IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

WILLIAM WHITFORD, ROGER ANCLAM, EMILY BUNTING, MARY LYNNE DONOHUE, HELEN HARRIS, WAYNE JENSEN, WENDY SUE JOHNSON, JANET MITCHELL, ALLISON SEATON, JAMES SEATON, JEROME WALLACE, and DONALD WINTER,	)))))))	No. 15-cv-421-bbc
Plaintiffs,	))	
v.	))	
GERALD C. NICHOL, THOMAS BARLAND, JOHN FRANKE, HAROLD V. FROEHLICH, KEVIN J. KENNEDY, ELSA LAMELAS, and TIMOTHY VOCKE,	)))))	
Defendants.	)	

PLAINTIFFS' RESPONSE TO PROPOSED FINDINGS OF FACT IN SUPPORT OF DEFENDANTS' MOTION FOR SUMMARY JUDGMENT

Peter G. Earle
LAW OFFICE OF PETER G. EARLE
839 North Jefferson Street, Suite 300
Milwaukee, WI 53202
(414) 276-1076

Michele Odorizzi
MAYER BROWN LLP
71 South Wacker Drive
Chicago, IL 60606
(312) 782-0600

Paul Strauss
Ruth Greenwood
Annabelle Harless
CHICAGO LAWYERS' COMMITTEE
 FOR CIVIL RIGHTS UNDER LAW, INC.
100 N. LaSalle St., Suite 600
Chicago, IL 60602
(312) 202-3649

Nicholas O. Stephanopoulos
UNIVERSITY OF CHICAGO LAW SCHOOL
1111 E. 60th St., Suite 510
Chicago, IL 60637
(773) 702-4226

Dated: January 25, 2016

1.   *The plaintiffs claim that the efficiency gap measures "wasted votes," defined as all votes cast for a losing candidate (which it counts as "cracking") and all votes cast for a winning candidate in excess of the number needed to prevail (which it counts as "packing"). (Compl. ¶ 5.)*

       Disputed. The efficiency gap is defined as "the difference between the sum of wasted votes for the two parties, divided by the total number of votes cast in the election." (Mayer Rpt. (Dkt. 54) at p. 43; Compl. (Dkt. 1) at ¶¶ 49, 50, 51.) **Undisputed** that "wasted votes" are all votes cast for a losing candidate and all votes cast for a winning candidates in excess of the number needed to prevail.

2.   *The concept of the efficiency gap comes from an article written in 2014 by Eric McGhee in Legislative Studies Quarterly and an article written by McGhee and Nicholas Stephanopolous (sic) in the University of Chicago Law Review. (Compl. ¶ 47.)*

       Disputed. Though the term "efficiency gap" was not coined until Stephanopoulos and McGhee, *Partisan Gerrymandering and the Efficiency Gap*, 82 U. Chi. L. Rev. 831 (2015), the concept of partisan symmetry the underlies the measure has "a long and distinguished lineage in both political science and statistics." (Jackman Rpt. (Dkt. 62) at p. 11.)

3.   *Mayer relied on the formulas and methods outlined in the Chicago Law Review article in determining the efficiency gap. (Mayer Dep. 37.)*

       Undisputed.

4.   *Jackman also relied on the method outlined in the Chicago Law Review and was not familiar with the efficiency gap before being retained to work on this case. (Jackman Dep. 11–12.)*

       Disputed. Jackman relied on the method outlined in Stephanopoulos and McGhee, *Partisan Gerrymandering and the Efficiency Gap*, 82 U. Chi. L. Rev. 831 (2015), and Eric McGhee, *Measuring Partisan Bias in Single-Member District Electoral Systems*, 39

Legis. Stud. Q. 55 (2014) (Dkt. 58-7), for an outline of the definition and properties of the efficiency gap, but Jackman was familiar with "the long and distinguished lineage in both political science and statistics" of partisan symmetry, dating back to 1898. (Jackman Rpt. (Dkt. 62) at pp. 11-16.)

5.   *One is a district-by-district calculation in which the wasted votes cast for each party's candidates are added and then "the difference between the parties' respective wasted votes" is then "divided by the total number of votes cast." (Compl. ¶ 5.)*

Undisputed.

6.   *The plaintiffs also use a different method, which they have dubbed a "shortcut" for calculating the district-by-district version of the efficiency gap. (Dkt. 31:24 n.8.)*

Disputed. The "shortcut" is not a different method for calculating the efficiency gap but rather a simplification of the same method used by Professor Mayer that applies in the "special case where there are only two parties and all districts are equal in population." (Jackman Rpt. (Dkt. 62) at pp. 16-17.)

7.   *In order for this shortcut to equate with the district-by- district calculation, one needs to assume that there were an equal number of votes cast in each district. (Jackman Dep. 21–22.)*

Undisputed.

8.   *Mayer does not tabulate the number of "wasted votes" that were cast in the 2012 Assembly elections. Instead, Mayer created a regression model with eight variables that generates "predicted Democratic and Republican votes [which] are model estimates of what the votes would have been and if the race was contested and when there was no incumbent running." (Mayer Report 10–11; Mayer Dep. 63.)*

Disputed. The Mayer regression model includes 80 variables, counting the constant and the full set of county fixed effects. (Mayer Rpt. (Dkt. 54) atpp. 10-11; Mayer Dep. (Dkt. 52) at 42:13-43:11.) The regressions were run using an assumption of contested races without incumbents, a reasonable method that allows comparable efficiency gaps to be

reliably calculated for Act 43 and the Demonstration Plan. (Mayer Rpt. (Dkt. 54) at p.

31.)

9.   *Mayer's model predicts the Assembly vote share for Democratic and Republican candidates in each ward using regressions based on the ward's total voting age population, total black voting age population, total Hispanic voting age population, the vote share for Obama, the vote share for Romney, whether there is a Democratic incumbent, whether there is a Republican incumbent, and the county of the ward. (Mayer Report 10–11.)*

Disputed. Mayer's model uses a measure of the voting *eligible* population, which

subtracts ineligible noncitizen and incarcerated adults. Mayer's model also uses vote

totals for Obama and Romney, not the vote *shares* in each district. (Mayer Rpt. (Dkt. 54)

at pp. 10-11; Mayer Dep. (Dkt. 52) at 17:4-20.)

10.   *Mayer relies on this model:*

The regression model used to predict Assembly vote totals takes the standard form of

$$Y_i = \alpha + \beta X_i + \varepsilon_i,$$

where Y_i is the dependent variable in ward i, X_i is a set of independent variables in ward i, and α,

β, and ε_i are parameters estimated as a function of the variables. The full model is:

$$\underset{i}{\text{Assembly Vote}} = \alpha + \beta_1 \text{Total VEP}_i + \beta_2 \text{Black VEP}_i + \beta_3 \text{Hispanic VEP}_i$$

$$+ \beta_4 \underset{\text{Presidential Vote}_i}{\text{Democratic}} + \beta_5 \underset{\text{Presidential Vote}_i}{\text{Republican}}$$

$$+ \beta_6 \underset{\text{Incumbent}_i}{\text{Democratic}} + \beta_7 \underset{\text{Incumbent}_i}{\text{Republican}} + \sum_{j=1}^{71} \gamma_j \text{County}_j + \varepsilon_i$$

(Mayer Rep. 10–11)

Undisputed.

11.   *Mayer only used the 2012 election results in his model; it does not rely on the results of any other elections. (Mayer Dep. 62–63.)*

4

Undisputed.

12. *Mayer's model does not show the actual wasted votes that were cast in the 2012 election. For example, in District 1 Mayer predicts that the Republican candidate would win 16,628 votes and the Democratic candidate would win 16,235 votes. (Mayer Rep. 50.)*

Undisputed.

13. *This generates 197 wasted votes for the Republicans and 16,235 wasted votes for the Democrats. (Mayer Rep. 50.)*

Undisputed.

14. *In the actual 2012 election, the Republican won with 16,993 votes and the Democrat lost with 16,124 votes. (GAB 2012 Fall General Election Results at 8.)*

Undisputed.

15. *In the actual election, there were 435 wasted votes for the Republicans and 16,124 wasted votes for the Democrats. (GAB 2012 Fall General Election Results at 8.)*

Undisputed.

16. *Mayer admits his model predicts two seats incorrectly (Mayer Rep. 25)*

Undisputed.

17. *Mayer's model actually predicts five seats incorrectly (four predicted to be won by Democrats that were actually won by Republicans and one the other way). (Mayer Rep.51)*

Disputed. Mayer's model accurately predicted the winners in "70 of 72 districts," and incorrectly predicted the winners of only two districts: Districts 51 (actual Republican vote: 51.9% vs. predicted Republican vote: 49.9%), and District 70 (actual Republican vote 49.7% vs. predicted Republican vote: 50.1%). (Mayer Rpt. (Dkt. 54) at pp. 24-25; Mayer Dep. (Dkt. 52) at 87:22-88:1.)

Table 8, shown on pages 50-51 of Mayer's Report, shows the calculation of the wasted

votes for Act 43 districts "using estimated partisan vote totals with incumbent advantages

removed" in order to establish a baseline level of partisanship. (Mayer Rpt. (Dkt. 54) at p.

45.) The projected results using Mayer's model and taking incumbency into account are

set out in Table 2, Mayer Rpt. (Dkt. 54) at pp. 24-25. "The accuracy of the model is

shown in Table 2, which gives the actual and predicted vote percentages of the two party

vote for Republican candidates in contested districts." (Mayer Rpt. (Dkt. 54) at p. 23.)

18.   *In Mayer's prediction, the Democrats would win District 50 with 12,467 votes over the*
       Republican's 12,326 votes. (Mayer Rep. 51.)

       Disputed. The district level predictions from Mayer's model are set out in Table 2 of his

       report, not Table 8. Mayer's model predicts the outcome correctly in District 50 (actual

       Republican vote: 51.7%, predicted Republican vote 51.8%). (Mayer Rpt. (Dkt. 54) at p.

       24.)

19.   *In the actual election, the Republicans won District 50 with 12,842 votes to the*
       Democrat's 11,945 votes (GAB 2012 Fall General Election Results at 20.).

       Undisputed.

20.   *In Mayer's prediction, the Democrats would win District 51 with 14,173 votes over the*
       Republicans' 13,048 votes (Mayer Rep. 51)

       Disputed. The district level predictions from Mayer's model are set out in Table 2 of his

       report, not Table 8. Mayer's model predicts the outcome incorrectly in District 51, but

       those results are shown in Table 2 on page 24 (actual Republican vote: 51.9% vs.

       predicted Republican vote: 49.9%). (Mayer Rpt. (Dkt. 54) at p. 24.)

21.   *In the actual election, the Republicans won District 51 with 10,642 votes to the*
       Democrat's 10,577 votes (GAB 2012 Fall General Election Results at 20).

Undisputed.

22.   *In Mayer's prediction, the Democrats would win District 68 with 13,663 votes over the Republicans' 13,005 votes (Mayer Rep. 51)*

Disputed. The district level predictions from Mayer's model are set out in Table 2 of his report, not Table 8. Mayer's model predicts the outcome correctly in District 68 (actual Republican vote: 52.4% vs. predicted Republican vote 50.7%). (Mayer Rpt. (Dkt. 54) at p. 25.)

23.   *In the actual election, the Republicans won District 68 with 13,758 votes to the Democrat's 12,482 votes (GAB 2012 Fall General Election Results at 25.)*

Undisputed.

24.   *In Mayer's prediction, the Republicans would win District 70 with 14,387 votes to the Democrat's 12,211 votes (Mayer Rep. 51)*

Disputed. The district level predictions from Mayer's model are set out in Table 2 of his report, not Table 8. Mayer's model predicts the outcome incorrectly in District 70, but those results are shown in Table 2 on page 24 (actual Republican vote: 49.7% vs. predicted Republican vote: 50.1%). (Mayer Rpt. (Dkt. 54) at p. 24.)

25.   *In the actual election, the Democrats won District 70 with 13,518 votes to the Republican's 13,374 votes (GAB 2012 Fall General Election Results at 25)*

Undisputed.

26.   *In Mayer's prediction, the Democrats would win District 72 with 14,294 votes over the Republicans' 13,895 votes (Mayer Rep. 51)*

Disputed. The district level predictions from Mayer's model are set out in Table 2 of his report, not Table 8. Mayer's model predicts the outcome correctly in District 72 (actual

Republican vote: 50.2% vs. predicted Republican vote 51.3%). (Mayer Rpt. (Dkt 54) at p.

25.)

27.   *In the actual election, the Republicans won District 72 with 14,138 votes to the Democrat's 14,029 votes (GAB 2012 Fall General Election Results at 26.)*

Undisputed.

28.   *Defendants use the GAB's official election results because Mayer agrees that these numbers are "authoritative." (Mayer Dep. 25.)*

Disputed. Mayer agrees that the GAB official election results are "authoritative" only for

showing the outcome of the actual state legislative election in 2012, not that they are

authoritative for "estimating what the underlying partisan vote would be in each newly

drawn (and hypothetical) district." (Mayer Rpt. (Dkt. 54) at p. 5.) Instead, Mayer

concludes that "[t]he [efficiency] gap cannot be estimated by simply rearranging the

votes cast in the actual Assembly contests in to a new district configuration, as the votes

cast for specific Assembly candidates in each district are a function of the electoral

environment in that district and whether a race is even contested by both parties. (Mayer

Rpt. (Dkt. 54) at pp. 5-6.) A large literature has developed around the problem of

estimating the likely election results in redistricting plan alternatives and calculating

summary statistics that characterize existing and hypothetical plans (Gelman and King

1994; Cain 1985)." (Jackman Decl. Ex. I (Dkt. 58-9), Ex. K (Dkt. 62).)

29.   *Republicans won 60 seats in the 2012 Assembly elections (Compl. ¶ 1)*

Undisputed.

30.   *Yet Mayer's model predicts only 57 Republican wins. (Mayer Dep. Ex. 5 at 3.)*

Disputed. Table 8 of Mayer's Report is not a table showing the predictions of Mayer's

regression model. (*See* Mayer Dep. Ex. 5 (Dkt. 52-1) at p. 3.) Rather, Table 8 shows the

calculation of the wasted votes for Act 43 districts "using estimated partisan vote totals

with incumbent advantages removed" in order to establish a baseline level of

partisanship. (Mayer Rpt. (Dkt. 54) at p. 45.) The projected results using Mayer's model

and taking incumbency into account are set out in Table 2 of Mayer's Report. (*See id.* at

pp. 24-25.) "The accuracy of the model is shown in Table 2, which gives the actual and

predicted vote percentages of the two party vote for Republican candidates in contested

districts." *(Id.* at p. 23.) Using Table 2, Mayer accurately "identifies the correct winner in

70 of 72 districts (97.2%)…[t]he average absolute error in the vote margin is 1.49%." *(Id.*

at p. 25.)

