

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

DAN MCCONCHIE, in his official capacity as Minority Leader of the Illinois Senate and individually as a registered voter, JIM DURKIN, in his official capacity as Minority Leader of the Illinois House of Representatives and individually as a registered voter, JAMES RIVERA, ANNA DE LA TORRE, DOLORES DIAZ, FELIPE LUNA JR., SALVADOR TREMILLO, CHRISTOPHER ROMERO, the REPUBLICAN CAUCUS OF THE ILLINOIS SENATE, the REPUBLICAN CAUCUS OF THE ILLINOIS HOUSE OF REPRESENTATIVES, and the ILLINOIS REPUBLICAN PARTY,

Plaintiffs,

vs.

IAN K. LINNABARY, CASANDRA B. WATSON, WILLIAM J. CADIGAN, LAURA K. DONAHUE, CATHERINE S. MCCRORY, WILLIAM M. MCGUFFAGE, and RICK S. TERVEN, SR., in their official capacities as members of the Illinois State Board of Elections, EMANUEL CHRISTOPHER WELCH, in his official capacity as Speaker of the Illinois House of Representatives, the OFFICE OF SPEAKER OF THE ILLINOIS HOUSE OF REPRESENTATIVES, DON HARMON, in his official capacity as President of the Illinois Senate, and the OFFICE OF THE PRESIDENT OF THE ILLINOIS SENATE,

Defendants.

Case No. 1:21-cv-03091

Circuit Judge Michael B. Brennan
Chief District Judge Jon E. DeGuilio
District Judge Robert M. Dow, Jr.

Three-Judge Court
Pursuant to 28 U.S.C. § 2284(a)

PLAINTIFFS' NOTICE OF CORRECTIONS TO EXPERT REBUTTAL REPORTS

Plaintiffs in the above-captioned matter submit this notice of minor corrections to two of the expert rebuttal reports that were submitted with the reply brief filed on December 1, 2021 [Dkt. No. 162].

1. Plaintiffs are making a correction to Table 1 in the Response Report of Dr. Jowei Chen, which was filed as Exhibit A to the reply brief [Dkt. No. 162-1]. The second line that included some of the candidate names was accidentally deleted from the previously-filed version of Table 1. The information is reinserted in Lines 3 and 10 of the Amended Table 1, which is attached hereto as Exhibit A.

2. Plaintiffs are making a correction to the Rebuttal Report of Dr. Anthony Fowler, which was filed as Exhibit B to the reply brief [Dkt. No. 162-2]. The previous version of the report over counted the number of cases in which an incumbent lost in a general election. The differences do not affect any of Dr. Fowler's substantive conclusions. The changes are found in paragraphs 29 and 30 of the version of the Rebuttal Report attached hereto as Exhibit B.

