute or agreed

9   upon definition of gerrymandering or partisan

10   fairness.

11   Regardless of whether or not that would

12   matter for an evaluation by, say, a political

13   scientist in the study of district redistricting, it

14   matters very significantly, if it were to be ever

15   adopted or used as part of the judicial test for

16   partisan gerrymandering.

17 Q. Jami, could you put up page 37 of Dr. Miller's

18   report, and I just want to look at number nine, the

19   conclusion.

20   So, Dr. Miller, in your report, you told us

21   what you did and then you had a first, a second, and

22   a third, and then you close on the next page with

23   the next page at the top of the page that the

24   implication of my findings is that the efficiency

25   gap should not be used to determine the legality of

1   the Congressional Districting plans in Kansas.

2   Your conclusion in paragraph nine are those

3   still your conclusion today?

4 A. Yes.

5   MR. AYERS: No more questions

6   THE COURT: Thank you, Gary. First of all,

7   how you doing? You need a break or are you all

8   right?

9   THE WITNESS: I think I need a little more

10   water. Can I get another bottle, because I'll go

11   through this one.

12   THE COURT: Absolutely. Tony, I don't know

13   if he has others in his bag or you have some.

14   MR. RUPP: I've got one across the halls,

15   so I'll run and get one real quick.

16   THE COURT: Thank you. With more water

17   you're okay then?

18   THE WITNESS: Yeah, I think I'll be okay.

19   (Recess.)

20   THE COURT: Back on the record, then, in

21   the same case that we have been litigating. The

22   appearances of the parties are the same or

23   substantially the same. We took a brief break, and

24   we're now ready to start cross-examination.

25

1   CROSS-EXAMINATION

2   BY MR. FREEDMAN:

3   Q.   Good afternoon. I'm John Freedman from Arnold &

4   Porter. I represent the plaintiffs. I always feel

5   think it's ridiculous when I'm say it's nice to meet

6   you because it's not the best of circumstances, but

7   I'm sorry we couldn't meet under different

8   circumstances.

9   You're not an empirical researcher, right?

10   A.   No. I am not an empirical researcher. Sorry. I

11   want to give a clear answer.

12   Q.   You don't teach a course that covers U.S. elections?

13   A.   I have not.

14   Q.   You've never taught any course on U.S. election

15   data?

16   A.   I never have.

17   Q.   You've never taught any course in polarization in

18   U.S. politics, right?

19   A.   I never have.

20   Q.   Turning to the scope of your analysis, you're not

21   here to offer an opinion on Professors Patrick

22   Miller, Jonathan Rodden, Jowei Chen, Loren

23   Collingwood, or Michael Smith, correct?

24   A.   That is not why I came.

25   Q.   Is it fair to say that you have no knowledge why

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 1      Kansas's Congressional Districts in Ad Astra 2 were

 2      drawn the way they were drawn?

 3   A. I think that would by a fair statement.

 4   Q. Your report did not purport to address the question

 5      whether a particular redistricting plan should be

 6      viewed as acceptable; is that right?

 7   A. That is correct.

 8   Q. You have not conducted any independent analysis of

 9      the Ad Astra 2 plan, correct?

10   A. No, I have not.

11   Q. And you're not opining that Ad Astra 2 is a

12      legitimate redistricting, correct?

13   A. I am not opining one way or the other about Ad Astra

14      2.

15   Q. And you would agree that when the republican party

16      is the political party given the task of drawing

17      district lines it is not possible to constrain the

18      republican party from working in its self-interest?