31.   *Mayer does not correct his model for what actually happened in the election; instead, he*
      counts the wasted votes based on what his model predicts should have happened. (Mayer
      Dep. 87–88.)

      Disputed. Table 8 (Mayer Rpt. (Dkt. 54) at pp. 50-51) shows the calculation of the

      wasted votes for Act 43 districts "using estimated partisan vote totals with incumbent

      advantages removed" in order to establish a baseline level of partisanship. (Mayer Rpt.

      (Dkt. 54) at p. 45.) The projected results using Mayer's model and taking incumbency

      into account are set out in Table 2. *(Id.* at pp. 24-25.) The reason for using this model is

      addressed in Plaintiffs' Opposition to Defendants' Motion for Summary Judgment

      (hereafter "Pl. Opp. ") at p. 30.

32.   *For his model, Mayer admits that "the average absolute error in the vote margin is*
      1.49%." (Mayer Rep. 25.)

      Undisputed.

33.   *The admitted average error rate is incorrect because the calculation assumes only two*

errors in the prediction of seats rather than the actual five. (Mayer Rep. 24–25.)

Disputed. The average error rate presented by Mayer on page 25 of his report is correctly calculated based on the results from the model that he presents in Table 2. (Mayer Rpt. (Dkt. 54) at p. 2.)

34. *Mayer's model of Act 43 contains 42 districts with at least a 50% Democratic baseline. (Mayer Rep. 41, Fig. 12.)*

    Undisputed insofar as this claim relates to the baseline analysis only (no incumbents, all districts contested). (Mayer Rpt. (Dkt. 54) at p. 41, Fig 12.)

35. *His model contains 17 seats that have a baseline between 50–55% Republican. (Mayer Rep. 41, Fig. 12.)*

    Undisputed insofar as this claim relates to the baseline analysis only (no incumbents, all districts contested). (Mayer Rpt. (Dkt. 54) at p. 41, Fig 12.)

36. *Mayer's model predicts that District 93 in Act 43 would have 50.2% Republican vote share. (Mayer Dep. Ex. 5 at 3.)*

    Undisputed that Mayer Dep. Ex. 5 shows that District 93 in Act 43 would have a 50.2% Republican vote share with no incumbent baseline, but **disputed** to the extent that Table 2, which takes incumbency into account, shows a Republican vote share of 52.0% (Mayer Rpt. (Dkt. 54) at p. 25, Table 2.)

37. *Mayer's model predicts that District 1 in Act 43 would have 50.6% Republican vote share. (Mayer Dep. Ex. 5 at 1.)*

    Undisputed that Mayer Dep. Ex. 5 shows that District 1 in Act 43 would have a 50.6% Republican vote share with no incumbent baseline, but **disputed** to the extent that Table 2, which takes incumbency into account shows a Republican vote share of 52.3% (Mayer Rpt. (Dkt 54) at p. 24, Table 2.)

38.   *Mayer's model predicts that District 67 in Act 43 would have 51.6% Republican vote share. (Mayer Dep. Ex. 5 at 2.)*

        Undisputed that Mayer Dep. Ex. 5 shows that District 67 in Act 43 would have a 51.6% Republican vote share with no incumbent baseline, but **disputed** to the extent that Table 2, which takes incumbency into account shows a Republican vote share of 53.5% (Mayer Rpt. (Dkt. 54) at p. 25, Table 2.)

39.   *Mayer's model predicts that District 29 in Act 43 would have 52.2% Republican vote share. (Mayer Dep. Ex. 5 at 1.)*

        Undisputed that Mayer Dep. Ex. 5 shows that District 29 in Act 43 would have a 52.2% Republican vote share with no incumbent baseline, but **disputed** to the extent that Table 2, which takes incumbency into account shows a Republican vote share of 55.2% (Mayer Rpt. (Dkt. 54) at p. 24, Table 2.)

40.   *Mayer's model predicts that District 88 in Act 43 would have 52.3% Republican vote share. (Mayer Dep. Ex. 5 at 3.)*

        Undisputed that Mayer Dep. Ex. 5 shows that District 88 in Act 43 would have a 52.3% Republican vote share with no incumbent baseline, but **disputed** to the extent that Table 2, which takes incumbency into account shows a Republican vote share of 54.1% (Mayer Rpt. (Dkt. 54) at p. 25, Table 2.)

41.   *Mayer's model predicts that District 4 in Act 43 would have 52.3% Republican vote share. (Mayer Dep. Ex. 5 at 1.)*

        Undisputed that Mayer Dep. Ex. 5 shows that District 4 in Act 43 would have a 52.3% Republican vote share with no incumbent baseline, but **disputed** to the extent that Table 2, which takes incumbency into account shows a Republican vote share of 54.6% (Mayer Rpt. (Dkt. 54) at p. 24, Table 2.)

42.   *Mayer's model predicts that District 49 in Act 43 would have 52.5% Republican vote share. (Mayer Dep. Ex. 5 at 2.)*

Undisputed that Mayer Dep. Ex. 5 shows that District 49 in Act 43 would have a 52.5%

Republican vote share with no incumbent baseline, but **disputed** to the extent that Table

2, which takes incumbency into account shows a Republican vote share of 54.6% (Mayer

Rpt. (Dkt. 54) at p. 24, Table 2.)

43.   *Mayer's model predicts that District 27 in Act 43 would have 52.7% Republican vote share. (Mayer Dep. Ex. 5 at 1.)*

Undisputed that Mayer Dep. Ex. 5 shows that District 27 in Act 43 would have a 52.7%

Republican vote share with no incumbent baseline, but **disputed** to the extent that Table

2, which takes incumbency into account shows a Republican vote share of 54.4% (Mayer

Rpt. (Dkt. 54) at p. 24, Table 2.)

44.   *Mayer's model predicts that District 42 in Act 43 would have 53.0% Republican vote share. (Mayer Dep. Ex. 5 at 2.)*

Undisputed that Mayer Dep. Ex. 5 shows that District 42 in Act 43 would have a 53.0%

Republican vote share with no incumbent baseline, but **disputed** to the extent that Table

2, which takes incumbency into account shows a Republican vote share of 54.8% (Mayer

Rpt. (Dkt. 54) at p. 25, Table 2.)

45.   *Mayer's model predicts that District 26 in Act 43 would have 53.3% Republican vote share. (Mayer Dep. Ex. 5 at 1.)*

Undisputed that Mayer Dep. Ex. 5 shows that District 26 in Act 43 would have a 53.3%

Republican vote share with no incumbent baseline, but **disputed** to the extent that Table

2, which takes incumbency into account shows a Republican vote share of 55.1% (Mayer

Rpt. (Dkt. 54) at p. 24, Table 2.)

46.   *Mayer's model predicts that District 62 in Act 43 would have 53.9% Republican vote share. (Mayer Dep. Ex. 5 at 2.)*

Undisputed that Mayer Dep. Ex. 5 shows that District 62 in Act 43 would have a 53.9% Republican vote share with no incumbent baseline, but **disputed** to the extent that Table 2, which takes incumbency into account shows a Republican vote share of 53.9% (Mayer Rpt. (Dkt. 54) at p. 24, Table 2.)

47.   *Mayer's model predicts that District 31 in Act 43 would have 54.1% Republican vote share. (Mayer Dep. Ex. 5 at 1.)*

Undisputed that Mayer Dep. Ex. 5 shows that District 31 in Act 43 would have a 54.1% Republican vote share with no incumbent baseline, but **disputed** to the extent that Table 2, which takes incumbency into account shows a Republican vote share of 55.9% (Mayer Rpt. (Dkt. 54) at p. 24, Table 2.)

48.   *Mayer's model predicts that District 70 in Act 43 would have 54.1% Republican vote share. (Mayer Dep. Ex. 5 at 2.)*

Undisputed that Mayer Dep. Ex. 5 shows that District 70 in Act 43 would have a 54.1% Republican vote share with no incumbent baseline, but **disputed** to the extent that Table 2, which takes incumbency into account shows a Republican vote share of 50.1% (Mayer Rpt. (Dkt 54) at p. 25, Table 2.)

49.   *Mayer's model predicts that District 40 in Act 43 would have 54.2% Republican vote share. (Mayer Dep. Ex. 5 at 2.)*

Disputed. Mayer's model for Act 43 taking incumbency into account makes no prediction for this district because it was not contested. (Mayer Dep. Ex. 5 (Dkt. 52-1) at p. 2.)

50.   *Mayer's model predicts that District 28 in Act 43 would have 42.6% Republican vote share. (Mayer Dep. Ex. 5 at 1.)*

Undisputed that Mayer Dep. Ex. 5 shows that District 28 in Act 43 would have a 42.6%

Republican vote share with no incumbent baseline, but **disputed** to the extent that Table

2, which takes incumbency into account shows a Republican vote share of 56.5% (Mayer

Rpt. (Dkt. 54) at p. 24, Table 2.)

51. *Mayer's model predicts that District 30 in Act 43 would have 54.7% Republican vote share. (Mayer Dep. Ex. 5 at 1.)*

Disputed. Mayer's model for Act 43 taking incumbency into account predicts that

District 28 would have a Republican vote share of 56.5%. (Mayer Rpt. (Dkt. 54) at p. 24,

Table 2.)

52. *Mayer's model predicts that District 21 in Act 43 would have 54.9% Republican vote share. (Mayer Dep. Ex. 5 at 1.)*

Undisputed that Mayer Dep. Ex. 5 shows that District 21 in Act 43 would have a 54.9%

Republican vote share with no incumbent baseline, but **disputed** to the extent that Table

2, which takes incumbency into account shows a Republican vote share of 56.9% (Mayer

Rpt. (Dkt. 54) at p. 24, Table 2.)

53. *Mayer did not produce a model to predict the results of the 2014 election either under the current plan or his Demonstration Plan. (Mayer Dep. 104.)*

Disputed. Mayer's sensitivity testing estimates what efficiency gaps the Current Plan and

Demonstration Plan would have exhibited under electoral conditions similar to 2014.

(Mayer Rebuttal Rpt. (Dkt. 64) at pp. 25-28.)

54. *Professor Ronald Keith Gaddie did not calculate an efficiency gap because the efficiency gap did not emerge until 2014 and Gaddie's document did not estimate the number of votes that would be cast in each district, which is an essential element of calculating Mayer's version of the efficiency gap. (Mayer Dep. 81.)*

14

Disputed. Professor Ronald Keith Gaddie calculated an underlying partisanship estimate

for each district in 2011. (Mayer Rpt. (Dkt 54) at p. 29; Goedert Dep. Ex. 25 (Dkt. 65-4).)

"[Professor Gaddie's analysis] is analogous in terms of what he's trying to measure, but

his methods were slightly different than [Mayer's]." (Mayer Dep. (Dkt. 52) at 75:7-9.)

Mayer then used Gaddie's estimates to calculate the corresponding efficiency gap.

(Mayer Rpt. (Dkt. 54) at p. 46.)

55.   *Mayer derives "Gaddie" efficiency gap by plugging Gaddie's percentages for the*
       Republican and Democratic vote into Mayer's regression model for estimating the results
       of Act 43. (Mayer Dep. 79–80.)

      Disputed. Mayer applied Gaddie's percentages to the total predicted vote in each district

      to derive the actual vote estimates for the efficiency gap calculation, but does not "plug

      in" Gaddie's percentages. (Mayer Rpt. (Dkt. 54) at p. 46; Mayer Dep. (Dkt. 52) at 83:8-

      14.)

56.   *Mayer made one error in translating Gaddie's data. Gaddie predicted the 86th District*
       would have 55.08% Republican vote share. But Mayer uses 48.38%. (Mayer Dep. Ex. 7,
       Ex. 8; Mayer Report 53.)

      Undisputed. But see arguments explaining that error does not affect Mayer's conclusion.

      (Pl. Opp. at p. 33.)

57.   *Mayer incorrectly repeated the Republican percentage for the 85th District (48.38%) into*
       the 86th District. (Mayer Dep. Ex. 8 at 3; Mayer Report 53.)

      Undisputed. But see arguments explaining that error does not affect Mayer's conclusion.

      (Pl. Opp. at p. 33.)

58.   *Plaintiffs claim that Gaddie's model forecast the eventual efficiency gap of the 2012*
       election. (Compl. ¶ 36.)

      Disputed. Plaintiffs claim that Gaddie's model can be used to calculate an efficiency

gap, which can then be compared to that of the actual 2012 election, as explained in Mayer's Deposition:

> Q.   Now, it's not your testimony that Dr. Gaddie himself went ahead and performed any sort of calculation like [the efficiency gap]?
>
> A.   Not that I'm aware of.
>
> Q.   Okay. Basically what you did is you took his underlying baseline partisanship numbers and plugged them into -- I guess you didn't plug them into your model, but you applied them to the total votes produced by your model?
>
> A.   Correct. I'm glad you rephrased that -- that was very nicely done

(Mayer Dep. (Dkt. 52) at 83:4-14.)

59.   *In District 49, Gaddie's model shows a Republican vote percentage of 49.59%. (Mayer Dep. Ex. 7.)*

Undisputed.

60.   *The actual Republican vote percentage in District 49 in 2012 was 54.19%. (GAB 2012 Fall General Election Results at 20.)*

Undisputed.

61.   *In District 51, Gaddie's model shows a Republican vote percentage of 46.23%. (Mayer Dep. Ex. 7.)*

Undisputed.

62.   *The actual Republican vote percentage in District 51 in 2012 was 51.85%. (GAB 2012 Fall General Election Results at 20–21.)*

Undisputed

63. *In District 68, Gaddie's model shows a Republican vote percentage of 52.39%. (Mayer Dep. Ex. 7.)*

Disputed. In District 68, Gaddie's model shows a Republican vote percentage of 49.38%.

(Mayer Dep. Ex. 7. (Dkt. 52-2).)

64. *The actual Republican vote percentage in District 68 in 2012 was 52.39%. (GAB 2012 Fall General Election Results at 25.)*

Undisputed.

65. *In District 70, Gaddie's model shows a Republican vote percentage of 50.73%. (Mayer Dep. Ex. 7.)*

Undisputed.

