Beyond the Adjustment Wars: Dealing with Uncertainty and Bias in Redistricting Data

Jeff Zalesin

ABSTRACT. The Constitution requires legislative redistricting plans to have approximately equal populations in each district. But no one knows exactly how many people live in any district, because census data are never fully accurate. Courts have developed little doctrine in response to this problem. Yet, the need for such doctrine is growing. Policymakers have largely given up on improving the census through statistical adjustment. The 2020 Census will likely be *less* accurate than its predecessors, thanks to political interference and the COVID-19 pandemic.

This Essay offers a pragmatic approach to litigating malapportionment cases with imperfect population data. Courts in malapportionment litigation should clarify that they will consider evidence that the data underlying a redistricting plan are biased, such that the district populations are less equal than they appear. Such evidence will be especially important when courts evaluate maps drawn with novel types of data, such as estimates of citizen voting-age population.

INTRODUCTION

Everyone agrees on two things about the decennial census: it is highly important, and it is not entirely accurate. The question is what, if anything, to do about this disconnect between the weight we place on census data and our actual confidence in the census to accurately measure populations.

In election law, abandoning all reliance on the census is simply not an option. The Constitution explicitly requires the reapportionment of congressional seats to be based on the census.[1] It also requires legislative district plans to have ap-

---

1. U.S. CONST. art. I, § 2.

proximately equal populations in each district—a mandate that is all but impossible to follow without census data.[2] Stuck with the census, election lawyers and experts in adjacent fields have long debated proposals to improve the census data on which they rely for reapportionment, redistricting, Voting Rights Act enforcement, and other important applications. In particular, they have argued over whether the census data should be adjusted based on statistical sampling before those data are used to structure our democracy.[3] For better or worse, advocates of census adjustment have had little success, dragged down by both political opposition and a lack of expert unanimity about the feasibility of using statistics to represent the precise distribution of population more accurately than the unadjusted census.[4] For the most part, courts take the census as they find it, playing along with the fiction that the census accurately counts every United States resident.[5]

Focusing on the constitutional imperative to draw voting districts with approximately equal populations for state and local legislatures,[6] this Essay offers a moderate and pragmatic alternative approach to dealing with the reality that the census—and every other set of population data—is never perfectly accurate. Because the Census Bureau does not publish statistical point estimates of the population of each census block, no one can pinpoint the "real" population at the block level. But this should not stop courts and litigants from scrutinizing the published census data. Instead, plaintiffs in malapportionment litigation should have an opportunity to offer extrinsic evidence that any population data underlying a redistricting plan are biased in such a way as to make the population deviations between districts look smaller than they really are. Depending on the strength of the evidence of bias, courts should sometimes be willing to strike

---

2. *See* Karcher v. Daggett, 462 U.S. 725, 738 (1983) ("[B]ecause the census count represents the best population data available, it is the only basis for good-faith attempts to achieve population equality." (internal citation omitted)).

3. *See, e.g.*, David A. Freedman, *Adjusting the Census of 1990*, 34 JURIMETRICS J. 99, 100-01, 105 (1993) ("Adjustment requires the Bureau to replace data by stories about data, more politely, models. Using imaginary scientific tools to address real social problems will have a bitter institutional cost if we lose the ability to distinguish fact from fantasy."); Nathaniel Persily, *The Right to Be Counted*, 53 STAN. L. REV. 1077, 1077-78, 1090-93 (2001) (book review); Note, *Demography and Distrust: Constitutional Issues of the Federal Census*, 94 HARV. L. REV. 841, 843 (1981).

4. *See infra* Part I.

5. *Id.*

6. *See* Evenwel v. Abbott, 136 S. Ct. 1120, 1123-24 (2016). This constitutional mandate is widely known as the "one-person, one-vote" rule. *Id.* at 1123. However, this terminology may confuse matters by implying, wrongly, that the Constitution requires every vote to have equal weight and thus requires each district to have the same number of *voting-eligible* residents. *See id.* at 1132 (rejecting this constitutional theory). This Essay, therefore, mostly avoids referring to the "one-person, one-vote" rule.

down maps as unconstitutionally malapportioned — even though the Census Bureau's official data products in isolation would point to the opposite result.

As I will argue, this principle has the virtue of already being embedded in the case law, or at least follows from the most sensible interpretation of the relevant precedent. The census matters in state and local redistricting litigation not because balancing census figures across districts is an end in itself, but because the data provide evidence — usually the best evidence available — of where people live. Like all evidence, these data are subject to rebuttal at trial. Yet, courts have surprisingly little doctrine to apply when assessing census inaccuracy in malapportionment cases, to the point where one could be forgiven for wondering whether courts have created a de facto irrebuttable presumption that the census is accurate.