19   A. I would agree.

20   Q. I just want to touch briefly on your academic work

21      in this area.  Mitch, could we pull up 1061, page 4,

22      Dr. Miller's report and, if you could in Section 2,

23      if you could at the of the first paragraph highlight

24      the little phrase at the end.  I'm sorry, paragraph,

25      first paragraph, paragraph above that, and just
```

1   highlight the one that explicitly study scoring

2   methods.

3   This is discussing your research, correct?

4 A. That is correct.

5 Q. Now, that is a reference to your article Voting in

6   Corporations, correct?

7 A. Correct. I'm very proud of that paper.

8 Q. Let's introduce as Plaintiffs' Exhibit 755 the

9   article voting in corporations. Can we show that

10   up?

11   MR. RUPP: Has this been admitted?

12   MR. FREEDMAN: No, we're just offering it

13   through him.

14   MR. RUPP: Well, I think based on prior

15   experience if it's not admitted -- oh, I'm sorry.

16   This is not my witness. I need to be quiet.

17 Q. (By Mr. Freedman) Do you recognize this document?

18 A. I do.

19 Q. What is it?

20 A. It's a paper I wrote. It's called Voting in

21   Corporations. The paper -- do you want me to

22   describe it?

23   MR. FREEDMAN: No, just move for the

24   admission of 755.

25 A. It's the first part of the paper.

1   MR. AYERS: No objection.

2   THE COURT: Everybody slow down a second.

3   So, 755 is admitted without objection.

4   MR. FREEDMAN: We can pull that down,

5   Mitch.

6 Q. (By Mr. Freedman) The article Voting in

7   Corporations, the one you refer to in your report as

8   the one that explicitly studies voting methods

9   concerns shareholder voting, correct?

10 A. That's absolutely correct.

11 Q. Okay. Now, you offer opinions. We heard your

12   opinions on the efficiency gap, right?

13 A. I presume so. I gave them.

14 Q. You're not familiar enough to offer an opinion about

15   other partisan bias metrics, like, mean median,

16   declination, or partisan symmetry, correct?

17 A. I would not consider myself well-versed enough in

18   those metrics. I have not examined them carefully

19   enough to offer an expert opinion.

20 Q. On any of them?

21 A. On any of those.

22 Q. Now, Mr. Ayers asked you about an article that you

23   coauthored during your direct; do you recall that?

24   About the efficiency gap?

25 A. Flaws in the efficiency gap?

1 Q. Yes.

2 A. Yes, he did.

3 Q. Do you have any other published writings concerning

4   the efficiency gap?

5 A. No, that's it.

6 Q. Your article on efficiency gap was not peer

7   reviewed, correct?

8 A. That's correct. It was published in a student

9   edited law review.

10 Q. The journal and law and politics is a law journal

11   run by students at the University of Virginia,

12   correct?

13 A. That's my understanding.

14 Q. University of Virginia is a fine law school, but

15   sitting here today, can you tell us whether any of

16   the students who worked on your article have PhD's

17   in political science, economics or any other related

18   field?

19 A. It's a student edited law review. It's very rare

20   that they do.

21 Q. All right. Let's take a look at your article.

22   Mitch, can you pull up the Flaws in the Efficiency

23   Gap article, and let's look at page 7, figure one.

24   Can you blow that up and then also if we could do a

25   split screen, I would also like to take a look at

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 1      page 10, table one, not a big deal.  We can keep

 2      going.  In your article, you and your coauthors

 3      presented hypothetical examples how to calculate a

 4      efficiency gap for a five-district state, right?

 5  A.  That's correct.

 6  Q.  And you presented this same figure in the report you

 7      filed in this case?

 8  A.  That's correct.

 9  Q.  In fact, the report you filed in this case presents

10      a lot of the non-peer reviewed analysis you

11      presented in the Flaws article, right?

12  A.  There's a significant amount adapted from and

13      inspired by that article and there's some new

14      material, new analysis.

15  Q.  Mitch, can we call up demonstrative D-9.  So,

16      Dr. Miller, this is a comparison of red line of a

17      section from your article, which is on the left, and

18      your report on the right.

19           This is from your article, I'm sorry, the

20      portion from the report is Section 6, and we've

21      highlighted the portion that's different.

22  A.  Uh-huh.

23  Q.  You see one of the changes you made, if you look at

24      the start of the second paragraph, in your article

25      we said we.  You said we because you had coauthors
```

1   and this report you said I?

2 A. That's correct.

3 Q. Let's look at another example. The section in your

4   report the efficiency gap is almost verbatim the

5   same language as the section in your non-peer

6   reviewed article Flaws called packing cracking and

7   the efficiency gap.

8 A. Is that the section?

9 Q. I'm sorry. That's what we just looked at.

10 A. I assume that's correct.

11 Q. Okay. Let's look at Mitch, D-10. This section in

12   your report 8.2 the problem with assuming certainty

13   that we heard some testimony about, in your report

14   is almost the same language as in your non-peer

15   reviewed article Flaws, right?

16 A. That's correct.

17 Q. Can we look at another example Mitch demonstrative

18   D-11. The section in the report called the benefit

19   of a seat is almost copied entirely from your

20   non-peer reviewed law review article, right?

21 A. That's correct. I use the parts that I thought I

22   still agreed with.

23 Q. Now, in your report you don't present peer-reviewed

24   research you, yourself, have conducted about the

25   efficiency gap, correct?

1 A. That is correct.

2 Q. And we had -- early in your testimony we had about

3   4:10, when you were asked about equation three, you

4   don't cite any peer-reviewed article in your report

5   that discusses formula three, correct?