66. *The actual Republican vote percentage in District 70 in 2012 was 49.65%. (GAB 2012 Fall General Election Results at 25.)*

Undisputed.

67. *In District 75, Gaddie's model shows a Republican vote percentage of 52.18%. (Mayer Dep. Ex. 7.)*

Undisputed.

68. *The actual Republican vote percentage in District 75 in 2012 was 48.85%. (GAB 2012 Fall General Election Results at 26.)*

Undisputed.

69. *In District 94, Gaddie's model shows a Republican vote percentage of 51.91%. (Mayer Dep. Ex. 7.)*

Undisputed.

70. *The actual Republican vote percentage in District 94 in 2012 was 39.38%. (GAB 2012*

Fall General Election Results at 31.)

Undisputed.

71.   *In District 96, Gaddie's model predicts a Republican vote percentage of 46.40%. (Mayer Dep. Ex. 7.)*

Undisputed.

72.   *The actual Republican vote percentage in District 96 in 2012 was 59.52%. (GAB 2012 Fall General Election Results at 31.)*

Undisputed.

73.   *The model likewise predicts the incorrect winner in six races in the 2014 election, undercounting five Republican wins. (Mayer Dep. Ex. 7.)*

Disputed. The purpose of the model was not to predict results in particular elections, but

rather to produce a baseline estimate of partisanship for each district. (Mayer Rebuttal

Rep. (Dkt. 64) at p. 22.)

74.   *In District 49, Gaddie's model predicts a Republican vote percentage of 49.59%. (Mayer Dep. Ex. 7.)*

Undisputed.

75.   *The actual Republican vote percentage in District 49 in 2014 was 61.38%. (GAB 2014 Fall General Election Results at 20.)*

Undisputed.

76.   *In District 51, Gaddie's model predicts a Republican vote percentage of 46.23%. (Mayer Dep. Ex. 7.)*

Undisputed.

77.   *The actual Republican vote percentage in District 51 in 2014 was 47.48%. (GAB 2014 Fall General Election Results at 20.)*

Undisputed.

78. *The Republican won in District 51 with less than 50% of the vote because an independent candidate won 5.25% of the vote. (GAB 2014 Fall General Election Results at 20.)*

   Undisputed.

79. *When calculated as a percentage of the two–party vote, the Republican won with 50.15%. (GAB 2014 Fall General Election Results at 20.)*

   Undisputed.

80. *In District 68, Gaddie's model shows a Republican vote percentage of 49.23%. (Mayer Dep. Ex. 7.)*

   Undisputed that Gaddie's model shows a Republican vote percentage of 49.38%. We

   believe the defendants made a minor typographical error. (Mayer Dep. Ex. 7 (Dkt. 52-2).)

81. *The actual Republican vote percentage in District 68 in 2014 was 52.82%. (GAB 2014 Fall General Election Results at 24.)*

   Undisputed.

82. *In District 85, Gaddie's model shows a Republican vote percentage of 48.38%. (Mayer Dep. Ex. 7.)*

   Undisputed.

83. *The actual Republican vote percentage in District 85 in 2014 was 50.19%. (GAB 2014 Fall General Election Results at 28.)*

   Undisputed.

84. *In District 94, Gaddie's model shows a Republican vote percentage of 51.91%. (Mayer Dep. Ex. 7.)*

   Undisputed

85. *The actual Republican vote percentage in District 94 in 2014 was 45.94%. (GAB 2014*

Fall General Election Results at 30.)

Undisputed.

86.   *In District 96, Gaddie's model shows a Republican vote percentage of 46.40%. (Mayer Dep. Ex. 7.)*

Undisputed.

87.   *The actual Republican vote percentage in District 96 in 2014 was 58.91%. (GAB 2014 Fall General Election Results at 30.)*

Undisputed.

88.   *Mayer creates an alternative plan, called the Demonstration Plan. (Mayer Rep. 35, Fig. 8.)*

Undisputed.

89.   *Mayer calculates an efficiency gap based on his regression model as applied to the Demonstration Plan. (Mayer Rep. 45.)*

Undisputed.

90.   *Mayer's regression model is based on the specific conditions of the 2012 election— something which the drafters of Act 43 could not have known in 2011. (Goedert Rep. 16– 17.)*

Disputed. Table 8, shown on pages 50-51 of Mayer's Report, shows the calculation of

the wasted votes for Act 43 districts "using estimated partisan vote totals with incumbent

advantages removed" in order to establish a baseline level of partisanship, rather than

relying only on the specific conditions of the 2012 election. (Mayer Rpt. (Dkt. 54) at p.

45.) Mayer also tests his model with respect to both Act 43 and his Demonstration Plan

by calculating efficiency gap scores with and without incumbents, and by applying a

uniform swing to simulate the largest Democratic and Republican wave elections of the

past three decades. (Mayer Rebuttal Rpt. (Dkt. 64) at pp. 24-27.) Further, the conditions

of the 2012 election could have been accurately forecast using pre-2012 data, given the

extremely high correlation between election results in different years. (Mayer Rebuttal

Rpt. (Dkt. 64) at p. 23.)

91.   *While the plaintiffs contend the Demonstration Plan is roughly equivalent to Act 43 in*
      terms of population deviation, compactness, number of municipal splits, and Voting
      Rights Act compliance, Mayer was unwilling to say that his plan was superior to Act 43,
      particularly when it came to keeping communities of interest together, which he said was
      "a very loose and subjective standard that can be difficult to do." (Mayer Dep. 116–17.)

      Disputed. Mayer concludes that he "drew a demonstration plan that was equivalent to

      Act 43 on population deviation, municipal splits, and compliance with the Voting Rights

      Act, and better on compactness, with a dramatically lower efficiency gap score." (Mayer

      Rpt. (Dkt. 54) at p. 55.) Mayer testified that he aimed to keep communities of interest

      together when he drew the Demonstration Plan, but gave no conclusion on whether either

      the Demonstration Plan or Act 43 was superior on this metric. (Mayer Dep. (Dkt. 52) at

      pp. 116-117.)

92.   *Mayer predicts that his Demonstration Plan would yield 51 Democratic seats and 48*
      Republican seats, which would still produce a gap of 62,414 wasted votes and a 2.20%
      efficiency gap in favor of Republicans. (Mayer Rep. 46.)

      Disputed. Mayer does not predict that his Demonstration Plan would yield 51

      Democratic seats and 48 Republican seats, instead Mayer calculates the "baseline

      partisanship measure" (which includes no incumbents and all districts contested) for his

      Demonstration Plan, concluding that "[d]ividing 62,414 by the predicted total number of

      votes 2,843,108, produces the baseline efficiency gap for my plan, .0220, or 2.20%."

      (Mayer Rpt. (Dkt. 54) at pp. 45-46.)

93.   *Mayer achieves this result by creating seventeen districts that are 50%–55% Democratic*
      under his model. (Mayer Dep. Ex. 10.)

Disputed. Mayer created eighteen districts that would have a Democratic vote percentage of 50% - 55% if the seats were contested with no incumbents running. (Mayer Rpt. (Dkt. 54 at p. 31); Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

94.   *In Mayer's Demonstration Plan, District 49 has a 50.3% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 2.)*

    Undisputed that in Mayer's Demonstration Plan, District 49 has a 50.3% predicted Democratic vote percentage if the seat was contested with no incumbents running. (Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

95.   *In Mayer's Demonstration Plan, District 92 has a 50.5% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 3.)*

    Undisputed that in Mayer's Demonstration Plan, District 92 has a 50.5% predicted Democratic vote percentage if the seat was contested with no incumbents running. (Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

96.   *In Mayer's Demonstration Plan, District 86 has a 50.7% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 3.)*

    Undisputed that in Mayer's Demonstration Plan, District 86 has a 50.7% predicted Democratic vote percentage if the seat was contested with no incumbents running. (Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 3.)

97.   *In Mayer's Demonstration Plan, District 96 has a 51.5% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 3.)*

    Undisputed that in Mayer's Demonstration Plan, District 96 has a 51.5% predicted Democratic vote percentage if the seat was contested with no incumbents running. (Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 3.)

98.   *In Mayer's Demonstration Plan, District 91 has a 51.7% predicted Democratic vote*

percentage. (Mayer Dep. Ex. 10 at 3.)

Undisputed that in Mayer's Demonstration Plan, District 91 has a 51.7% predicted

Democratic vote percentage if the seat was contested with no incumbents running.

(Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 3.)

99.   *In Mayer's Demonstration Plan, District 81 has a 51.8% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 3.)*

Undisputed that in Mayer's Demonstration Plan, District 81 has a 51.8% predicted

Democratic vote percentage if the seat was contested with no incumbents running.

(Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 3.)

100.   *In Mayer's Demonstration Plan, District 40 has a 51.9% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 2.)*

Undisputed that in Mayer's Demonstration Plan, District 40 has a 51.9% predicted

Democratic vote percentage if the seat was contested with no incumbents running.

(Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

101.   *In Mayer's Demonstration Plan, District 42 has a 51.9% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 2.)*

Undisputed that in Mayer's Demonstration Plan, District 42 has a 51.9% predicted

Democratic vote percentage if the seat was contested with no incumbents running.

(Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

102.   *In Mayer's Demonstration Plan, District 67 has a 51.9% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 2.)*

Undisputed that in Mayer's Demonstration Plan, District 67 has a 51.9% predicted

Democratic vote percentage if the seat was contested with no incumbents running.

(Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

102.   *In Mayer's Demonstration Plan, District 71 has a 52.1% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 2.)*

Undisputed that in Mayer's Demonstration Plan, District 71 has a 52.1% predicted

Democratic vote percentage if the seat was contested with no incumbents running.

(Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

103.   *In Mayer's Demonstration Plan, District 20 has a 52.3% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 1.)*

Undisputed that in Mayer's Demonstration Plan, District 20 has a 52.3% predicted

Democratic vote percentage if the seat was contested with no incumbents running.

(Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

104.   *In Mayer's Demonstration Plan, District 29 has a 52.3% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 2.)*

Undisputed that Mayer's Demonstration Plan, District 29 has a 52.3% predicted

Democratic vote percentage if the seat was contested with no incumbents running.

(Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52- 4) at p. 2.)

105.   *In Mayer's Demonstration Plan, District 29 has a 52.3% predicted Democratic vote percentage. (Mayer Dep. Ex. 10 at 2.)*

Undisputed that in Mayer's Demonstration Plan, District 29 has a 52.3% predicted

Democratic vote percentage if the seat was contested with no incumbents running.

(Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

106.   *In Mayer's Demonstration Plan, District 51 has a 52.6% predicted Democrat vote percentage. (Mayer Dep. Ex. 10 at 2.)*

Undisputed that in Mayer's Demonstration Plan, District 51 has a 52.6% predicted

Democratic vote percentage if the seat was contested with no incumbents running.

(Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

107.   *In Mayer's Demonstration Plan, District 64 has a 52.8% predicted Democrat vote percentage. (Mayer Dep. Ex. 10 at 2.)*

   Undisputed that in Mayer's Demonstration Plan, District 64 has a 52.8% predicted

   Democratic vote percentage if the seat was contested with no incumbents running.

   (Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

108.   *In Mayer's Demonstration Plan, District 54 has a 53.4% predicted Democrat vote percentage. (Mayer Dep. Ex. 10 at 2.)*

   Undisputed that in Mayer's Demonstration Plan, District 54 has a 53.4% predicted

   Democratic vote percentage if the seat was contested with no incumbents running.

   (Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

109.   *In Mayer's Demonstration Plan, District 57 has a 53.4% predicted Democrat vote percentage. (Mayer Dep. Ex. 10 at 2.)*

   Undisputed that Mayer's Demonstration Plan, District 57 has a 53.4% predicted

   Democratic vote percentage if the seat was contested with no incumbents running.

   (Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 2.)

110.   *In Mayer's Demonstration Plan, District 2 has a 54.1% predicted Democrat vote percentage. (Mayer Dep. Ex. 10 at 1.)*

   Undisputed that Mayer's Demonstration Plan, District 2 has a 54.1% predicted

   Democratic vote percentage if the seat was contested with no incumbents running.

   (Mayer Rpt. (Dkt. 54) at p. 31; Mayer Dep. Ex. 10 (Dkt. 52-4) at p. 1.)

111.   *These predicted vote percentages were determined using the 2012 election environment. (Mayer Dep. 62–63.)*

   Disputed. Table 8 of Mayer's Report shows the calculation of the wasted votes for Act

   43 districts "using estimated partisan vote totals with incumbent advantages removed" in

order to establish a baseline level of partisanship, rather than relying only on the specific

conditions of the 2012 election. (Mayer Rpt. (Dkt. 54) at pp. 45, 50-51.)

112.   *Jackman calculates Democrats won 51.4% of the statewide vote. (Jackman Dep. 117.)*

Disputed. Jackman calculates "In Wisconsin in 2012, and after imputations for

uncontested seats, *V* is estimated to be 51.4% (+/- 0.6)" (Jackman Rpt. (Dkt. 62) at p. 69.)

V is the "democratic vote share" of the two party vote. (Jackman Dep. (Dkt. 53) at 33:13-

16, 40:9-11.)

113.   *Mayer did not create a model to show how these districts would have performed in the*
       2014 election environment. (Mayer Dep. 104.)

Disputed. Mayer "conducted a uniform swing analysis over the range of plausible

election results, based on the maximum and minimum statewide Democratic Assembly

vote since 1992. This analysis shows that the efficiency gaps of both Act 43 and the

Demonstration Plan are robust: Act 43's efficiency gap remains very high across this

range, always significantly above the plaintiffs' suggested 7% threshold, and the

Demonstration Plan's efficiency gap remains very low, and is always well below the

threshold." (Mayer Rebuttal Rpt. (Dkt. 64) at p. 2.)

114.   *In the 2014 election environment Democratic vote share fell 3.4% down to 48.0%.*
       (Jackman Dep. 117.)
       Undisputed.

115.   *Jackman calculates a version of the efficiency gap, which he shortens to EG, that*
       assumes there were an equal number of votes are (sic) cast in each district. (Jackman
       Dep. 21–22.)

Undisputed, except that the simplified method of calculating the efficiency gap is not

another "version" of the measure. The results produced by the full and simplified

methods are also nearly identical, as explained in the Pl. Opp. at p. 37.

116.   *Jackman's report and the plaintiffs' filings are therefore incorrect when they suggest that this version of the efficiency gap assumes districts of "equal population" because the number relevant to "wasted votes" is the number of votes, not the number of residents in a district. (Jackman Dep. 21–22.)*

Undisputed, except that the simplified method of calculating the efficiency gap is not

another "version" of the measure. The results produced by the full and simplified

methods are also nearly identical, as explained in the Pl. Opp. at p. 37.