Dated: December 3, 2021

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Respectfully submitted,

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EXHIBIT A

TABLE 1 (corrected)
CORRECTED LICHTMAN TABLE 9 ANALYSIS OF ENDOGENOUS ELECTIONS EXAMINED BY DR. CHEN

COUNT	DISTRICT & ELECTION	CANDIDATE OF CHOICE OF HISPANIC VOTERS	CANDIDATE OF CHOICE OF WHITE VOTERS?	HISPANIC CANDIDATE OF CHOICE WINS?	Incumbent	Multiple Candidates	District Overlap	25-50% LCVAP (2019 ACS)
ENDOGENOUS ELECTIONS								
1	HD40 2012 GENERAL	MELL	YES	YES	YES	NO	YES	YES
2	HD 39 2012 DEM PRIMARY	BERRIOS	NO	YES	YES	NO	YES	YES
3	HD 40 2014 DEM PRIMARY	ANDRADE	YES	YES	YES	Schiavione, Goldstein, Harmston, Pasieka, Ferrand	YES	YES
4	HD39 2014 DEM PRIMARY	BERRIOS	NO	NO		NO	YES	YES
5	HD77 2016 DEM PRIMARY	WILLIS	YES	YES	YES	NO	YES	YES
6	HD 24 2016 GENERAL	HERNANDEZ	YES	YES	YES	NO	YES	NO 66.25%
7	SD 22 2016 GENERAL	CASTRO	YES	YES		NO		YES
8	HD 2 2016 PRIMARY	ACEVEDO	YES	NO	YES	NO	YES	YES
9	SD 22 2016 PRIMARY	CASTRO	YES	YES		NO		YES
10	HD22 2016 DEM PRIMARY	MADIGAN	YES	YES	YES	Caramelli, Evans	YES	YES
11	HD1 2018 DEM PRIMARY	ORTIZ	NO	YES	YES	Gonzales, Rodriguez, Barboza	YES	NO 60.36%
12	HD4 2018 DEM PRIMARY	RAMIREZ	NO	YES		NO	YES	NO 63.46%
13	SD20 2018 DEM PRIMARY	MARTINEZ	YES	YES	YES	Millan, Pattison, Shaw	YES	YES
14	SD11 2020 GENERAL	VILLANEUVA	YES	YES	YES	NO	YES	NO 57% ¹
15	SD22 2020 DEM PRIMARY	CASTRO	YES	YES	YES	NO	YES	YES
SUM:								
0 Wins and 1 Loss (Berrios -2014) for Latino Preferred Candidate								
WIN RATE = 0%								

¹ For ease of calculation, the SD LCVAP is just an average of the two House Districts.

EXHIBIT B

**IN THE UNITED STATES DISTRICT COURT
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REBUTTAL REPORT OF ANTHONY FOWLER

A. Introduction

1. I concluded in my initial report that (1) there is significant racially polarized voting in Illinois; (2) voters in minority districts have little opportunity to elect their preferred officials or

incentivize their officials to work hard on their behalf; and (3) Latino legislators are unlikely to emerge in districts that are not predominantly Latino.

2. I submit this rebuttal report to address several inaccuracies in Dr. Allan J. Lichtman's report as he attempted to rebut my conclusions and those offered by other experts in the above-caption matter, and the related cases. As discussed below, Dr. Lichtman failed to utilize survey weights when assessing racial voting in Illinois General Assembly elections, which leads him to underestimate the extent of racially polarized voting. He also appears to have misunderstood my analysis of district demographics and the race of election winners.

3. This report is based on the information now known to me. I reserve the right to supplement this report or revise my opinions if new or additional information becomes available. I am compensated for my work at a \$500 hourly rate. My compensation in no way depends on the opinions that I offer or the outcome of this case.

B. Summary

4. Dr. Lichtman's report discusses my analyses of racially polarized voting in statewide elections in Illinois and my analyses of the extent to which district demographics correspond with the race of general election winners in state legislative elections.

5. Dr. Lichtman does not seriously engage with my analyses of appointments and uncontested races. I found that minority districts are especially unlikely to have electoral choices, which means that voters in minority districts have less opportunity to select their leaders and hold them accountable.

6. Dr. Lichtman also does not engage with my discussion of why racially polarized voting likely understates the extent to which minority groups have divergent interests. We would not expect to see racially polarized voting if minority voters aren't presented with viable candidates who would differentially represent their interests. Therefore, the absence of racially polarized

voting in a particular instance does not necessarily mean that minority voters do not have important and divergent interests from white voters.

7. In discussing my analyses of racially polarized voting in statewide elections, Dr. Lichtman adds an analysis of racially polarized voting in Illinois state legislative races in 2018 and 2020. However, Dr. Lichtman fails to utilize survey weights in this analysis, which are necessary for generating representative results. I find that racially polarized voting is greater in Illinois state legislative elections than Dr. Lichtman's report suggests when I improve this analysis by utilizing the weights provided by the survey vendor. Specifically, Dr. Lichtman's analysis overestimates the extent to which white voters in Illinois support Democratic candidates in state legislative races and underestimates the extent to which Latino voters support Democratic candidates.

8. Much of Dr. Lichtman's discussion of my analyses of district-level demographics and the race of election winners appears to stem from a misunderstanding of my analysis. Below, I clarify that my analyses utilized data from real state legislative elections between 2012 and 2020. Indeed, my estimates are essentially moving averages, summarizing the frequency with which different types of districts produce electoral winners of a particular race.