6 A. No. That's something I realized -- happy to prove

7   it for you on a sheet of paper if you like.

8 Q. No, but you've never gotten it published in a

9   peer-reviewed article, right?

10 A. No. It's too trivial to publish in a peer-reviewed

11   article in my field.

12 Q. Just so we're clear, when you presented your

13   testimony about formula three, which wasn't actually

14   in your report, other than your narrative

15   description that you went through, that is not

16   peer-reviewed research that has been published in

17   any journal?

18 A. No, that's original to this report.

19 Q. You first started billing on this matter on March

20   25th, 12 days ago?

21 A. That's correct.

22 Q. Mitch, can we pull up Plaintiffs' Exhibit 743. This

23   is, Dr. Miller, the invoice that you've issued in

24   this case so far.

25 A. That's correct.

1 Q. And you're charging $750 an hour in this case?

2 A. That was the rate we agreed upon.

3 Q. And this first invoice reflecting your time through

4   March 31st is six days work is for $50,900, right?

5 A. I worked some very long days, yes.

6 Q. And, when you had submitted this bill, you had

7   completed your report, correct?

8 A. Yes.

9 Q. But you had not reviewed Dr. Warshaw's entire

10   testimony, correct?

11 A. You're referring to his deposition?

12 Q. Yes.

13 A. I was sent a copy of his deposition on Wednesday of

14   that week. I looked at a couple small sections of

15   it. I still have not read his entire deposition.

16 Q. At the time of your deposition, you had only

17   reviewed the small portions of Dr. Warshaw's

18   testimony that defense counsel told you would be the

19   most relevant or the most interesting, correct?

20 A. That's correct, and I have not looked at it since.

21 Q. It's been six days since you issued this invoice, so

22   sitting on the stand today how many total hours do

23   you have on this case?

24 A. I haven't added them up. I would guess that by the

25   time I'm done it will be probably another amount of

1   this quantity probably.

2 Q. Another $51,000?

3 A. It's a very rough approximation.

4 Q. And that's for 12 days work?

5 A. Twelve very, very long -- well, the first two days

6   weren't, but many of these are very long days.

7 Q. Let me ask you about reviewing Dr. Warshaw's report.

8   Did you review Dr. Alford's report in this case?

9 A. No, I did not.

10 Q. Have you met Dr. Alford?

11 A. I met him here a day or two ago.

12 Q. Do you know what Dr. Alford says in his report about

13   the efficiency gap?

14 A. I have not seen his report.

15 Q. Okay. So, turning to your analysis Dr. Warshaw, you

16   tried to replicate Dr. Warshaw's results, correct?

17 A. Some of them.

18 Q. And you testified today about this at about 4:52,

19   when you looked at states with four or more

20   Congressional Districts, you were able to replicate

21   Dr. Warshaw's numbers precisely, correct?

22 A. Yes. When I looked at four or more states, I was

23   able to come up with how he got to the 95 percent,

24   98 percent numbers. So that made me confident that

25   I was on the right track how to calculate it.

1 Q. Mitch, can we just pull up Exhibit 1061, page 24,

2   fourth full paragraph. If you could just highlight

3   the first sentence, you wrote, I can replicate Dr.

4   Warshaw's numbers 95 and 98 percent precisely if I

5   look at Congressional elections in states with four

6   or more districts?

7 A. Yes, I did. That's what I just said.

8 Q. Now, looking also at Dr. Warshaw's analysis

9   regarding the relationship between the efficiency

10   gap and the level of conservative roll call voting

11   in Congress, you don't question his findings, do

12   you?

13 A. No. I haven't evaluated those findings closely.

14 Q. Mitch, could we turn to page 37, and in the top

15   part, if you could highlight the phrase, I have both

16   Stephanopoulos and McGhee and the Warshaw report

17   rely on historical data regarding the relationship

18   between efficiency gap and the level of conservative

19   roll call voting in Congress.

20   And, Dr. Miller, you go on stating, I have

21   not evaluated the data and do not question the

22   findings; do you see that?

23 A. That's correct.

24 Q. I have a couple questions about what you refer to as

25   the axiomatic approach. In your report, is it fair

     1   to say you test the efficiency gap in hypothetical

     2   situations that are unlikely to arise?

     3 A. Yes.

     4 Q. And you conducted what you refer to in your report

     5   as thought experiments, right?

     6 A. I would say that.

     7 Q. What lawyers sometimes think of as hypotheticals,

     8   right?