117.   *Wisconsin does not have equal turnout across districts. (2012 GAB Fall Election Results at 10–11; 2014 GAB Fall General Election Results at 11, 14.)*

Undisputed.

118.   *In Wisconsin's 2012 Assembly elections, the turnout in individual districts varied from just over 8,000 votes in District 8 to over 37,000 votes in District 14. (2012 GAB Fall General Election Results at 10–11.)*

Undisputed.

119.   *In Wisconsin's 2014 elections, the turnout in individual districts varied from approximately 6,400 votes in District 8 to over 31,400 votes in District 23. (2014 GAB Fall General Election Results at 11, 14.)*

Undisputed.

120.   *Using the assumption of equal turnout, Jackman's efficiency gap is calculated using statewide vote shares and seat shares because "the average (over districts) of the Democratic share of the two–party vote," corresponds "to the Democratic share of the state–wide two–party vote," which Jackman refers to as V. (Jackman Rep. 16–17.)*

Disputed. Jackman calculates the efficiency gap using individual district results (and

imputed results where districts were uncontested). "I compute two quantities for each

election:

1. V, the statewide share of the two-party vote for Democratic candidates, formed by

averaging the district-level elections results v_i (the Democratic share of the two-party

vote in the district *i*) in seats won by major party candidates, including uncontested seats,

and

2. *S*, the Democratic share of seats won by major parties"

(Jackman Rpt. (Dkt. 62) at pp. 19-20.)

121.   *The efficiency gap is then calculated by comparing the seat share the party won, which
       Jackman refers to as S, to the seat share expected under a zero– efficiency gap
       environment: "For any given observed* V, *the hypothesis of zero efficiency gap tells us
       what level of* S *to expect." (Jackman Rep. 19.)*

       Undisputed.

122.   *The hypothesis of zero efficiency gap "implies that if the efficiency gap is zero, we obtain
       a particular type of seats–votes curve," which is "is linear through the 50–50 point with
       a slope of 2." (Jackman Rep. 17.)*

       Disputed. There is no "hypothesis" of zero efficiency gap. Rather, a zero efficiency gap

       implies "a particular type of seats-votes curve." (Jackman Rpt. (Dkt. 62) at p. 17.)

123.   *Each additional percentage point of vote share for party A generates two additional
       percentage points of seat share." (Jackman Rep. 17.)*

       Undisputed that each percentage point of vote share for party A generates two additional

       percentage points of seat share as long as the efficiency gap is zero.

124.   *For example, 51% vote share should result in 52% seat share, 52% vote share should
       result in 54% seat share, 53% vote share should result in 56% seat share, and so on. This
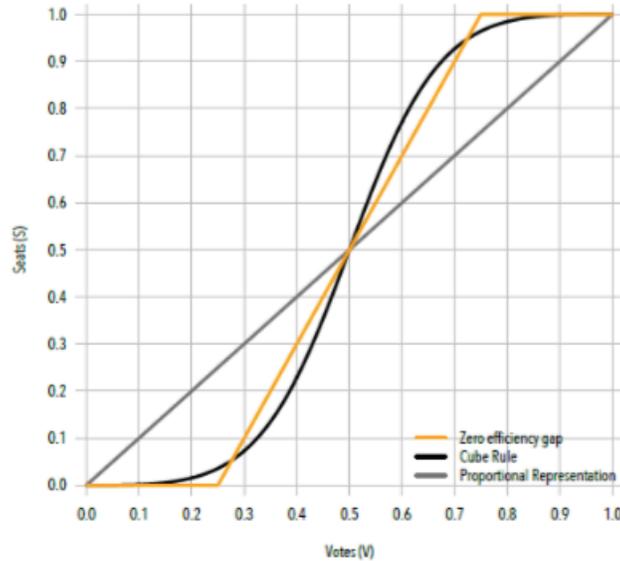   is represented by the orange line in Figure 4 below.*

Figure 4: Theoretical seats-votes curves. The $EG = 0$ curve implies that (a) a party winning less than $V = .25$ jurisdiction-wide should not win any seats; (b) symmetrically, a party winning more than $V = .75$ jurisdistion-wide should win all the seats; and (c) the relationship between seat shares S and vote shares V over the interval $V \in [.25, .75]$ is a linear function with slope two (i.e., for every one percentage point gain in vote share, seat share should go up by two percentage points).

(Jackman Rep. Fig. 4.)

Undisputed.

125.   *Jackman claims that the efficiency gap is an "excess seats" measure based on "the party winning more seats than we'd expect given its vote share (V) and if wasted vote rates were the same between the parties." (Jackman Rep. 3.)*

Undisputed.

126.   *The efficiency gap is observed by comparing "how far the observed S lies above or below the orange line in Figure 4" of his report, which represents the seat share called for by the zero efficiency gap hypothesis. (Jackman Rep. 19 & Fig. 4.)*

Undisputed, except that this refers to how the efficiency gap is calculated under the

simplified method, not the full method. (Jackman Rpt. (Dkt. 62) at pp. 16, 18, 19.)

127.   *The zero efficiency gap hypothesis calls for 56% vote share to translate into a 62% seat share. (Jackman Rep. 17.)*

29

Undisputed that if the efficiency gap is zero a vote share of 56% would translate into a 62% seat share, assuming that the efficiency gap is calculated using the simplified method. (Jackman Rpt. (Dkt. 62) at p. 17.)

128.   *Jackman rounds his efficiency gap calculations to the nearest percent (or .01 as decimal) based on his comfort with "digits of precision." (Jackman Dep. 119.)*

Disputed. Jackman *reports* the efficiency gap for Wisconsin in 2012 and 2014 rounded to the nearest percent based on his comfort with "digits of precision," but he did not round numbers during any of his calculations ("When I'm reporting negative 0.13 and negative .10 in the report and in testimony, I'm rounding to digits of precision"). (Jackman Rpt. (Dkt. 62) at p. 4; Jackman Dep. (Dkt. 53) at 119:15-17.)

129.   *Jackman calculates the efficiency gap for 786 state legislative elections that occurred in from 1972 to 2014. (Jackman Rep. 19.)*

Undisputed.

130.   *Jackman computes the V (two–party vote share for the Democratic candidates) and S (seat share for Democrats) in each election. (Jackman Rep. 19–20.)*

Disputed. The full quote from pages 19-20 is: "I compute two quantities for each election:

1. *V*, the statewide share of the two-party vote for Democratic candidates, formed by averaging the district-level elections results v_i (the Democratic share of the two-party vote in the district *i*) in seats won by major party candidates, including uncontested seats, and

2. *S*, the Democratic share of seats won by major parties"

(Jackman Rpt. (Dkt. 62) at pp. 19-20.)

30

131.   *The EG is then calculated using the process described above that compares the actual seat share obtained against the seat share called for by the zero efficiency gap hypothesis. (Jackman Rep. 19.)*

   Undisputed.

132.   *In determining seats share, if a seat is won by a third–party candidate that is not a Republican or a Democrat, then this seat is disregarded. (Jackman Dep. 43.)*

   Undisputed.

133.   *Unlike Mayer, Jackman calculates vote share using the actual votes cast in an election rather than a regression model that predicts the votes that would have been cast if no incumbents had run. (Jackman Rep. 20.)*

   Disputed. Jackman makes imputations for uncontested elections to supplement the

   observed vote shares in each district included in his data set. (Jackman Rpt. (Dkt. 62) at

   pp. 22-32.) Mayer calculates the "underlying partisanship of a district" so that he can

   estimate "*how many* votes will be cast for Democratic and Republican candidates in each

   district in a demonstration district plan." (Emphasis in original) (Mayer Rpt. (Dkt. 54) at

   p. 8.)

134.   *Like Mayer, Jackman adjusts the raw vote totals by imputing vote shares for uncontested races, which he finds are 38.7% of races. (Jackman Rep. 22.)*

   Undisputed.

135.   *Jackman uses two different methods for imputing vote shares depending on the type of data available. (Jackman Dep. 48.)*

   Disputed. Jackman uses two different imputation models (that "correlate at .99") and

   "combin[es] the two sets of imputations…[h]e model[s] the difference between the two

   sets of imputations, adjusting the "Model 2" imputations of V to better match what [h]e

   ha[s] obtained from "Model 1", had the necessary presidential vote shares by state

   legislative district been available." (Jackman Rpt. (Dkt. 62) at pp. 29-30.)

136.   *In one, Jackman "relied on a modeling procedure that used presidential vote tabulated by state legislative district from the most temporally proximate presidential election" when such data became available in the 2000s. (Jackman Dep. 49–50.)*

Undisputed, but note correct citation is Jackman Dep. (Dkt. 53) at 48:13-49:12, not

Jackman Dep. (Dkt. 53) at pp. 49-50.

137.   *When such data were not available, Jackman models results by "interpolating unobserved Democratic votes shares given (1) previous and future results for a given district; (2) statewide swing in a general election; and (3) the change in incumbency status of a given district." (Jackman Rep. 29.)*

Disputed. When such data were not available, Jackman models results by "interpolating

unobserved Democratic votes shares given (1) previous and future results for a given

district; (2) statewide swing in a *given state* election; and (3) the change in incumbency

status of a given district." (Jackman Rpt. (Dkt. 62) at p. 29 (emphasis added).)

138.   *The presence of imputed vote totals leads to uncertainty in Jackman's calculation of vote share, which "generates uncertainty in determining how far each point lies above or below the orange, zero efficiency gap benchmark." (Jackman Rep. 32.)*

Undisputed.

139.   *Jackman expresses his EG calculations as "point estimates" with lines indicating a 95% level of confidence. (Jackman Dep. 24; Jackman Rep. 32.)*

Undisputed.

140.   *Jackman has less confidence in the "point estimate" of his EG as the number of uncontested seats increases. (Jackman Dep. 62.)*

Undisputed.

141.   *Jackman found that "[t]he distribution of EG measures trends in a pro–Republican direction through the 1990s, such that by the 2000s, EG measures were more likely to be negative (Republican efficiency over Democrats)." (Jackman Rep. 44.)*

Undisputed.

142. *Jackman finds this by plotting the efficiency gap of each plan in each year from lowest to highest (from most favorable to Republicans to least) and then calculating the EG of the 25th percentile plan, the median plan and the 75th percentile plan. (Jackman Rep. 45, Fig. 20; Jackman Dep. 65–68.)*

Disputed. Jackman finds this by plotting the efficiency gap of each plan in each year from lowest to highest (from most favorable to Republicans to least) and then "overlaying estimates of the smoothed weighted quantiles (25th, 50th and 75th) of the EG measures." (Jackman Rpt. (Dkt. 62) at pp. 44-45, Fig. 20.) The blue lines in Figure 20 represent the "smoothed over time estimate of the median efficiency gap." (Jackman Dep. (Dkt. 53) at 67:18-68:6

143. *The efficiency gap of the median plan has been negative (favorable to the Republicans) since the mid–1990s. (Jackman Rep. 45, Fig. 20; Jackman Dep. 69.*

Disputed. The median *efficiency gap* (not median plan) has been negative, since the mid-1990s:

Q: So if I'm reading this correctly, since about it looks like as you said the mid nineties, the median plan has been an efficiency gap that's favorable to republicans?

A: That's right. Well, strictly speaking, the median efficiency gap estimate, right, so plans span multiple elections. But substantially the characterization that plans is correct, but technically the graph is displaying election-by-election estimates of the efficiency gap.

Q: Yeah. So the median efficiency gap that you calculated for that particular election year?

A: Election year, correct.

(Jackman Dep. (Dkt. 53) at p. 69:8-21.)

144.   *The most favorable median toward Democrats since 2000 was in 2010. (Jackman Rep. 45, Fig. 20.)*

   Undisputed.

145.   *The 25th percentile has been below 5% since the mid–1990s and even approached 7% in 2004, 2010, and 2012. (Jackman Rep. 45, Fig. 20.)*

   Undisputed.

146.   *The 75th percentile has been below 5% since the mid–1990s and has hovered between 1% and 2% since 2000. (Jackman Rep. 45, Fig. 20.)*

   Undisputed.

147.   *Jackman's calculation of the "the probability that a given efficiency gap number from a given election year is positive or negative" also shows a trend in favor of Republicans. (Jackman Dep. 70; Jackman Rep. 46, Fig. 21.)*

   Undisputed.

148.   *He finds that in every election year since 1996, more plans have had negative efficiency gaps than positive ones. (Jackman Rep. 46, Fig. 21.)*

   Disputed. In 2010 the proportion of efficiency gap measures (not plans) that are positive

   is greater than 0.5. (Jackman Rpt. (Dkt. 62) at p. 46, Fig. 21.)

149.   *In 2006, 75% of plans produced a negative efficiency gap while only 25% of plans produced a positive efficiency gap, with similar results in 2000 and 2012. (Jackman Rep. 46, Fig. 21; Jackman Dep. 71.)*

   Undisputed.

150.   *Since 1996, the best year for the Democrats was 2010, in which there was a 50–50 probability of a plan being negative. (Jackman Rep. 46, Fig. 12.)*

Disputed. Since 1996, the year with the greatest proportion of efficiency gap measures that favor Democrats was 2010, in which there was a *less than* 50-50 probability of a plan being negative. (Jackman Rpt. (Dkt. 62) p. 46, Fig. 12.)

151.   *Jackman opines that a plan that has an efficiency gap of 7% in the first election after redistricting should be presumptively unconstitutional. (Jackman Rep. 66.)*

Disputed. Jackman does not express opinions about the legal implications of any efficiency gap threshold or how it might fit into a test for gerrymandering. Instead, Jackman opines:

> Historical analysis of the relationship between the relationship between the first EG measure we observe under a new districting plan and the subsequent EG measures lets us assess the extent to which that first EG estimate is a *reliable* indicators (sic) of a *durable* and hence *systematic* feature of the plan. In turn, this let us assess the *confidence* associated with a range of possible *actionable EG thresholds*.

> My analysis suggests that EG greater than .07 in absolute value be used as an actionable threshold. Relatively few plans produce a first election with an EG measure in excess of this threshold, and of those that do, the historical analysis suggests that most go on to produce a sequence of EG estimates indicative of systematic, partisan advantage consistent with the first election EG estimates, At the 0.07 threshold, 95% of plans would be either (a) undisturbed by the courts, or (b) struck down because we are sufficiently confident that the plan, if left undisturbed, would go on to produce a one-sided sequence of EG estimates, consistent with the plan being a partisan gerrymander. In short, our "confidence

35

level" in the 0.07 threshold is 95%.