Now is an excellent time to clear up this ambiguity. At this moment, the U.S. Census Bureau is finishing collecting data for the 2020 Census while facing major, unexpected obstacles, including the Coronavirus Disease 2019 (COVID-19) pandemic,[7] and the issuance of a presidential memorandum that asks the Census Bureau for data on undocumented immigrants and risks creating the false impression that these immigrants should not respond to the census.[8] Even before

---

7.   *See* U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-20-551R, 2020 CENSUS: COVID-19 PRESENTS DELAYS AND RISKS TO CENSUS COUNT (2020), https://www.gao.gov/assets/710/707456.pdf [https://perma.cc/P8K5-QRWP]. The Census Bureau initially planned to extend its data-collection operations for the 2020 Census through October 31, 2020 to mitigate the effects of COVID-19 on the count. However, the Bureau has recently sought to shorten that schedule — a change that experts believe would harm data quality. *See* Hansi Lo Wang, *Appeals Court Rejects Push to End Census Early by Trump Administration*, NPR (Sept. 30, 2020, 4:06 PM ET), https://www.npr.org/2020/09/30/916291712/appeals-court-rejects-push-to-end-census -early-by-trump-administration [https://perma.cc/3E8G-EL8Q]. As of this publication, the schedule for 2020 Census data collection is being litigated. Judge Lucy H. Koh of the Northern District of California ordered the Census Bureau to revert to its previously announced plan to collect data through October 31. Nat'l Urban League v. Ross, 20-CV-05799-LHK, 2020 WL 5876939, at *9 (N.D. Cal. Oct. 1, 2020). However, the Supreme Court has stayed Judge Koh's injunction pending appeal. Nat'l Urban League v. Ross, No. 20A62, 2020 WL 6041178 (Oct. 13, 2020).

8.   Presidential Memorandum, Memorandum on Excluding Illegal Aliens from the Apportionment Base Following the 2020 Census (July 21, 2020), https://www.whitehouse.gov /presidential-actions/memorandum-excluding-illegal-aliens-apportionment-base-following -2020-census [https://perma.cc/3DHL-4HFH]. The President's Memorandum declares that the "policy of the United States" is to exclude undocumented immigrants from consideration in determining how many congressional seats each state receives after the 2020 Census. *Id.* § 2. In September 2020, a three-judge district court in the Southern District of New York declared the Memorandum unlawful on statutory grounds and enjoined its implementation. New York v. Trump, 20-CV-5770 (RCW) (PWH) (JMF), 2020 WL 5422959, at *2 (S.D.N.Y. Sept. 10, 2020). The court found that the Memorandum "has created, and is likely to create, widespread confusion among illegal aliens and others as to whether they should participate

these crises, democracy advocates warned that this census could be less accurate than previous iterations, citing concerns about the census's flawed operational design,[9] lingering confusion from the federal government's failed attempt to add a citizenship question to the census,[10] and the Bureau's adoption of a new system for protecting respondents' privacy by algorithmically adding error to published data.[11] Together, these factors place the 2020 Census at risk of being the least accurate census in living memory.[12] In turn, redistricting plans based on 2020 Census data could set off a wave of malapportionment litigation.

Meanwhile, there is increasingly widespread interest in abandoning or modifying the Census Bureau's core population data as the basis for redistricting. Some state and local governments will likely try to redistrict their legislatures based on the Census Bureau's 2020 estimates of the citizen voting-age population (CVAP)—a new and controversial data product whose accuracy will be suspect at best.[13] Other jurisdictions are committed to modifying the Census Bureau's published data to relocate incarcerated people from prisons to their home addresses; this, too, will raise some questions about whether the modifications are being performed with consistent accuracy.[14]

---

in the census, a confusion which has obvious deleterious effects on their participation rate." *Id.* at *13.

9. *See* Molly Danahy & Danielle Lang, *Distortion in the Census: America's Oldest Gerrymander?*, 49 U. MEM. L. REV. 1065, 1073-75 (2019).

10. *See* D'Vera Cohn & Anna Brown, *Growing Share of Adults Have Heard Something About the 2020 Census Recently*, PEW RES. CTR. (Mar. 30, 2020), https://www.pewsocialtrends.org/2020/03 /30/growing-share-of-adults-have-heard-something-about-the-2020-census-recently [https://perma.cc/8G3S-8UHJ] ("A large majority of U.S. adults either erroneously think the 2020 census will ask if they are a citizen or not (53%) or are unsure if this will be on the census form (27%).").