     9 A. I would have to think carefully if the way we use

    10   the term thought experiment in economics, and I

    11   think the way it's used in the sciences is

    12   equivalent to the way we use hypotheticals in law,

    13   and as someone who teaches law, I'm not sure that

    14   that's 100 percent right.

    15 Q. Okay. Someone who teaches law and economics?

    16 A. I teach law and economics, law and law in economics.

    17 Q. Let's turn back to your analysis.   So, for example,

    18   one thought experiment you present in your report

    19   analyzes what happens to the efficiency gap

    20   calculation if one party has 100 percent of the vote

    21   share, correct?

    22 A. Correct.

    23 Q. And you present what happens when the efficiency gap

    24   is applied to states with only one Congressional

    25   District, right?

1   A.   Honestly, I don't recall if I put that in there or

2   not. I'll take your word for it.

3   Q.   I think during Mr. Ayers discussion he showed you

4   figure three from your report where you present a

5   column with one Congressional District?

6   A.   Oh, that, yeah. Yeah. Yeah. Yes. I assume I

7   would have put it in had I thought it carefully.

8   Q.   You would agree that applying the efficiency gap to

9   states with only one Congressional District would be

10   nonsensical, right?

11 A.   Absolutely.

12 Q.   So, Mitch, can we go to page 7 of the report, second

13   full paragraph, and if you could just highlight and

14   magnify the last sentence. I'm sorry, second full

15   paragraph, so one below that. Thank you.

16   You write in your report a failure of the

17   efficiency gap in this extreme case indicates that

18   it cannot be trusted to function well in more

19   realistic environments. You wrote that, right?

20 A.   I did write that.

21 Q.   Is that a principle of axiomatic?

22 A.   We test a measure or a solution or a rule by how it

23   functions in the cases where there's a clear

24   unambiguous answer. This is one of those cases.

25   When it fails in that case, then we think it fails.

Rosemarie A. Vieth, Official Court Reporter

1   There are other measures. There are other

2   ways of measuring partisan gerrymandering that don't

3   suffer from these problems.

4   I'm not endorsing the use of those. I

5   haven't studied those, but, for example, it's not

6   like this is a problem with all possible measures of

7   partisan gerrymandering.

8   Q. Well, let's do a thought experiment with you here to

9   see whether the proposition you put up here makes

10   any sense that the failure of a theory in an extreme

11   case indicates it cannot be trusted to function well

12   in a realistic environment.

13   So, let me give you one to just think

14   about. Assume in the 17th Century there was a

15   natural philosopher named Isaac Newton, and he came

16   up with something that he referred to as the theory

17   of gravity, gravitation, which provides among other

18   things that, if something is dropped, it falls to

19   the ground.

20 A. Correct.

21 Q. Further assume that four centuries later human

22   beings are able to escape the earth's orbit and

23   individuals find that when they're in zero gravity

24   the objects that drop no longer fall to the ground.

25   Do you still stand by -- my question is do

1   you still stand by that the failure of a theory in

2   an extreme case indicates that it cannot be trusted

3   to function well in more realistic environments?

4 A.   There's a distinction between testable positive and

5   normative theories. A measure such as the

6   efficiency gap is inherently normative. It cannot

7   be tested, tested in a scientific sense. It cannot

8   be tested by an actual experiment.

9   A scientific predictive theory such as

10   Newton's theory of gravity or for that matter

11   Einstein's theory of special relatively can be

12   tested in those cases. So, I think that's a quite

13   important distinction.

14 Q. I see.

15 A. And that's a distinction we use within economics,

16   and I think in general through the sciences.

17 Q. Sciences.

18 A. Economists consider themselves scientists -- whether

19   I don't have a particularly strong opinion as to

20   whether we do a good job of it, but the methodology

21   of economics is drawn from the natural sciences.

22 Q. I see. Let's turn to one of the other thought

23   experiments you do in your report. You conducted

24   some efficiency gap analysis looking at states with

25   only and exactly four Congressional seats. You

 1   testified about that at 4:53 this afternoon. Do you

 2   recall that?

 3 A. I don't recall where I was at 4:53. I believe I

 4   testified about that at some point, but I'm not sure

 5   if I only testified about it once, because my memory

 6   is not good of everything that happened today.

 7 Q. Well, as to your question I think your record will

 8   reflect that you're sitting right there at 4:53.

 9   That's where you were at 4:53.

10 A. I believe that.

11 Q. You understand that the list of states with four

12   Congressional seats is not a static list. In some

13   decades you were looking at Congressional elections

14   from five jurisdictions and others your were looking

15   at as few as two, right?