(Jackman Rpt. (Dkt. 62) at p. 5.)

Jackman further finds:

[A]n efficiency gap threshold of 0.07 is quite conservative, in that it sacrifices

some accuracy (which would be maximized at a threshold of around 0.03) in

order to drive down the false positive and false discovery rates. At a threshold of

0.07, in fact, the false positive and false discovery rates are about *half* of the false

omission rate, indicating that there are about twice as many plans that are *not*

being flagged even though their *EG* signs would remain one-sided throughout the

cycle, than there are plans that *are* being flagged even though their *EG* signs

would flip. This is further powerful confirmation of the reasonableness of the 0.07

efficiency gap threshold.

and

[E]ven given the uncertainty that accompanies EG measures due to

uncontestedness, the relationship between first-election EG and plan-average EG

is quite strong.

…

This constitutes additional, powerful evidence that (a) first- election *EG* estimates

are predictive with respect to the *EG* estimates that will be observed over the life

of the plan; and (b) the threshold values of +/- 0.07 are conservative, generating

high-confidence predictions as to the behavior of the district plan in successive

elections.

(Jackman Rebuttal Rep. (Dkt. 63) at pp. 10, 15-16.)

152.   *In determining that number, the key fact Jackman considered was whether the EG would flip sign throughout the course of the plan; i.e. whether a plan would change from negative to positive or vice versa. (Jackman Dep. 106.)*

Disputed. Jackman considered a number of factors in his Report and Rebuttal Report that

support his opinion that an actionable threshold for an extreme and durable partisan

gerrymander could be set at EG > |0.07|. In his Report, Jackman considers whether:

- a particular EG is "large relative to those observed in the previous 40 years of state

  legislative elections" (Jackman Rpt. (Dkt. 62) at p. 65); and

- "whether the estimate is so large that the historical record suggests that the first

  election's EG estimate is a reliable indicator as an enduring feature of the plan, and

  not an election specific aberration" *(id.* at p. 66).

In his Rebuttal Report Jackman considers:

- "several widely accepted prognostic measures—all based on the rates of true

  positives, false positives, true negatives, and false negatives to determine the odds of

  a district plan's efficiency gap changing signs over the plan's lifetime given a certain

  efficiency gap value in the plan's first election" (Jackman Rebuttal Rpt. (Dkt. 63) at

  p. 2);

- "the same prognostic measures with the respect to the odds of a district plan's average

efficiency gap, over its lifetime, having a different sign than that observed in the first election under a plan, given a certain efficiency gap value in this first election" (*id.*);

- "the relationship between the magnitudes of the first efficiency gap observed under a plan and the average efficiency gap we observe over the life of the plan" (*id.* at p. 15); and

- "the behavior of the efficiency gap when we perturb it by mimicking 'uniform swing' across a jurisdiction" (Jackman Decl., Ex. D (Dkt 58-4) at p. 1).

153.   *In his report, he opines that "[i]t is especially important that we assess the durability of the sign of the EG measure." (Jackman Rep. 53.)*

Undisputed.

154.   *Jackman's analysis focuses on determining a threshold for the EG in the first election under a plan from which he could be confident that the sign of the plan would not change. (Jackman Dep. 96–97.)*

Disputed. Jackman's analysis focuses on a number of factors in determining a possible threshold for the EG. Jackman's analysis in setting a threshold focuses on finding out "how informative is the signal we get from the first efficiency gap reading under a plan…How much does the first election or the efficiency gap estimate produced under the first election tell you about the plan. And in particular, what's the critical threshold of -- how big does that first efficiency gap estimate have to be before you can feel confident that you're seeing something about a plan that is not a one-off or a fluke, that you've seen something that gives you enough confidence to believe this plan is manifesting advantage one way or the other. That's the goal of this part of the analysis." (Jackman Dep. (Dkt. 53) at 96:22-97:17.) In order to assess the signal given by the first efficiency gap reading

38

under a plan he looks at a number of factors, including whether:

- a particular EG is "large relative to those observed in the previous 40 years of state legislative elections" (Jackman Rpt. (Dkt. 62) at p. 65); and

- "whether the estimate is so large that the historical record suggests that the first election's EG estimate is a reliable indicator as an enduring feature of the plan, and not an election specific aberration" (*id.* at p. 66).

In his Rebuttal Report Jackman considers:

- "several widely accepted prognostic measures—all based on the rates of true positives, false positives, true negatives, and false negatives to determine the odds of a district plan's efficiency gap changing signs over the plan's lifetime given a certain efficiency gap value in the plan's first election" (Jackman Rebuttal Rpt. (Dkt. 63) at p. 2);

- "the same prognostic measures with the respect to the odds of a district plan's average efficiency gap, over its lifetime, having a different sign than that observed in the first election under a plan, given a certain efficiency gap value in this first election" (*id.*); and

- "the relationship between the magnitudes of the first efficiency gap observed under a plan and the average efficiency gap we observe over the life of the plan" (*id.* at p. 15).

155. *He chose to look at the first election in the plan because he "tried to put [himself] in the shoes of litigants" who would have to "intervene early before we've seen much data all from the plan, the election results the plan is throwing off." (Jackman Dep. 96.)*

Undisputed.

156. *Jackman first calculated the proportion of plans that produced an efficiency gap in excess of a particular threshold in the first election and then calculated the proportion of the plans in each subclass that produced an election with an efficiency gap of the opposite sign. (Jackman Rep. 60–61, Fig. 29.)*

> **Undisputed.**

157. *Jackman's figures use red and blue squares spaced at each half percent (.005). (Jackman Dep. 103.)*

> **Undisputed** that PFOF 157 is correct for Figures 27-30. (Jackman Rpt. (Dkt. 62) at pp.
>
> 57, 59, 61-62.)

158. *For all plans since 1972, Jackman finds that 36% of all plans produced an efficiency gap of 7% or greater in the first election: 18% on the positive side and 18% on the negative side. (Jackman Rep. 61, Fig. 29.)*

> **Undisputed.**

159. *Since 1991, 34% of all plans produced an efficiency gap greater than 7% in the first election: 22% produced a gap of at least –7% and 12% percent produced a gap of at least +7%. (Jackman Dep. 115; Jackman Rep. 62, Fig. 30.)*

> **Undisputed.**

160. *For all plans since 1972, Jackman finds that 18% of plans that had an EG of at least – 7% go on to produce an election with a positive EG. (Jackman Rep. 61, Fig. 29.)*

> **Undisputed.**

161. *He finds that 40% of plans that produce an EG of at least +7% in the first election go on to produce an election with a negative EG. (Jackman Rep. 61, Fig. 29.)*

> **Undisputed.**

162. *Since 1991, Jackman finds that 18% of plans that produce an EG of at least –7% in the first election go on to produce an election with a positive EG. (Jackman Rep. 62, Fig. 30.)*

Undisputed.

163. *Since 1991, He finds that 60% of plans that produce an EG of at least +7% in the first election go on to produce an election with a negative EG. (Jackman Rep. 62, Fig. 30.)*

Undisputed.

164. *Jackman finds that elections favoring Republicans in the first election are much more common than those favoring Democrats. (Jackman Rep. 60.)*

Disputed. Jackman finds "over the full set of data (Figure 29) we observe a roughly symmetric set of EG scores in the first election under a plan. But we seldom see plans in the 1990s or later that commence with a large, pro-Democratic efficiency gap." (Jackman Rpt. (Dkt. 62) at p. 60.)

165. *Jackman says that "we seldom see a plan in the 1990s or later that commence with a large–pro Democratic efficiency gap." (Jackman Rep. 60.)*

Undisputed.

166. *The probability that the first election has an efficiency gap greater than 5% "is only about 11%." (Jackman Rep. 60.)*

Disputed. Jackman finds that the probability that the first election has an efficiency gap greater than 5% "is only about 11%" "in the 1990s or later." (Jackman Rpt. (Dkt. 62) at p. 60.)

167. *In contrast, negative efficiency gaps "are much more likely under the first election in post–1990 plans: almost 40% of plans open with EG < –.05 and about 20% of plans open with EG < –.10." (Jackman Rep. 60.)*

Undisputed.

168. *Based on the discrepancy between the likelihood of sign change between negative and positive efficiency gaps, Jackman concludes that "pro– Democratic efficiency gaps seem much more fleeting than pro–Republican efficiency gaps." (Jackman Rep. 60.)*

Undisputed, but note that Jackman finds that, for an efficiency gap threshold of 7%, 93% of plans either would not exceed the threshold, or if they did, would feature a pro-Democratic efficiency gap throughout their lifetimes. (Jackman Rpt. (Dkt. 62) at p. 67.) He also finds that there is a 90% chance that a plan with an initial efficiency gap of 7% will have an average efficiency gap that is pro-Democratic. (Jackman Rebuttal Rpt. (Dkt. 63) at p. 16.)

169.   *A Democratic advantage is "not a durable feature" whereas a Republican advantage "tends to be a more durable feature of a plan." (Jackman Dep. 93.)*

   Disputed. Jackman finds that, for an efficiency gap threshold of 7%, 93% of plans either would not exceed the threshold, or if they did, would feature a pro-Democratic efficiency gap throughout their lifetimes. (Jackman Rpt. (Dkt. 62) at p. 67.) He also finds that there is a 90% chance that a plan with an initial efficiency gap of 7% will have an average efficiency gap that is pro-Democratic. (Jackman Rebuttal Rpt. (Dkt. 63) at p. 16.)

170.   *This trend becomes "even more pronounced in the analysis that focused on recent decades." (Jackman Dep. 95.)*

   Disputed. Jackman finds that, for an efficiency gap threshold of 7%, 93% of plans either would not exceed the threshold, or if they did, would feature a pro-Democratic efficiency gap throughout their lifetimes. (Jackman Rpt. (Dkt. 62) at p. 67.) He also finds that there is a 90% chance that a plan with an initial efficiency gap of 7% will have an average efficiency gap that is pro-Democratic. (Jackman Rebuttal Rpt. (Dkt. 63) at p. 16.)

171.   *To determine his confidence in a threshold, Jackman set out to determine the proportion of plans that trip the threshold and "if left undisturbed, would go on to produce a sequence of EG measures that lie on the same side of zero as the threshold?" (Jackman Rep. 66.)*

   Disputed. Jackman's analysis in setting a threshold focuses on finding out "how

informative is the signal we get from the first efficiency gap reading under a plan…How

much does the first election or the efficiency gap estimate produced under the first

election tell you about the plan. And in particular, what's the critical threshold of -- how

big does that first efficiency gap estimate have to be before you can feel confident that

you're seeing something about a plan that is not a one-off or a fluke, that you've seen

something that gives you enough confidence to believe this plan is manifesting advantage

one way or the other. That's the goal of this part of the analysis." (Jackman Dep. (Dkt.

53) at 96:22-97:17.) In order to assess the signal given by the first efficiency gap reading

under a plan he looks at a number of factors, including whether:

- a particular EG is "large relative to those observed in the previous 40 years of state
  legislative elections" (Jackman Rpt. (Dkt. 62) at p. 65); and

- "whether the estimate is so large that the historical record suggests that the first
  election's EG estimate is a reliable indicator as an enduring feature of the plan, and
  not an election specific aberration" (*id.* at p. 66).

In his Rebuttal Report Jackman considers:

- "several widely accepted prognostic measures—all based on the rates of true
  positives, false positives, true negatives, and false negatives to determine the odds of
  a district plan's efficiency gap changing signs over the plan's lifetime given a certain
  efficiency gap value in the plan's first election" (Jackman Rebuttal Rpt. (Dkt. 63) at
  p. 2);

- "the same prognostic measures with the respect to the odds of a district plan's average

43

efficiency gap, over its lifetime, having a different sign than that observed in the first

election under a plan, given a certain efficiency gap value in this first election" *(id.)*;

- "the same prognostic measures with the respect to the odds of a district plan's average

  efficiency gap, over its lifetime, having a different sign than that observed in the first

  election under a plan, given a certain efficiency gap value in this first election" *(id.)*;

  and

- "the relationship between the magnitudes of the first efficiency gap observed under a

  plan and the average efficiency gap we observe over the life of the plan" *(id.* at p. 15).

172. *Jackman finds a 7% threshold acceptable because "at that threshold, 96 percent of plans*
     are either not tripping that threshold or if they are, they're continuing to produce
     efficiency gaps on that side of zero." (Jackman Dep. 111.)

     Undisputed that one of the reasons that Jackman finds the 7% threshold acceptable is

     that "at that threshold, 96 percent of plans are either not tripping that threshold or if they

     are, they're continuing to produce efficiency gaps on that side of zero," but additional

     reasons to support a threshold of an EG > |0.07| include:

- it is "large relative to those observed in the previous 40 years of state legislative

  elections" (Jackman Rpt. (Dkt. 62) at p. 65);

- it is supported by "several widely accepted prognostic measures—all based on the

  rates of true positives, false positives, true negatives, and false negatives to determine

  the odds of a district plan's efficiency gap changing signs over the plan's lifetime

  given a certain efficiency gap value in the plan's first election…[he] conclude[s] that

  the proposed 0.07 threshold is highly conservative. In fact, this threshold *sacrifices*

some accuracy (which would be maximized at a lower threshold) in order to reduce the proportion of false positives" (Jackman Rebuttal Rpt. (Dkt. 63) at p. 2);

- the relationship between the EG in the first election under a plan and the average over the plan's lifetime is "impressively tight ($r^2 = 0.73$), indicating that the plan's initial bias is a very good predictor of its overall lifetime bias." (Jackman Decl., Ex. D (Dkt 58-4) at p. 5); and

- "larger values of the efficiency gap are much more robust to perturbations from uniform swing. In fact, for large actual efficiency gaps (greater than .07 in magnitude), the correlation between actual and simulated efficiency gaps stays impressively large over the entire range of uniform swing levels considered here" (Jackman Decl., Ex. D (Dkt 58-4) at p. 5).

173. *Jackman thinks this number is acceptable because these plans are unlikely to change sign and thus would be properly struck down by courts as constitutional violations. (Jackman Rep. 66–69.)*

Disputed. Jackman thinks the threshold of EG > |0.07| is acceptable because it represents a "durable," and "systematic" gerrymander. (Jackman Rpt. (Dkt. 62) at p. 5.) Jackman makes no claims as to the constitutional test that should be adopted by the Court.