9. I also present supplemental data on the electoral dominance of incumbents in Illinois General Assembly elections to rebut Dr. Lichtman's attempts to minimize the importance of incumbency in Illinois elections.

C. Racially Polarized Voting in Illinois General Assembly Elections

10. Dr. Lichtman's report includes an assessment of racially polarized voting in Illinois General Assembly races in 2018 and 2020. Analyzing data from the Cooperative Election Study (CES) and pooling all districts together, he computes the share of respondents from different racial groups that reported voting for a Democrat versus a Republican (excluding those who report not voting or supporting a third-party candidate)

11. I replicated Dr. Lichtman's analysis and found that he likely did not utilize survey weights in this analysis. Survey weights are essential for obtaining representative estimates from this data, and therefore, Dr. Lichtman's estimates are unreliable.

12. The CES and their survey vendor, YouGov, provide survey weights intended to correct for the potential unrepresentativeness of their sample. For example, if the share of women in the survey sample is smaller than the share of women in the population of voting-age Illinoisans, analysts can account for this by putting more weight on women in the sample. YouGov provides weights to minimize the extent to which the distributions of age, gender, race, education, political party, and income differ between the sample and the voting-age population.¹

13. Table 1 reports the results of these estimates with and without the use of survey weights. The top row of each panel shows results without utilizing survey weights, which closely match those on p. 126 of Dr. Lichtman's report.² The bottom row shows the same estimates after utilizing survey weights. The results show that the unweighted analysis overstates the extent to which white voters supported Democrats in these elections, and it understates the extent to which Latino voters supported Democrats.

14. Importantly, Dr. Lichtman's table suggests that the majority of white voters supported the same party as the majority of minority voters. But the more reliable analysis that

¹ For more information on the survey weights provided by YouGov and the CES, see yougov.co.uk/about/panel-methodology/research-qs/ and cces.gov.harvard.edu/frequently-asked-questions. In some cases, the CES provides multiple survey weights. To ensure consistency across all of my analyses, I utilize the "common weight," which is available for all CES surveys. The other weights yield similar estimates, but failing to utilize survey weights at all can yield very different estimates that are likely biased by the unrepresentativeness of the survey sample.

² There are two minor discrepancies for which I have no explanation. Specifically, Dr. Lichtman's table reports lower Democratic support among Black voters in the 2020 Illinois House elections and higher Democratic support among Asian voters in the 2018 Illinois House elections.

utilizes survey weights shows that the majority of white voters supported a different party than the majority of minority voters. Furthermore, Dr. Lichtman's table suggests that Latino voters were 19-20 percentage points more likely to support Democratic candidates than white voters. But the more reliable weighted analysis suggests that Latino voters were 31-33 percentage points more likely to support Democratic candidates. This analysis suggests that the extent of racially polarized voting in Illinois General Assembly elections is significant, and Dr. Lichtman's analysis significantly understates this phenomenon.

D. Summarizing the Relationship between District Demographics and the Race of Election Winners

15. My previous report summarized the extent to which the share of a minority group in a district corresponded to the probability of electing a state legislator from that minority group. I reached my conclusion by analyzing Illinois General Assembly elections between 2012 and 2020 and presenting the results of local polynomial regressions, a commonly used method for summarizing nonlinear relationships.

16. Much of Dr. Lichtman's discussion of these analyses reflects a misunderstanding of my analysis. On p. 88 of his report, for instance, Dr. Lichtman states that I presented a "generic, statewide theoretical model." He then attempts to discredit my analysis by selectively reporting statistics that appear to be inconsistent with my figures.

17. To be clear, my results did not come from a "theoretical model"; I analyzed real data from Illinois General Assembly elections. Dr. Lichtman may not be familiar with local polynomial regressions, but this is a standard tool used by quantitative analysts to summarize a potentially non-linear relationship without making strong modeling assumptions.³ Local polynomial

³ See, for example, Cleveland, William S. 1978. Robust Locally Weighted Regression and Smoothing Scatterplots. *Journal of the American Statistical Association* 74(368):829-836 and Fan,

regressions are similar to moving averages. So my figures simply show the share of cases in which districts within a nearby range of minority population elected a minority candidate.