16 A. Kansas used to have five districts. Utah, which is

17   sort of my home state, had three.

18 Q. And in some decades you were looking at your sample

19   didn't include Kansas at all, because Kansas didn't

20   have four districts?

21 A. That's correct.

22 Q. Are you familiar with the law of small numbers?

23 A. The law of large numbers.

24 Q. The law of small numbers, Danny Kahneman and Amos

25   Tversky famous theory 1971 about misinterpreting

1   data when you're looking at only a small sample?

2 A. I believe that's definitely possible.

3 Q. You've heard of Dr. Kahneman?

4 A. Yes. I've heard -- wait, yeah, Danny Kahneman and

5   Amos Tversky, yes.

6 Q. The Nobel Prize winner?

7 A. He has won a Nobel Prize along with Vernon Smith.

8 Q. Let's think of another thought experiment. Let's

9   consider a different hypothesis than the one you

10   actually tested.

11   Let's say that you wanted to test whether

12   the efficiency gap worked with states like Kansas

13   with six letters in their name and unlike your

14   thought experiment, my thought experiment is static.

15   It's not volatile. States don't move in and out and

16   Kansas remains in it every time. Do you know what

17   the results you would get?

18 A. I certainly wouldn't conduct that study, but I think

19   that's also an unfair or at least a misleading

20   analogy.

21 Q. First rule of thought experiments is don't fight the

22   premise of the thought experiment. Mitch, can we

23   pull up demonstrative D-12. D-12 compares what the

24   results look like for your thought experiment where

25   you compare states with states with four seats and

1   my thought experiment where we look at states with

2   six letters in their name. It looks pretty similar

3   doesn't it, Doctor?

4 A. It's hard for me to tell, because of the shading.

5   There's pretty similar range. The three, six states

6   is a little bit more compact but not by much. I

7   don't know how many states are with six letters in

8   their names. I haven't counted

9 Q. You're not a cross word puzzle person?

10 A. No. I used to do it, but I've gotten too busy with

11   other stuff.

12 Q. Do you know what happens if you expand the sample

13   size and you look at states with four to seven

14   letters, say?

15 A. I presume you're going to get more data points.

16 Q. Mitch, can you pull up D-13. Professor, Dr., I've

17   shown you as demonstrative 13, the graph on the left

18   is one that we used as a demonstrative with Dr.

19   Warshaw.

20   I'm sorry. The one on the right is the one

21   that we showed with Dr. Warshaw yesterday what

22   happens if you look at states with four to seven

23   seats.

24   The one on the left is my thought

25   experiment where we're looking at states with four

1   to seven letters in their name.

2   A. Okay.

3   Q. Do you think the distributions look pretty similar?

4   A. They're not identical. They're not massively

5   different.

6   Q. Okay. I want to look at another one of your thought

7   experiments. Mitch, can we go back to 1061, page

8   22. And, if you could highlight at the bottom of

9   the page the phrases -- let's blow that up for now.

10   Dr. Miller, this is your discussion of how

11   you calculated the vote shares that are are

12   presented in your appendixes, correct?

13 A. Correct.

14 Q. And you went over with Mr. Ayers at about 4:20 table

15   five. That's your calculation?

16 A. That's correct.

17 Q. Okay. Now, for this thought experiment you did, you

18   say that you used the version of formula one of the

19   Warshaw report, and then you say I did not impute

20   vote shares in uncontested races; do you see that?

21 A. That's correct.

22 Q. I thought at 4:10 this afternoon when we were having

23   our squabble about formula three, you said that you

24   used formula three in your report?

25 A. Later on. I think it's on the next page maybe.

1 Q. Do the vote share calculations in table five reflect

2   formula one or formula three?

3 A. That's formula one. That's what it says right

4   there. I did formula three afterwards, just to see

5   and put up the numbers to show how they would all

6   compare.

7 Q. Okay. Mitch, can we pull up table five. It's page

8   41 of the report. Can you highlight the efficiency

9   gap at the very bottom, just blow that up, the

10   calculation at the very bottom.

11   Dr. Miller, the analysis you present in

12   your table five, that's formula one, right?

13 A. That's exactly formula one.

14 Q. Is formula three anywhere on this page?

15 A. No. I just calculated that and put it in the text

16   or the footnote on page 23.

17 Q. Okay. I want to test the premise of your no

18   imputation though experiment, the idea that you

19   could go and calculate a vote share without doing a

20   calculation.