(Jackman Rebuttal Rpt. (Dkt. 63) at pp. 3-4.)

174. *Jackman finds that "plans with at least one election" of an efficiency gap of 7% or greater "are reasonably common." (Jackman Rep. 56.)*

Undisputed.

175. *An EG of 7% or greater "is not a particularly informative signal with respect to the other elections in the plan." (Jackman Rep. 56.)*

Disputed. Jackman finds that *any* EG estimate of 7% or greater "is not a particularly informative signal with respect to the other elections in the plan." (Jackman Rpt. (Dkt. 62) at p. 56.) But he also finds that "[r]elatively few plans produce a *first election* with an EG measure in excess of this threshold, and of those that do, the historical analysis suggests that most go on to produce a sequence of EG estimates indicative of systematic, partisan advantage consistent with the first election EG estimates." (Jackman Rpt. (Dkt. 62) at p. 5 (emphasis added).)

176. *Jackman finds that 53% of plans since 1972 have one election with an EG of 7% or greater, with 29% of plans having a gap of –7% or greater and 25% of plans having a gap of +7% or greater. (Jackman Rep. 57, Fig. 27.)*

      Disputed. Jackman finds that 53% of plans since 1972 have one election with an EG of 7% or greater, with 29% of plans having *at least one election with* a gap of –7% or less and 25% of plans having *at least one election with* a gap of +7% or greater. (Jackman Rpt. (Dkt. 62) at p. 57, Fig. 27.)

177. *When looking at plans since 1991, 47% of plans have had at least one election with an EG greater than 7%, with 38% of plans having an election with a gap of –7% or greater and 19% of plans having an election with an gap of +7% or greater. (Jackman Rep. 59, Fig. 28.)*

      Undisputed. But note that this should read "38% of plans having an election with a gap of -7% or *less* and…" (Jackman Rpt. (Dkt. 62) at p. 59, Fig. 28.)

178. *Since 1972, 33% of plans have had an election with an EG of 10% or higher, with 18% having an election with a gap of –10% and 15% having an election with an gap of +10%. (Jackman Rep. 57, Fig. 20; Jackman Dep. 89, 91.)*

      Undisputed, but note that this should read "18% having an election with a gap of -10% or less and 15% having an election with a gap of +10% or higher," the and correct citation is to Jackman Rpt. (Dkt. 62) at p. 57, Fig 27; Jackman Dep. (Dkt. 53) at 89:11-

16,91:4-11.

179.   *When looking just at elections since 1991, 35% of plans have had an election with an EG of at least 10%: 24% of plans have had an election with a gap of –10% and 11% of plans having an election with a gap of +10%. (Jackman Rep. 59, Fig. 21.)*

Undisputed, but note that this should read "an EG of at least |10%|," and the correct

citation is to Jackman Rpt (Dkt. 62) at p. 59, Fig 28.

180.   *Jackman found that 17 of the 141 plans for which he could calculated three or more efficiency gaps (12%) were "utterly unambiguous with respect to the sign of the efficiency gap," i.e., that even the confidence level bar did not cross over to the other sign. (Jackman Rep. 53; Jackman Dep. 83–84.)*

Undisputed.

181.   *Of these seventeen plans, sixteen of them were favorable to the Republicans and only one was favorable to the Democrats. (Jackman Rep. 55, Table 1.)*

Undisputed.

182.   *Jackman does not analyze whether these plans were partisan districting in the sense of one party controlling the districting process. (Trende Rep. ¶¶ 109–10.)*

Disputed. In his Rebuttal Report, Jackman addresses this issue: "if we focus on the plans

among the seventeen that likely would have failed plaintiffs' proposed test (at least the

first two elements), we see that both the test and the efficiency gap perform exceptionally

well. Five of the seventeen plans featured control by a single party over redistricting

(from which, like Goedert (2014) and Goedert (2015), we can infer partisan intent) as

well as an initial efficiency gap above 7% (the threshold I recommended in my initial

report): Florida in the 1970s, Florida in the 2000s, Michigan in the 2000s, New York in

the 1970s, and Ohio in the 2000s. Assuming that these plans' large efficiency gaps were

avoidable (a granular inquiry that cannot be carried out here), it would have been quite

reasonable for all of these maps to attract heightened judicial scrutiny." (Jackman

Rebuttal Rpt. (Dkt. 63) at p. 22.)

183.   *When one considers this fact, only seven plans featured unified partisan control over the districting process. (Trende Rep. ¶¶ 109–10.)*

Undisputed.

184.   *One of the "utterly unambiguous" plans was the Wisconsin 2002 Plan put in place by the federal court in Baumgart v. Wendelberger, No. 01–C–0121, 2002 WL 34127471, at *1 (E.D. Wis. May 30, 2002), amended, 2002 WL 34127473 (E.D. Wis. July 11, 2002). (Jackman Rep. 55, Table 1.)*

Undisputed.

185.   *The sign of the efficiency gap does not necessarily correlate to control of the state legislature. In five of the seven plans enacted under unified party control, the party in control of the state house changed despite the fact that the efficiency gap remained the same sign. (Trende Rep. ¶ 110.)*

Undisputed that the sign of the efficiency gap does not necessariy correlate to control of

the state legislature, or that in five of the seven plans enacted under unified party control,

the party in control of the state house changed despite the fact that the efficiency gap

remained the same sign. The statement is **disputed** in its entirety, however, because it is

inadmissible under Fed. R. Evidence 702 and the standard for admissibility set forth in

Daubert v. Merrell Dow Pharmaceuticals 509, U.S. 579 (1993), and it is also not

material. (*See* Pls.' Motion to Strike the Declaration of Sean P. Trende and Motion in

Limine to Exclude his Testimony at Trial, forthcoming.)

186.   *Jackman calculated EGs for the 2012 and 2014 elections for 39 states. (Jackman Rep. 73, Fig. 36.)*

Undisputed.

187.   *Fifty–one point estimates were negative (65.4%) while twenty–seven were positive (34.6%). (Jackman Rep. 73, Fig. 36.)*

Disputed. Fifty point estimates were negative, while twenty-eight (56.8%) were positive

(31.8%). (Jackman Rpt. (Dkt. 62) at p. 73, Fig. 36.)

188.   *Eighteen states (46%) had point estimates for 2012 and 2014 that were both negative.*
       (Jackman Rep. 73, Fig. 36.)

       Undisputed.

189.   *Included among this eighteen were Minnesota, Missouri, New York, and Kansas.*
       (Jackman Rep. 73, Fig. 36.)

       Undisputed.

190.   *In elections held under the 1992 and 2002 Plans, the Republicans failed to win control of*
       the Assembly two times: in 1992 and 2008. (Keenan Dec. ¶ 15, Ex. 113.)

       Undisputed, but note that correct citation is to Keenan Decl. (Dkt. 49) ¶ 15, Ex. 113

       (Dkt. 49-9), and Ex. 108 (Dkt. 49-14).

191.   *In the 1992 Assembly elections, Republicans won 47 seats and Democrats won 52.*
       (Keenan Dec. ¶ 15, Ex. 113.) The 1992 election results are publicly available in the
       1993–1994 Wisconsin Blue Book, available at http://digicoll.library.wisc.edu/cgi–
       bin/WI/WI–
       idx?type=article&did=WI.WIBlueBk1993.i0016&id=WI.WIBlueBk1993&isize=M

       Undisputed.

192.   *In the 1994 Assembly elections, Republicans won 51 seats and Democrats won 48.*
       (Keenan Dec. ¶ 15, Ex. 113.) The 1994 election results are publicly available in the
       1995–96 Wisconsin Blue Book, available http://digicoll.library.wisc.edu/cgi–bin/WI/WI–
       idx?type=article&did=WI.WIBlueBk1995.i0017&id=WI.WIBlueBk1995&isize=M

       Undisputed.

193.   *In the 1996 Assembly elections, Republicans won 52 seats and Democrats won 47.*
       (Keenan Dec. ¶ 15, Ex. 113.) The 1996 election results are publicly available in the
       1997–98 Wisconsin Blue Book, available at http://digicoll.library.wisc.edu/cgi–
       bin/WI/WI–
       idx?type=article&did=WI.WIBlueBk1997.i0017&id=WI.WIBlueBk1997&isize=M

Undisputed.

194.   *In the 1998 Assembly elections, Republicans won 55 seats and Democrats won 44. (Keenan Dec. ¶ 15, Ex. 113.) The 1998 election results are publicly available in the 1999–2000 Wisconsin Blue Book, available at http://digicoll.library.wisc.edu/cgi–bin/WI/WI–idx?type=article&did=WI.WIBlueBk1999.i0017&id=WI.WIBlueBk1999&isize=M*

Undisputed.

195.   *In the 2000 Assembly elections, Republicans won 56 seats and Democrats won 43. (Keenan Dec. ¶ 15, Ex. 113.) The 2000 election results are publicly available on the GAB's website at http://www.gab.wi.gov/sites/default/files/2000_General_Election_Summary_Results. Pdf*

Undisputed.

196.   *In the 2002 Assembly elections, Republicans won 58 seats and Democrats won 41. (Keenan Dec. ¶ 15, Ex. 113.) The 2002 election results are publicly available on the GAB's website at http://www.gab.wi.gov/sites/default/files/elec02F_results.pdf*

Undisputed.

197.   *In the 2004 Assembly elections, Republicans won 60 seats and Democrats won 39. (Keenan Dec. ¶ 15, Ex. 113.) The 2004 election results are publicly available on the GAB's website at http://www.gab.wi.gov/sites/default/files/2004_FallElection_Results_Summary.pdf*

Undisputed.

198.   *In the 2006 Assembly elections, Republicans won 52 seats and Democrats won 47. (Keenan Dec. ¶ 15, Ex. 113.) The 2006 election results are publicly available on the GAB's website at http://www.gab.wi.gov/sites/default/files/2006_FallElection_Results_Summary_0.pdf*

Undisputed.

199.   *In the 2008 Assembly elections, Republicans won 46 seats, Democrats won 52, and an independent candidate won 1. (GAB 2008 Fall General Election Results at 10–43.)*

Undisputed

200.   *In the 2010 Assembly elections, Republicans won 60 seats, Democrats won 38, and an independent candidate won 1. (GAB 2010 Fall General Election Results at 9–34.)*

Undisputed.

201.   *When Jackman analyzed each Wisconsin Assembly elections since 1972, he found that Wisconsin's EG has ranged from +2% (in 1994) to –14% (in 2012). (Jackman Rep. 36.)*

Undisputed.

202.   *Disregarding results from the current plan, the lowest EG was –12% (in 2006). (Jackman Rep. 72, Fig. 35.)*

Undisputed.

203.   *The most favorable EG towards Democrats since 1972 was 2%, which notably occurred in 1994 when the Republicans gained control of the Assembly. (Jackman Rep. 36; Keenan Dec. ¶ 15, Ex. 113.)*

Undisputed.

204.   *Jackman finds that "Wisconsin has recorded an unbroken run of negative EG estimates from 1998 to 2014." (Jackman Rep. 36.)*

Undisputed.

205.   *The last positive EG was the 2% from 1994. (Jackman Dep. 120.)*

Undisputed.

206.   *With respect to the 2002 Plan, Jackman calculated an average efficiency gap of –8%, with –12% as the most favorable year to Republicans and –4% as the most favorable year to Democrats. (Jackman Rep. 55, Table 1.)*

Undisputed that these are the efficiency gap calculations rounded to the nearest whole

number.

207.   *In 1992, the Democrats' seat share founded (sic) to the nearest .25% was 52.5%. Given that Jackman calculates an EG of –2%, this means the implied seat share was 54.5% and their vote share was 52.25%. (Jackman Rep. 17–19, 72, Fig. 35; PFOF 191.)*

Disputed. In 1992 the Democrats' seat share rounded to the nearest 0.25% was 52.5%.

Given that Jackman calculates an EG of -2%, this means the implied seat share *if the*

efficiency gap was zero would be 54.5%, and their vote share was therefore 52.25%.

(Jackman Rpt. (Dkt. 62) at pp. 17–19, 72, Fig. 35; PFOF ¶191.)

208.   *In 1994, the Democrats' seat share rounded to the nearest 0.25% was 48.5%. Given that Jackman calculates an EG of +2%, this means the implied seat share was 46.5% and their vote share was 48.25%. (Jackman Rep. 17–19, 72, Fig. 35; PFOF 192.)*

Disputed. In 1994 the Democrats' seat share rounded to the nearest 0.25% was 48.5%.

Given that Jackman calculates an EG of +2%, this means the implied seat share *if the*

efficiency gap was zero would be 46.5%, and their vote share was therefore 48.25%.

(Jackman Rpt. (Dkt. 62) at pp. 17–19, 72, Fig. 35; PFOF ¶192.)

209.   *In 1996, the Democrats' seat share rounded to the nearest 0.25% was 47.5%. Given that Jackman calculates an EG of 0%, this means the implied seat share was 47.5% and their vote share was 48.75%. (Jackman Rep. 17–19, 72, Fig. 35; PFOF 193.)*

Undisputed.

210.   *In 1998, the Democrats' seat share rounded to the nearest 0.25% was 44.5%. Given that Jackman calculates an EG of –7.5%, this means the implied seat share was 52% and their vote share was 51%. (Jackman Rep. 17–19, 72, Fig. 35; PFOF 194.)*

Disputed. In 1998 the Democrats' seat share rounded to the nearest 0.25% was 44.5%.

Given that Jackman calculates an EG of -7.5%, this means the implied seat share *if the*

efficiency gap was zero would be 52%, and their vote share was therefore 51%. (Jackman

Rpt. (Dkt.) at pp. 17–19, 72, Fig. 35; PFOF ¶194.)

211.   *In 2000, the Democrats' seat share rounded to the nearest 0.25% was 43.5%. Given that Jackman calculates an EG of –6%, this means the implied seat share was 49.5% and their vote share was 49.75%. (Jackman Rep. 17–19, 72, Fig. 35; PFOF 195.)*

Disputed. In 2000 the Democrats' seat share rounded to the nearest 0.25% was 43.5%.

Given that Jackman calculates an EG of -6%, this means the implied seat share *if the efficiency gap was zero would be* 49.5%, and their vote share was therefore 49.75%. (Jackman Rpt. (Dkt 62) at pp. 17–19, 72, Fig. 35; PFOF ¶195.)

212.   *In 2002, the Democrats' seat share rounded to the nearest 0.25% was 41.5%. Given that Jackman calculates an EG of –7.5%, this means the implied seat share was 49% and their vote share was 49.5%. (Jackman Rep. 17–19, 72, Fig. 35; PFOF 196.)*

Disputed. In 2002 the Democrats' seat share rounded to the nearest 0.25% was 41.5%.