18. As noted above, local polynomial regressions are similar to moving averages. Thus, my plots are showing how often districts within a certain range of minority population produce an electoral winner from that minority group. Dr. Lichtman points out that “Black candidates won 100% of districts with black [sic] CVP percentages ranging from 42.55% to 47.95%” and that my analyses do not show a 100 percent probability of Black winners in these cases. This is true, but there are cases just outside this range where Black candidates did not win, and my local polynomial regressions draw information from these cases.⁴

19. A key benefit of local polynomial regressions is that they do not require strong modeling assumptions and they allow for any kind of continuous relationship between the two variables of interest.⁵ One potential limitation is that they can produce biased estimates near the endpoints of the explanatory variable of interest.⁶ To avoid this potential problem, we would have to forgo some of the benefits of local polynomial regressions by imposing stronger parametric

Jianqing. 1992. Design-adaptive Nonparametric Regression. *Journal of the American Statistical Association* 87(420):998-1004.

⁴ Specifically, there are five cases in my data where a district that is 37 percent Black did not produce a Black winner, and there are eight cases where a district that is 53 percent Black did not produce a Black winner.

⁵ Other descriptive or predictive methods would typically impose strong assumptions about the nature of the relationship between the two variables of interest. For example, a linear regression would assume that the relationship is linear, a quadratic regression would assume that the relationship follows the shape of a parabola, etc. Local polynomial regression makes no such assumption and finds whatever continuous curve best summarizes the data.

⁶ To see why, imagine that we wanted to predict the probability of electing a Black candidate in a hypothetical district that has a higher share of Black residents than any actual district in our data set. All of our information would come from districts with a lower share of Black residents, so our estimate could potentially be biased downward.

assumptions.

20. Figure 1 re-displays my previous results using a local polynomial regression (black) and also shows results from a logit regression (gray). A logit regression imposes stronger assumptions about how the variables of interest relate to one another, but it is less susceptible to concerns about the potential for endpoint bias.

21. For the sake of transparency, Figure 1 also shows binned averages. Specifically, each circle shows the share of elections won by a Black or Latino candidate for each 10-percentage-point bin of the demographic variable of interest. The sizes of the circles are proportional to the number of cases in each bin.

22. In other words, Figure 1 uses three different methods to assess the extent to which the share of minority residents in a district corresponds with the chances of electing a minority legislator. In general, the three different methods produce similar results and tell essentially the same story.

23. If anything, Figure 1 suggests that the local polynomial regression utilized in my previous report may have underestimated the importance of majority-Latino districts for electing Latino legislators. Compared with the local polynomial approach, the logit regression predicts lower chances of a Latino electoral winner when a district is less than 50 percent Latino and higher chances of a Latino winner when a district is more than 50 percent Latino.

24. The binned averages in Figure 1 suggest that majority-Latino districts are important for producing Latino election winners. In districts that are 40-50 percent Latino, a Latino candidate won in 14 out of 31 elections (approximately 45 percent), and in districts that are 50-60 percent Latino, a Latino candidate won in 17 out of 20 elections (85 percent).

25. Although 14 out of 31 races in districts that are 40-50 percent Latino were won by a

Latino candidate, only one of those races was won by a non-incumbent Latino. By comparison, non-incumbents won in three of the 17 cases where a non-Latino candidate won. So cases of non-incumbents winning are rare, and instances of non-incumbent Latino candidates winning are especially rare, even in districts that are 40-50 percent Latino.

26. Between the Illinois House and Senate, there were seven districts for which the share of Latino residents was between 40 and 50 percent for the 2012-2020 redistricting cycle. Of those seven districts, six started the redistricting cycle with an incumbent. Five of the incumbents were Latino and one was white. In the district without an incumbent seeking reelection in 2012 (H-77), a white candidate (Kathleen Willis) won and continued to win each election through 2020. In the district with a white incumbent (H-23), the incumbent won every election between 2012 and 2020. In the districts with Latino incumbents, two of the five seats (H-2 and H-39) are currently held by non-Latino legislators. These patterns suggest that Latino candidates have a difficult time emerging in districts that have large but non-majority Latino populations.