21 A. I don't think that was the idea.

22 Q. Can you name any Congressional election with more

23   than one candidate on the ballot where 100 percent

24   of the people supported one of the candidates?

25 A. I'm sorry. What do you mean by 100 percent of the

```
 1    people supported one of the candidates?
 2 Q. If you have a contested election, if you've got two
 3    people running, in American history, has there ever
 4    been an election where 100 percent of the votes went
 5    to one candidate?
 6 A. No.  I think we all agree this leads to an absurd
 7    result.
 8 Q. You don't consider empirical or real world data
 9    relevant to your thought experiments, right?
10 A. No, I'm a theorist.
11 Q. You view the work you presented here as an academic
12    exercise, right?
13 A. Can you define what you mean by academic?
14 Q. Well, what I mean is what you testified about when
15    you were deposed three days ago.  Would it help to
16    see that testimony?
17 A. I think my memory may be off, but I thought I asked
18    that question there as well, but --
19 Q. I'm happy to show you, your testimony, and see if
20    it's refreshing your recollection.
21         THE COURT:  Gentlemen, let each one of you
22    finish, because he still wants to say things and
23    you're cutting him off.  Hold on.  If he's not being
24    responsive, bring it to my attention, but let him
25    finish his answers.
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1   THE WITNESS: Go ahead, Doctor.

2   THE WITNESS: The short answer to that is

3   yes, it's an academic exercise, because I like all

4   six of your witnesses are experts all though I

5   didn't see the last two are academics.

6   So, but when you use the word academic

7   exercise, I don't know if you're belittling me and

8   your six witnesses by using academic as the sense of

9   trivial or unimportant, because a word like that has

10   two meanings. It's important to be clear.

11   It was also used in the deposition, and the

12   deposition I notice the same thing. I didn't react

13   quite as strongly, but, you know, I find it quite

14   offensive if counsel is belittling experts, because

15   we're academics.

16 Q. Can we pull up the deposition page 151 and can we

17   highlight the top lines three to five, and,

18   Dr. Miller, you were asked, okay, your work is an

19   academic exercise, and you responded these are all

20   academic exercises; do you see that?

21 A. I agree.

22 Q. Theoretical economics doesn't do a great job of

23   accounting for the costs and benefits experienced by

24   real voters, does it?

25 A. By real voters? I'm sorry. Can you explain what

1   you mean?

2   MR. FREEDMAN: I think your answer says it

3   all. No further questions.

4   THE COURT: Follow-up, Gary.

5   MR. AYERS: No questions.

6   THE COURT: No subpoena, I assume?

7   MR. AYERS: Free to go. Free to stay.

8   THE COURT: Free to go as he choses.

9   Plaintiff is not going to recall him or call him.

10   Dr. Miller, thank you for your testimony.

11   THE WITNESS: Thank you. It's easier than

12   I expect. I'm going to clean, pick this up, so I

13   won't leave this mess. Somebody else left this.

14   THE COURT: If you leave them, I'll make

15   sure to take care of them. Thank you very much.

16   Appreciate that and appreciate your testimony and

17   you're free to go. I think we're about to wrap up

18   for the day, but you are free to stay as well?

19   THE WITNESS: Okay. Great.

20   (Witness excused.)

21   THE COURT: So, Tony, I'm about to ask

22   Sharon what she wants to do, and she's going to say

23   let's try this thing until midnight and get done.

24   So what's the defense's point?

25   MR. RUPP: Here's my thought, Your Honor,

1   and it is this. I think you're tired, and I think

2   that counsel is tired, and my guess is everybody is

3   hungry. That having been said, I think there's a

4   mutual interest in getting this case done, submitted

5   to you, and get the proposed findings and

6   conclusions to you.

7   So what I would suggest is just would be

8   that we've got Thursday, Friday, Saturday, and

9   Sunday with nothing going on in the Court, we would

10   volunteer to do an evidentiary deposition of

11   Professor Alford or Dr. Alford during those four

12   days and present that transcript and that video to

13   you by Monday.

14   And, if they -- I know they've indicated

15   they have a rebuttal witness, if they wanted to do

16   that the same way, we could all get that done, you

17   know, over the next four days, get the case

18   submitted to you, probably appear in some fashion on

19   Monday to complete the record, submit those things

20   to you, advise you of any objections that you need

21   to rule on that occur in the course of the