Given that Jackman calculates an EG of -7.5%, this means the implied seat share *if the efficiency gap was zero would be* 49%, and their vote share was therefore 49.5%.

(Jackman Rpt. (Dkt. 62) at pp. 17–19, 72, Fig. 35; PFOF ¶196.)

213.   *In 2004, the Democrats' seat share rounded to the nearest 0.25% was 40%. Given that Jackman calculates an EG of –10%, this means the implied seat share was 50% and their vote share was 50%. (Jackman Rep. 17–19, 72, Fig. 35; PFOF 197.)*

Disputed. In 2004 the Democrats' seat share rounded to the nearest 0.25% was 40%.

Given that Jackman calculates an EG of -10%, this means the implied seat share *if the efficiency gap was zero would be* 50%, and their vote share was therefore 50%. (Jackman Rpt. (Dkt. 62) at pp. 17–19, 72, Fig. 35;PFOF ¶197.)

214.   *In 2006, the Democrats' seat share rounded to the nearest 0.25% was 47.5%. Given that Jackman calculates an EG of –12%, this means the implied seat share was 59.5% and their vote share was 54.75%. (Jackman Rep. 17–19, 72, Fig. 35; PFOF 198.)*

Disputed. In 2006 the Democrats' seat share rounded to the nearest 0.25% was 47.5%.

Given that Jackman calculates an EG of -12%, this means the implied seat share *if the efficiency gap was zero would be* 59.5%, and their vote share was therefore 54.75%.

(Jackman Rpt. (Dkt 62) at pp. 17–19, 72, Fig. 35; PFOF ¶198.)

215.   *In 2008, the Democrats' seat share rounded to the nearest 0.25% was 53%. Given that*

Jackman calculates an EG of –5%, this means the implied seat share was 58% and their actual vote share was 54%. (Jackman Rep. 17–19, 72, Fig. 35; PFOF 199.)

Disputed. In 2008 the Democrats' seat share rounded to the nearest 0.25% was 53%.

Given that Jackman calculates an EG of -5%, this means the implied seat share *if the*

efficiency gap was zero would be 58%, and their vote share was therefore 54%. (Jackman

Rpt. (Dkt 62) at pp. 17–19, 72, Fig. 35; GAB 2008 Fall General Election Results (Dkt.

49-9) at 10–43.)

216.　*In 2010, the Democrats' seat share rounded to the nearest 0.25% was 39%. Given that Jackman calculates an EG of –4%, this means the implied seat share was 43% and their actual vote share was 46.5%. (Jackman Rep. 17–19, 72, Fig. 35; PFOF 200.)*

　　　Disputed. In 2010 the Democrats' seat share rounded to the nearest 0.25% was 39%.

Given that Jackman calculates an EG of -4%, this means the implied seat share *if the*

efficiency gap was zero would be 43%, and their vote share was therefore 46.5%.

(Jackman Rpt. (Dkt 62) at pp. 17–19, 72, Fig. 35; GAB 2010 Fall General Election

Results (Dkt. 49-10) at 9–34.)

217.　*In 2012, the Democrats' vote share was 51.4%. This yields an implied seat share of 52.8% under a zero efficiency gap hypothesis. The Democrats' actual seat share was 39.4%, yielding an efficiency gap of –13.4%. (Jackman Dep. 117–19.)*

　　　Undisputed.

218.　*In 2014, the Democrats' vote share was 48.0% which yields an implied seat share of 46.0%. Their actual seat share was 36.4%, which yields an efficiency gap of –9.6%. (Jackman Dep. 117–19; Jackman Rep. 17–19, 72, Fig. 35; GAB 2014 Fall Election Results at 9–31.)*

　　　Disputed. In 2014, the Democrats' vote share was 48.0% which *would yield* a seat share

of 46.0% *if the efficiency gap was zero*. Their actual seat share was 36.4%, which means

the efficiency gap was actually –9.6%. (Jackman Dep. (Dkt. 53) at pp. 117–19; Jackman

Rpt. (Dkt. 62) at pp. 17–19, 72, Fig. 35; GAB 2014 Fall Election Results (Dkt. 49-7) at

9–31.)

219.   *In 2008, the Democrats won control of the Assembly for the first time since 1992. (PFOF 191–199; GAB 2008 Fall General Election Results at 10–43.)*

   Undisputed.

220.   *Senator Obama carried Wisconsin with 56.22% of the total vote (and 57.05% of the two–party vote). (GAB 2008 Fall General Election Results at 1.)*

   Disputed. Senator Obama carried Wisconsin with 56.22% of the total vote (and 57.06%

   of the two–party vote). (GAB 2008 Fall General Election Results (Dkt. 49-9) at p. 1.)

221.   *Assembly Democrats ran about two points behind Obama in the two– party vote. (Jackman Rep. 72, Fig. 35; GAB 2008 Fall General Election Results.)*

   Disputed. The Assembly Democrats ran 3.06% behind Obama in the two party vote.

   (GAB 2008 Fall General Election Results (Dkt. 49-9).)

222.   *In the November 2010 election Republican candidates won the Governor's office, a majority in the State Senate and retook the majority in the Assembly. (GAB 2010 Fall General Election Results.)*

   Undisputed.

223.   *In the November 2010 election Scott Walker won the Governor's office with 52.25% of the total vote (52.9% of the two–party vote). (GAB 2010 Fall General Election Results at 1.)*

   Undisputed.

224.   *In the November 2010 election Republicans won 60 seats in the Assembly. (GAB 2010 Fall General Election Results at 9–34.)*

   Undisputed.

225.   *In the November 2010 election Republicans secured 53.5% of the two– party vote share.*

(PFOF 216; GAB 2010 Fall General Election Results.)

Undisputed.

226.   *The complaint lists 20 districts as having been won by Democratic candidates in the 2008 election that have allegedly been cracked by the current plan. (Compl. ¶¶ 60–76.)*

Disputed. The complaint does not allege that any particular numbered districts were

cracked by the current plan, but highlights regions of the state where there are

Democratic voters that were cracked between districts by Act 43. Those regions are:

- Milwaukee, Ozaukee, Washington, and Waukesha Counties (Compl. (Dkt. 1) ¶¶ 60-62);

- Calumet, Fond du Lac, Manitowoc and Sheboygan Counties *(id*. ¶¶ 63-65);

- Racine and Kenosha Counties *(id*. ¶¶ 66-68);

- Buffalo, Chippewa, Eau Claire, Jackson, La Crosse, Pepin, Pierce, St. Croix, and Trempealeau Counties *(id*. ¶¶ 69-71);

- Adams, Columbia, Marathon, Marquette, Portage, and Wood Counties *(id*. ¶¶ 72-74); and

- Brown and Manitowoc Counties *(id*. ¶¶ 75-77).

227.   *In the 2010 elections, the Republicans won eight of these districts (Districts 2, 5, 26, 42, 68, 72, 88, and 93) and an independent won one (District 25). (GAB 2010 Fall General Election Results at 9–32.)*

Disputed. In 2010 the Republicans won districts 2, 5, 26, 68, 72, 88, and 93, but Fred

Clark, Democrat won Assembly District 42. (GAB 2010 Fall General Election Results

(Dkt. 49-10) at 20.) An independent, Bob Ziegelbauer, won district 25, but he "typically

voted with Republicans." (Jason Stein and Patrick Marley, *More Than They Bargained*

For: Scott Walker, Unions, and the Fight for Wisconsin, Earle Decl., Ex. G (Dkt. 57-7) at

p. 119; GAB 2010 Fall General Election Results (Dkt 49-10) at pp. 9–32.)

228.   *On June 5, 2012, Governor Walker survived a recall attempt with 53.08% of the vote
(53.4% of the two–party vote). (GAB 2012 Recall Election Results at 1.)*

Undisputed.

229.   *In November of 2012, President Obama won Wisconsin in the presidential election with
52.83% of the total vote (53.5% of the two–party vote). (GAB 2012 Fall Election Results
at 1.)*

Undisputed.

230.   *Wisconsin's Democratic candidates for the Assembly again ran about two points behind
the President's vote share: Jackman calculates that Democrats had a two–party vote
share of 51.4%. (Jackman Dep. 117.)*

Undisputed.

231.   *In November of 2014, the Republicans increased their control of the Assembly by winning
63 seats, equating to a 63.6% seat share. (GAB 2014 Fall Election Results at 9–31.)*

Undisputed.

232.   *Jackman calculates that Republicans' two–party vote share of 52%. (Jackman Dep. 117.)*

Undisputed.

233.   *Both Goedert and Trende rely on recent work by political scientists Jowei Chen of the
University of Michigan and Jonathan Rodden of Stanford University. (Goedert Rep. 18;
Trende Rep. ¶ 89.)*

Undisputed that Goedert and Trende cite Jowei Chen and Jonathan Rodden,

"Unintentional Gerrymandering: Political Geography and Electoral Bias in Legislatures"

57 Quarterly Journal of Poli. Sci. 200 (2013) (Dkt. 49-13), but **Dispute** that Goedert and

Trende incorporate Chen and Rodden's empirical data into their own analysis or apply the results to Wisconsin. (Trende Dep. (Dkt. 66) at 69:9-17; Goedert Dep. (Dkt. 65) at 156:16-158:16).

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed. R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow Pharmaceuticals* 509, U.S. 579 (1993), and it is also not material**.** (*See* Pls.' Motion to Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony at Trial, forthcoming.)

234. *Trende analyzes the differences in the election results in 1996 and 2012 in the West South Central region of the country, made up of Texas, Oklahoma, Arkansas, Louisiana, Alabama, Mississippi, Tennessee, and Kentucky, to provide an example of the Democrats' increased clustering, (Trende Rep. ¶¶ 66–69.)*

Undisputed that Trende analyzes the votes for presidential candidates aggregated at the county level for 1996, 2004, and 2012, but **Dispute** the conclusion that this proves that there is Democratic clustering in the country, or in Wisconsin, or that Democratic clustering in the country, or Wisconsin, has increased from 1996 to 2012. (Mayer Rebuttal Rpt. (Dkt. 64) at p. 4.)

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed. R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow Pharmaceuticals* 509, U.S. 579 (1993), and it is also not material**.** (*See* Pls.' Motion to Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony at Trial, forthcoming.)

235. *In 1996, President Clinton's "support in the region was geographically dispersed, which allowed him to carry around 54 percent of the Congressional districts in the region."*

(Trende ¶ 67.)

Dispute that showing county level data for the Clinton presidential election can allow one to determine what percentage of the Congressional districts were carried by Clinton. (Mayer Rebuttal Rpt. (Dkt 64) at p. 4.)

Dispute the conclusion that "In 1996, President Clinton's support in the region was geographically dispersed." Trende's "argument about geographic concentration is based on flawed data and measures, and has no basis in accepted methods of measuring geographic concentration and isolation. Trende, in particular, uses an unorthodox method with no support in the peer-reviewed literature, and one that is guaranteed to produce a biased result that shows Democrats far more concentrated than they actually are." (Mayer Rebuttal Rpt. (Dkt. 64) at pp. 3-4.)

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed. R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow Pharmaceuticals* 509, U.S. 579 (1993), and it is also not material**. (*See* Pls.' Motion to Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony at Trial, forthcoming.)

236.   *In 2012, Obama's "coalition shrank geographically" with Obama winning "only 23 percent of the Congressional Districts in the region, with Democrats winning 39 percent of the seats. The latter number fell to 26 percent in 2010." (Trende Rep. ¶ 68.)*

Dispute the conclusion that Obama's "coalition shrank geographically". "When [Mayer] analyze[s] the geographic distribution of Wisconsin's Democrats and Republicans using widely accepted measures of spatial concentration and isolation (Global Moran's I and the Isolation Index), [he] find][s] that there is very little evidence of significant disparities

in how the parties' voters have been distributed in recent election cycles. Republicans are in fact *more concentrated* than Democrats when measured by the 2012 Assembly vote." (Mayer Rebuttal Rpt. (Dkt. 64) at p. 4.)

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed. R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow Pharmaceuticals* 509, U.S. 579 (1993), and it is also not material**.** (*See* Pls.' Motion to Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony at Trial, forthcoming.)

237. *Trende calculates the Partisan Index (PI) of each county in Wisconsin in 1996 and 2012 as a way to show the change in the partisan makeup of the state. (Trende Rep. ¶¶ 81–85.)*

Undisputed that Trende calculates the partisan index for each county in Wisconsin in 1996 and 2012, but **Dispute** the conclusion that this is a way to show the change in the partisan makeup of the state. (Mayer Rebuttal Rpt. (Dkt. 64) at pp. 3-4.)

"When [Mayer] analyze[s] the geographic distribution of Wisconsin's Democrats and Republicans using widely accepted measures of spatial concentration and isolation (Global Moran's I and the Isolation Index), [he] find][s] that there is very little evidence of significant disparities in how the parties' voters have been distributed in recent election cycles. Republicans are in fact *more concentrated* than Democrats when measured by the 2012 Assembly vote." (Mayer Rebuttal Rpt. (Dkt. 64) at pp. 3-4.)

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed. R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow Pharmaceuticals* 509, U.S. 579 (1993), and it is also not material**.** (*See* Pls.' Motion to

Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony

at Trial, forthcoming.)

238.   *The Partisan Index compares the share of the two–party vote in a jurisdiction compared to the national share of the vote. (Trende Rep. ¶¶ 77.)*

Undisputed that Trende compared the share of the two-party vote for Presidential

candidates in a county to the national share of the vote in the same races. (Trende Rpt.

(Dkt. 55) at ¶¶ 72, 79.)

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed.

R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow*

Pharmaceuticals 509, U.S. 579 (1993), and it is also not material**.** (*See* Pls.' Motion to

Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony

at Trial, forthcoming.)

239.   *The Partisan Index is a way to "control for national effects, and compare results across elections." (Trende Rep. ¶¶ 77.)*

Disputed. "The PVI (which is how Trende abbreviates the measure) is a quantity that is

not commonly used in the academic literature, and when it is, it is used largely as a

simple descriptive statistic. What this index does is simply redistribute the ward vote

around the statewide average, and thus tells us which areas are more Democratic (or

Republican) than the state as a whole, and which areas are less so. It tells us little about

overall partisan strength, and is useful only in comparing elections at one level (here,

counties or wards) to elections at another (the state).