E. The Dominance of Incumbents in Illinois General Assembly Elections

27. In my previous report, I documented the lack of electoral competition in Illinois elections, and I cited studies that estimate the large advantages of incumbency in state legislative elections. Here, I further document the extent to which incumbents in the Illinois General Assembly are successful in winning reelection. This evidence is relevant for understanding the extent to which Illinois voters have viable choices at the ballot box. Furthermore, the fact that incumbents are so dominant in these elections suggests that many elections with incumbents may not provide voters with a viable alternative, and therefore, these elections may not be good opportunities for assessing the extent to which minority voters have divergent interests.⁷

⁷ See, for example, *S. Christian Leadership Conf. of Alabama v. Sessions*, 56 F.3d 1281, 1293 (11th Cir. 1995) (en banc) (affirming district court, and noting that it found Dr. Lichtman's analysis

28. Utilizing data on General Assembly election results between 2012 and 2020 and the members who served in the 98th through 102nd Assemblies, I tracked various outcomes of interest. Specifically, for all elections between 2014 and 2020, I documented who won office in the previous election for that seat, and I counted how often that previous winner won reelection, lost in the primary election, lost in the general election, resigned, or retired. And in cases of resignation, I counted how often a newly appointed incumbent won the next election, lost in the primary, or lost in the general.

29. Table 2 shows the results of these tabulations. In total, there were 592 General Assembly elections for which I can track these outcomes of interest. In 451 cases, the previous winner ran again and won. In only six cases, the previous winner ran for reelection and lost in the primary election. In 16 cases, the previous winner ran for reelection and lost in the general election. In 63 cases, the previous winner resigned and the newly appointed incumbent won reelection. In one case, the previous winner resigned and the newly appointed incumbent lost in the primary. In five cases, the previous winner resigned and the newly appointed incumbent lost in the general. And in only 50 cases, the winner of the election served out their term and retired.

30. The rates of these various outcomes are similar between the Illinois House and Senate. Considering appointments, an incumbent was on the ballot in 91.6 percent of all elections, and when an incumbent ran, they won 94.8 percent of the time.

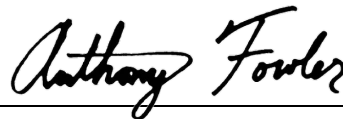
31. The fact that most incumbents win may not be especially surprising or troubling to many. Perhaps they became incumbents because their constituents liked them. What is perhaps more surprising and troubling is the fact that appointed incumbents perform almost as well as those

was “flawed” where he “failed to appropriately consider the effect on judicial election results of the power of incumbency and, with respect to incumbents who had been appointed to office, the prestige of merit selection”).

incumbents who previously won. When the previous electoral winner sought reelection, they won 95.3 percent of the time, and when an appointed incumbent sought reelection, they won 91.3 percent of the time.

32. These results, in conjunction with the results in my previous report, suggest that most Illinois voters have little opportunity to select their representatives in the General Assembly. Incumbents are significantly advantaged in Illinois General Assembly elections—even incumbents who were not initially selected by the voters.

Dated this 2nd day of December 2021 at Chicago, Illinois.

A handwritten signature in black ink, reading "Anthony Fowler", is positioned above a horizontal line.