22   deposition, and that would be my preference.

23   That would also expedite, I think, getting

24   the proposed findings and conclusions to you so that

25   you could write your opinion, and I think that I'd

1   be willing to stipulate that, you know, we can start

2   that clock running as soon as those two depositions

3   are completed. That would be my suggestion.

4   I really am hesitant with it being 6:00

5   o'clock on a day like this that where we've been

6   going since 9:00 to really try to rush in a witness

7   at the last minute.

8   THE COURT: So, I think you're proposal is

9   perhaps acceptable. We'll see, but under any set of

10   circumstances that gets us back here Monday anyway,

11   and to say that the Court has expected a lot of

12   counsel would be the biggest understatement that I

13   have have made.

14   So, I don't expect you to have to do that,

15   Tony. I just kind of wanted to get a little feel,

16   if you and the plaintiffs agree upon that procedure,

17   that's fine.

18   I see that you and the plaintiffs will not

19   be agreeing upon with that procedure, so we'll plan

20   on presenting your last expert then on Monday.

21   You haven't made a decision about rebuttal

22   yet or have you?

23   MS. BRETT: I think we have, and we would

24   like to call one very short rebuttal witness and

25   expert that has testified previously in this case,

1   and we will communicate that with Tony with what we

2   intend to present in rebuttal.

3   THE COURT: All right. Will that person be

4   testifying back to testify in Court?

5   MS. THEODORE: Yes.

6   THE COURT: Okay. Thank you for that. Do

7   we need to put anything else on the record at this

8   point in time? You've rejected Tony's offer.

9   That's on the record. Gary?

10   MR. AYERS: Again, for the appellate

11   record, I think it's 1066-E, our demonstrative, so

12   they know what we were talking about. It's was the

13   three formulas of Dr. Miller.

14   THE COURT: I'm not sure, are you asking

15   for admission, Gary.

16   MR. AYERS: Yes, move to admit.

17   MR. FREEDMAN: Your Honor, it's just being

18   admitted for demonstrative purposes.

19   THE COURT: I take that from what the

20   statement for demonstrative purposes.

21   MR. AYERS: Mostly for the Appellate Court,

22   because they get really mad if they don't know what

23   you're talking about.

24   MR. FREEDMAN: No objection.

25   THE COURT: 1066-E is admitted without

1   objection.

2   Now, let's go in some coherent order. I

3   know that's not what we've typically done, but we'll

4   try to day and see if it works. So, issues that

5   the plaintiff wishes to discuss on the record? And

6   it can be any of you talking here.

7   MR. FREEDMAN: The only one I would have is

8   we would also move that plaintiffs demonstratives

9   for the cross be admitted. I think that they were

10   -- I think that they were seven, eight -- no, I'm

11   sorry eight, nine, 10, 11, 12.

12   MS. BRETT: We'll have to mark them as

13   exhibits, Your Honor. We can do so and send them

14   through e-Flex.

15   THE COURT: Not an issue for the court

16   right now about marking them. I just want to make

17   sure the record is clear. You want demonstrative

18   Exhibits 8 through 12 respectively admitted?

19   MR. FREEDMAN: For demonstrative purposes.

20   MR. AYERS: No objection.

21   THE COURT: So 8 through 12 inclusively.

22   MS. BRETT: Maybe nine through 13, Your

23   Honor. I think we're a little lost on the number.

24   MR. AYERS: No, well then.

25   MS. BRETT: We will clean that up.

1   THE COURT: I assume, Gary, that as long as

2   they are those demonstrative exhibits whether it's 9

3   through 13 or 8 through 12, you still have no

4   objection?

5   MR. AYERS: That's right, Your Honor.

6   THE COURT: And probably a good idea,

7   however, Sharon, at some point to make sure we have

8   cleaned that up. All right. Anything else on

9   Alonzo Rivera plaintiffs?

10   MS. BRETT: I don't believe so, Your Honor.

11   THE COURT: All right. Mark or Curtis.

12   MR. JOHNSON: I had represented to the

13   Court, and I believe my commitments are important

14   that I would not bring my other witness in.

15   I called him to tell him he doesn't have to

16   come on Monday. I would like to file a declaration

17   that may well go beyond what the other witnesses

18   have filed, because I agreed to this arrangement

19   with the understanding that we would finish today,

20   and that we would not be coming back Monday.

21   So, I'm going to file a declaration for Mr.

22   Lea that may well go beyond the facts that were

23   stated in declarations from either of two witnesses.

24   THE COURT: This sounds like tag no take

25   backs. I don't feel that you're bound by that,