The PVI is used almost exclusively by political commentators to describe congressional

districts (the most widely known is the Cook PVI, which compares the average

congressional district vote split over two consecutive elections to the average national

presidential vote over those same elections). It is used less frequently in academic

research, and then largely as a basic descriptive statistic used to classify districts as

competitive or not. It is not used in the context of state legislative redistricting (Trende

did not cite any studies that support the use of his measure, and could not identify any in

his deposition). (footnotes omitted)"

(Mayer Rebuttal Rpt. (Dkt. 64) at pp. 4-5.)

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed.

R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow*

Pharmaceuticals 509, U.S. 579 (1993), and it is also not material**.** (*See* Pls.' Motion to

Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony

at Trial, forthcoming.)

240. *Using PI is a good comparison for 1996 and 2012 because Wisconsin "was almost*
       identically as Democratic in 2012 as it was in 1996." (Trende Rep. ¶ 84.)

      Disputed. The PI "tells us little about overall partisan strength, and is useful only in

      comparing elections at one level (here, counties or wards) to elections at another (the

      state)." (Mayer Rpt. (Dkt. 54) at pp. 4-5.)

      The statement is **disputed** in its entirety, however, because it is inadmissible under Fed.

      R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow*

      Pharmaceuticals 509, U.S. 579 (1993), and it is also not material**.** (*See* Pls.' Motion to

      Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony

      at Trial, forthcoming.)

241.   *The Democratic Party's support in 1996 was broad–based throughout the State, as shown by the 1996 map of County PI.*

Wisconsin County PI 1996
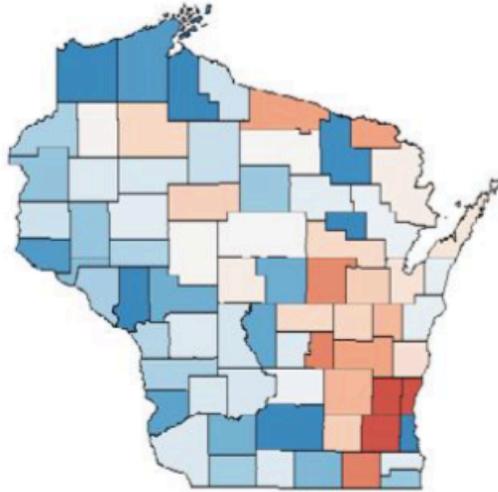
(Trende Rep. ¶ 80.)

Disputed. The Diagram shown with paragraph 80 of Trende's report shows the PI by county for Wisconsin in 1996. The Diagram does not show whether the support for the Democratic Party in 1996 was "broad-based throughout the state."

"The PVI (which is how Trende abbreviates the measure) is a quantity that is not commonly used in the academic literature, and when it is, it is used largely as a simple descriptive statistic. What this index does is simply redistribute the ward vote around the statewide average, and thus tells us which areas are more Democratic (or Republican) than the state as a whole, and which areas are less so. It tells us little about overall partisan strength, and is useful only in comparing elections at one level (here, counties or

wards) to elections at another (the state).

The PVI is used almost exclusively by political commentators to describe congressional districts (the most widely known is the Cook PVI, which compares the average congressional district vote split over two consecutive elections to the average national presidential vote over those same elections). It is used less frequently in academic research, and then largely as a basic descriptive statistic used to classify districts as competitive or not. It is not used in the context of state legislative redistricting (Trende did not cite any studies that support the use of his measure, and could not identify any in his deposition). (footnotes omitted)"

(Mayer Rebuttal Rpt. (Dkt. 64) at pp. 4-5.)

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed. R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow Pharmaceuticals* 509, U.S. 579 (1993), and it is also not material**. (***See* Pls.' Motion to Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony at Trial, forthcoming.)

242.   *While "the state was almost identically as Democratic in 2012 as it was in 1996, only 27 counties retained a Democratic lean in the latter year, or just 37.5 percent of the state. Moreover, these counties were geographically concentrated, in the southwestern portion of the state, in the far northwest, and in Milwaukee.*

Wisconsin County PI 2012
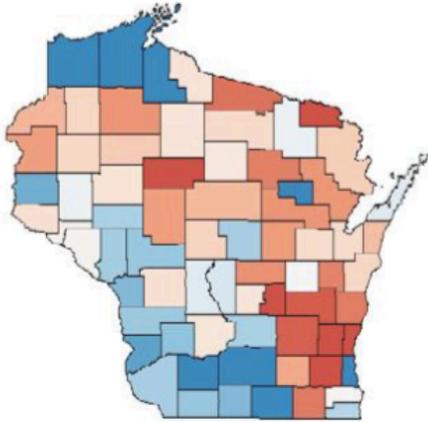
(Trende Rep. ¶ 84.)

Disputed. The Diagram shown with paragraph 84 of Trende's report shows the PI by

county for Wisconsin in 2012. The Diagram does not show whether the geographic

distribution of support for the Democratic Party had changed between 1996 and 2012.

"The PVI (which is how Trende abbreviates the measure) is a quantity that is not

commonly used in the academic literature, and when it is, it is used largely as a simple

descriptive statistic. What this index does is simply redistribute the ward vote around the

statewide average, and thus tells us which areas are more Democratic (or Republican)

than the state as a whole, and which areas are less so. It tells us little about overall

partisan strength, and is useful only in comparing elections at one level (here, counties or

wards) to elections at another (the state).

The PVI is used almost exclusively by political commentators to describe congressional

districts (the most widely known is the Cook PVI, which compares the average

congressional district vote split over two consecutive elections to the average national presidential vote over those same elections). It is used less frequently in academic research, and then largely as a basic descriptive statistic used to classify districts as competitive or not. It is not used in the context of state legislative redistricting (Trende did not cite any studies that support the use of his measure, and could not identify any in his deposition). (footnotes omitted)"

"When [Mayer] analyze[s] the geographic distribution of Wisconsin's Democrats and Republicans using widely accepted measures of spatial concentration and isolation (Global Moran's I and the Isolation Index), [he] find][s] that there is very little evidence of significant disparities in how the parties' voters have been distributed in recent election cycles. Republicans are in fact *more concentrated* than Democrats when measured by the 2012 Assembly vote."

(Mayer Rebuttal Rpt. (Dkt. 64) at p. 3-5.)

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed. R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow Pharmaceuticals* 509, U.S. 579 (1993), and it is also not material**.** (*See* Pls.' Motion to Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony at Trial, forthcoming.)

243.   *From 1996 to 2012, Republican support spread throughout much more of the state and Democratic support became more concentrated in its strongholds. (Trende Rep. ¶ 86.)*

Disputed. "When [Mayer] analyze[s] the geographic distribution of Wisconsin's Democrats and Republicans using widely accepted measures of spatial concentration and

isolation (Global Moran's I and the Isolation Index), [he] find][s] that there is very little evidence of significant disparities in how the parties' voters have been distributed in recent election cycles. Republicans are in fact *more concentrated* than Democrats when measured by the 2012 Assembly vote." (Mayer Rebuttal Rpt. (Dkt. 64) at pp. 3-4.)

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed. R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow Pharmaceuticals* 509, U.S. 579 (1993), and it is also not material**.** (*See* Pls.' Motion to Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony at Trial, forthcoming.)

244.   *In 1996, Clinton won Milwaukee, Dane and Rock Counties with 64% of the two–party vote but still managed to carry the rest of the state with 52% of the vote, a difference of twelve percent. (Trende Rep. ¶ 86.)*

Undisputed.

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed. R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow Pharmaceuticals* 509, U.S. 579 (1993), and it is also not material**.** (*See* Pls.' Motion to Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony at Trial, forthcoming.)

245.   *In 2012, Obama received more support in Milwaukee, Dane and Rock Counties—69% of the vote—but lost the rest of the state by 47% to 53%, a difference of twenty–two percent. (Trende Rep. ¶ 86.)*

Undisputed.

The statement is **disputed** in its entirety, however, because it is inadmissible under Fed.

R. Evidence 702 and the standard for admissibility set forth in *Daubert v. Merrell Dow Pharmaceuticals* 509, U.S. 579 (1993), and it is also not material**.** (*See* Pls.' Motion to Strike the Declaration of Sean P. Trende and Motion in Limine to Exclude his Testimony at Trial, forthcoming.)

246.   *Under the two court–drawn plans, the efficiency gap ranged from +2% to –12%. (Jackman Rep. 36, 72, Fig. 35.)*

Undisputed that under the two court-drawn plans the efficiency gap ranged from +2.5% to -11.8% (rounding to one decimal place). (Jackman Rpt. (Dkt. 62) at p. 72, Fig. 35.)

247.   *The most recent court–drawn plan had an average efficiency gap of – 8%, which ranged from –4% to –12%. (Jackman Rep. 55, Table 1.)*

Undisputed that the most recent court drawn plan had an average efficiency gap of - 7.6%, and under the most recent court-drawn plan the efficiency gap ranged from -4% to -11.8% (rounding to one decimal place). (Jackman Rpt. (Dkt. 62) at p. 72, Fig. 35.)

248.   *With respect to the entire country, Jackman found that "[t]he distribution of EG measures trends in a pro–Republican direction through the 1990s, such that by the 2000s, EG measures were more likely to be negative." (Jackman Rep. 44.)*

Undisputed, but **dispute** any inference that the trend in the pro-Republican direction was based on political geography. "[I]t is the change in party control that appears to account for essentially all of the pro-Republican trend in the efficiency gap over the past two decades—and not, as claimed by Trende and Goedert, a dramatic alteration of the country's political geography." (Jackman Rebuttal Rpt. (Dkt. 63) at p. 20.)

249.   *The median plan has been negative since the mid–1990s and the has been below 5% since the mid–1990s and even approached 7% in 2004, 2010, and 2012. (Jackman Rep. 45, Fig. 20.)*

Undisputed.

250. *Meanwhile the seventy–fifth percentile has only favored Democrats by 1%–2%. (Jackman Rep. 45, Fig. 20.)*

Undisputed.

251. *In every election year since 1996, more plans have had negative efficiency gaps than positive ones with about 75% of plans producing a negative efficiency gap in 2000, 2006 and 2012. (Jackman Rep. 46, Fig. 21.)*

Undisputed.

252. *Thirty–six percent of plans fail Jackman's standard of a 7% EG in the first election following redistricting. (Jackman Rep. 61, Fig. 29.)*

Undisputed that 36% of redistricting plans analyzed in the Jackman Report, from 1972 to 2014, had a first election with an EG > |0.07|. (Jackman Rpt. (Dkt. 62) at p. 61, Fig. 29.) But **Dispute** any inference that these plans are therefore unconstitutional.

253. *Even upping this standard to a 10% EG in the first election sweeps in about 18% of plans. (Jackman Rep. 61, Fig. 29.)*

Undisputed that 18% of redistricting plans analyzed in the Jackman Report, from 1972 to 2014, had a first election with an EG > |0.10|. (Jackman Rpt. (Dkt. 62) at p. 61, Fig. 29.) But **Dispute** any inference that these plans are therefore unconstitutional.

254. *If the 2004 and 2006 EGs had presented themselves first, then the 2002 Plan would have appeared to be identical to the current plan which plaintiffs claim is "one of the worst partisan gerrymanders in modern American history." (Compl. ¶ 1.)*

Disputed. Plaintiffs' claim that Act 43 is "one of the worst partisan gerrymanders in modern American history because it" meets all three criteria of the plaintiffs' proposed test (partisan intent, a first election with an EG>|0.07|, and that the large EG was not the necessary result of either a legitimate state policy or the state's underlying political geography). (Pls.' Brief in Opp. to Motion to Dismiss (Dkt: 31) at pp. 9-10. Compl. (Dkt. 1) at ¶¶ 1, 6, 8, 31-43, 58, 82, 83, 86, 89.)

255.   *In 2012, the Republicans won five seats (Districts 1, 26, 50, 72 and 93) with no more than 51.3% of the total vote. (GAB 2012 Fall General Election Results at 8, 14, 20, 26, 30–31.)*

   Undisputed.

256.   *The margin of victory across all of these races was about 3,200 votes, each less than 900 votes and one at only 109 votes (District 93). (GAB 2012 Fall General Election Results at 8, 14, 20, 26, 30–31.)*

   Disputed. In District 93 in 2012, the Republican candidate for state assembly received 15,612 votes and the Democratic candidate for state assembly received 15,114 votes, making the difference of votes 498. In District 72 in 2012, the Republican candidate for state assembly received 14,138 votes and the Democratic candidate for state assembly received 14,029 votes, making the difference of votes 119. (GAB 2012 Fall General Election Results (Dkt. 49-11) at pp. 8,14, 20, 26, 30-31.)

   Undisputed that the total margin of victory across these five races was about 3,200 votes, but **Dispute** any inference that this is evidence of how a uniform swing analysis could be applied to determine how the efficiency gap would change in an altered electoral environment. Mayer conducted a uniform swing analysis of the 2012 election results, using a peer-reviewed methodology, "over the range of plausible election results, based on the maximum and minimum statewide Democratic Assembly vote since 1992. This analysis shows that the efficiency gaps of both Act 43 and the Demonstration Plan are robust: Act 43's efficiency gap remains very high across this range, always significantly above the plaintiffs' suggested 7% threshold, and the Demonstration Plan's efficiency gap remains very low, and is always well below the threshold." (Mayer Rebuttal Rpt. (Dkt. 64) at pp. 3, 11.)

70

257.   *For 2012 and 2014, Jackman calculates that Illinois had one negative efficiency gap and one narrowly positive efficiency gap. (Jackman Rep. 73, Fig. 36.)*

Undisputed.

Respectfully submitted,

s/   Michele Odorizzi
One of the attorneys for plaintiffs

Peter G. Earle   Michele Odorizzi
LAW OFFICE OF PETER G. EARLE   MAYER BROWN LLP
839 North Jefferson Street, Suite 300   71 South Wacker Drive
Milwaukee, WI 53202   Chicago, IL 60606
(414) 276-1076   (312) 782-0600

Paul Strauss   Nicholas O. Stephanopoulos
Ruth Greenwood   UNIVERSITY OF CHICAGO LAW SCHOOL
Annabelle Harless   1111 E. 60th St., Suite 510
CHICAGO LAWYERS' COMMITTEE   Chicago, IL 60637
 FOR CIVIL RIGHTS UNDER LAW, INC.   (773) 702-4226
100 N. LaSalle St., Suite 600
Chicago, IL 60602
(312) 202-3649

Dated: January 25, 2015