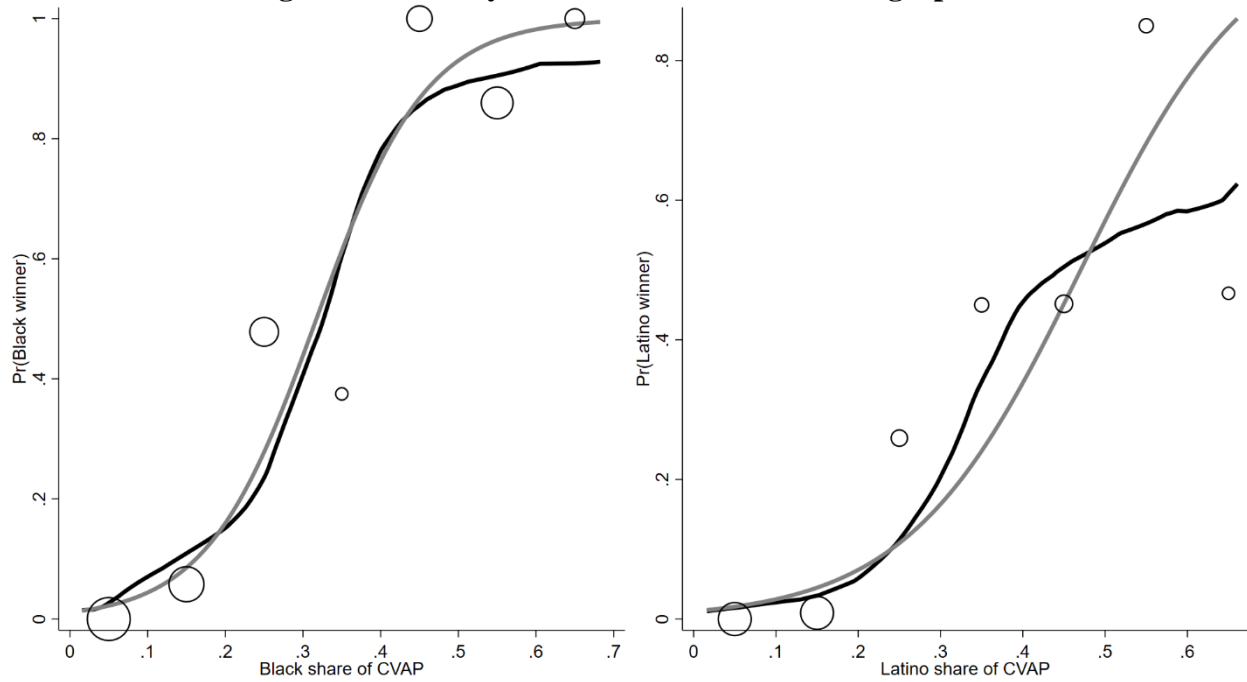
Anthony Fowler

Table 1. Racially Polarized Voting in Illinois General Assembly Elections

Elections	Weights?	White	Black	Latino	Asian	B–W	L–W	A–W
Illinois Senate 2020	No	.568	.967	.759	.830	.399	.190	.262
	Yes	.497	.941	.807	.709	.443	.310	.211
Illinois House 2020	No	.563	.963	.763	.804	.400	.200	.242
	Yes	.490	.945	.804	.692	.455	.314	.202
Illinois Senate 2018	No	.539	.959	.731	.775	.420	.192	.236
	Yes	.482	.954	.801	.710	.473	.319	.228
Illinois House 2018	No	.534	.945	.720	.786	.411	.187	.252
	Yes	.477	.945	.804	.720	.468	.327	.243

Table 2. Incumbent Dominance in Illinois General Assembly Elections, 2014-2020

	House	Senate	combined
won reelection	367	84	451
lost in primary	6	0	6
lost in general	13	3	16
resigned, appointed incumbent won	42	21	63
resigned, appointed incumbent lost in primary	1	0	1
resigned, appointed incumbent lost in general	4	1	5
retired, open seat race	39	11	50
total	472	120	592
Pr(winner reelected seeking reelection)	.951	.966	.953
Pr(appointed incumbent elected appointment)	.894	.955	.913
Pr(elected or appointed incumbent wins seeking election)	.945	.963	.948
Pr(incumbent running)	.917	.908	.916

Figure 1. Minority Winners and District Demographics

The black curves are kernel-weighted local polynomial regressions (Epanechnikov kernel, bandwidth = .1) showing how the probability that the general election winner is from a minority group relates to the share of the district's CVAP comprised of that group. The gray curves show predicted probabilities from a logit regression. The circles represent binned averages, and the sizes of the circles are proportional to the number of cases in each bin. The sample includes all state legislative general elections (from both chambers) between 2012 and 2020 in districts where at least 15 percent of the citizen voting-age population (CVAP) is Black, 15 percent is Latino, or 15 percent is Asian.