1   Mark. I think that you made that in a good faith

2   gesture.

3   MR. JOHNSON: I'm bound by it, because my

4   witness has other plans, because I told him he would

5   not have to be here Monday.

6   THE COURT: All right. If that changes and

7   you wish to call him on Monday subject to any

8   defense objections, you may do so, submit the

9   declaration, and then Gary, Tony, whomever let me

10   know what you think about that, if that's an issue,

11   and we'll go from there.

12   MR. JOHNSON: Thank you, Judge.

13   THE COURT: Anything else, Mark? You're so

14   welcome.

15   MR JOHNSON. No, Your Honor.

16   THE COURT: And, Gary, it doesn't have to

17   be you. It can be you. It can be Tony. Do you

18   have other things to put on the record?

19   MR. RUPP: I'm not aware of anything else

20   to go on the record right now.

21   THE COURT: Gary. Do you concur with the

22   man you make fun of?

23   MR. AYERS: I do.

24   THE COURT: Thank you so much, Judge.

25   MS. BRETT: Your Honor, can I ask one more

1   thing on the record?

2   THE COURT: No, Sharon. You messed things

3   up. Yes, ma'am. You certainly may.

4   MS. BRETT: I believe that we had talked.

5   Mr. Rupp and I talked about not doing closings and

6   just submitting the findings of fact and conclusions

7   of law at the close of evidence, but just wanted to

8   state on the record that that seems to be the

9   agreement amongst parties unless that has changed in

10   the last bit.

11   MR. RUPP: I'm fine with that, Your Honor.

12   I think that was the original discussion a few weeks

13   ago when we started this case. Obviously, you've

14   given us the opportunity to change our minds on that

15   and all of that, but I'm fine with that approach.

16   THE COURT: All right.

17   MR. JOHNSON: Your Honor, even though I was

18   not consulted on that, I agree.

19   THE COURT: Thank you, Mark. Again, nobody

20   is bound by that. If you change your minds on

21   Monday and you wish to make closing comments, as

22   long as we can get it done on Monday, that's not

23   problematic, but, if everyone is in agreement about

24   just submitting findings and conclusions, that's, of

25   course, okay as well.

                Rosemarie A. Vieth, Official Court Reporter

1   I just want to bring this to your

2   attention. I don't know that this really matters,

3   but I note that Dr. Miller is pacing outside of my

4   door, and I don't know if he feels like he needs to

5   talk to somebody or what's going on here. Is that

6   all that it is? He just needs his bag? We're

7   trying to get you squared away, Dr. Miller, and

8   you're welcome to stay. Did you need something

9   besides your backpack?

10   DR. MILLER: No, just my bag. I'll stay

11   for a minute.

12   THE COURT: You're welcome to. Please have

13   a seat. Okay. So, if I had it straight, then we

14   will be calling one defense expert on Monday.

15   MR. RUPP: Probably. You know, now that we

16   have four days, we will rethink our thoughts. We

17   have time to do that.

18   THE COURT: Then what I propose, counsel,

19   is I keep my mouth shut. I'll so you Monday, and

20   we'll figure out what do when we get here.

21   MR. RUPP: One other housekeeping thought

22   is the question of whether anybody is going to, I

23   mean, what about technology and the courtrooms?

24   THE COURT: You mean will we have it on

25   Monday?

1   MR. RUPP: This doesn't need to be on the

2   record.

3   (Court was adjourned.)

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Rosemarie A. Vieth, Official Court Reporter

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 1                C E R T I F I C A T E

 2    STATE OF KANSAS        )
                             ) SS:
 3    COUNTY OF WYANDOTTE    )

 4         I, ROSEMARIE A. VIETH, a Certified Court

 5    Reporter, and regularly appointed, qualified, and

 6    acting official reporter of Division 6 of the 29th

 7    Judicial District of the State of Kansas, do hereby

 8    certify that as such official reporter I was present

 9    at and reported in stenotype shorthand the above and

10    foregoing proceedings FAITH RIVERA, ET AL., VS.

11    SCOTT SCHWAB, ET AL., CASE NO. 2022-CV-89, heard on

12    April 6, 2022, before the HONORABLE BILL KLAPPER,

13    Judge of said court.

14         I further certify that a transcript of my

15    shorthand notes was prepared; and that the foregoing

16    transcript, consisting of 182 pages, is a true

17    record of all the proceedings.

18         SIGNED AND ELECTRONICALLY FILED WITH THE CLERK

19    OF THE DISTRICT COURT OF WYANDOTTE COUNTY, KANSAS,

20    this 8th day of April, 2022.

21                    /s/Rosemarie A. Vieth
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