11. *See* Qian Cai, *Pandemic, Privacy Rules Add to Worries Over 2020 Census Accuracy*, GOV'T TECH. (June 17, 2020), https://www.govtech.com/analytics/Pandemic-Privacy-Rules-Add-to -Worries-Over-2020-Census-Accuracy.html [https://perma.cc/LV6T-426G]; Gus Wezerek & David Van Riper, Opinion, *Changes to the Census Could Make Small Towns Disappear*, N.Y. TIMES (Feb. 6, 2020), https://www.nytimes.com/interactive/2020/02/06/opinion/census -algorithm-privacy.html [https://perma.cc/4LC9-Q6XG]; Letter from Tim Storey, Exec. Dir., Nat'l Conference of State Legislatures, to Steven Dillingham, Dir., U.S. Census Bureau 2 (May 26, 2020), https://www.ncsl.org/documents/statefed/Census-Bureau-letter-May26 -FINAL.pdf [https://perma.cc/2B7Q-N7PT].

12. *See* Robert Santos & Diana Elliott, *Is It Time to Postpone the 2020 Census?*, URBAN INST.: URBAN WIRE (Mar. 13, 2020), https://www.urban.org/urban-wire/it-time-postpone-2020-census [https://perma.cc/39WF-9XXR].

13. *See infra* Part III.

14. *See* Fletcher v. Lamone, 831 F. Supp. 2d 887, 896 (D. Md. 2011) (three-judge court) (upholding the use of adjusted census data because state acted in a "systematic manner" in making adjustments to relocate incarcerated people from prisons to their home addresses).

In short, issues about data quality are sure to arise in redistricting litigation in 2021 and beyond. The goal of this Essay is to provide a partial roadmap for resolving these issues within the existing framework for malapportionment cases. Part I briefly surveys the recent history and current doctrine relevant to redistricting with imperfect census data. Part II makes the legal and normative argument for considering evidence of data bias in malapportionment cases and discusses some types of evidence that could be brought to bear. Part III draws on the legal principles from Part II to sketch the outline of one potentially viable strategy for challenging redistricting plans based on the Census Bureau's 2020 CVAP estimates. Part IV concludes.

I. THE SEARCH FOR TRUE POPULATION DATA

Before delving into a legal argument for future development in malapportionment law, it may help to place the issues in historical and doctrinal context. This Part first reviews the emergence and refinement of the equal-population standard for redistricting, then discusses the decades-long controversy over whether the census should be statistically adjusted.

A. A Data-Driven Constitutional Doctrine Meets Imperfect Data

Since 1790, the census has shaped the distribution of American political power by determining how many members of Congress represent each state.[15] But the accuracy of census data took on a new kind of constitutional significance in the 1960s, when the Supreme Court began to strike down malapportioned voting-district maps.[16] As the Court recognized in *Wesberry v. Sanders*, the Constitution requires "equal representation for equal numbers of people" in the House of Representatives, which means each district in a state's congressional redistricting plan must have an approximately equal population.[17] The Court

---

15. *See* U.S. CONST. art. I, § 2. Congress has generally reapportioned itself based on the results of each census, but failed to do so after the 1920 Census. *History: 1920 Overview*, U.S. CENSUS BUREAU, https://www.census.gov/history/www/through_the_decades/overview/1920 .html [https://perma.cc/YMK3-6AXX].

16. Previously, the Supreme Court had refused to provide a constitutional remedy for malapportionment, finding that it would be unwise for the Court to "enter [the] political thicket" of redistricting. Colegrove v. Green, 328 U.S. 549, 556 (1946) (plurality opinion). However, in 1962, the Court reversed course and recognized "a justiciable constitutional cause of action" for state legislative malapportionment. Baker v. Carr, 369 U.S. 186, 237 (1962).

17. 376 U.S. 1, 18 (1964).

soon applied the same basic principle to redistricting for state legislatures[18] and local legislative bodies.[19]

The standard for unconstitutional malapportionment differs depending on the type of map at issue. In congressional redistricting cases, if there is *any* inequality in district population and the plaintiff shows that the deviation did not result from a "good-faith effort" to achieve absolute equality, "the State must bear the burden of proving that each significant variance between districts was necessary to achieve some legitimate goal."[20] Examples of such "legitimate goal[s]" include "making districts compact, respecting municipal boundaries, preserving the cores of prior districts, and avoiding contests between incumbent Representatives."[21]

By contrast, in state and local legislative malapportionment cases, the burden of justification shifts to the government only if the map has a ten percent or greater maximum population deviation—that is, the percentage deviation by which the most populated district exceeds the ideal district size, plus the percentage deviation by which the least populated district falls short of the ideal district size.[22] Then, the government must show that the challenged map "may reasonably be said to advance [a] rational state policy."[23] If the government does make this showing, the population deviations will be found unconstitutional only if they are so large that they "emasculate the goal of substantial population equality" and thus are not "constitutionally tolerable."[24]

The Supreme Court has never unambiguously singled out a specific measure of the overall population, or "population base," that must be roughly equalized in state and local legislative redistricting.[25] However, state and local governments

---

18. Reynolds v. Sims, 377 U.S. 533, 568 (1964).

19. Avery v. Midland Cty., 390 U.S. 474, 484-85 (1968).

20. Karcher v. Daggett, 462 U.S. 725, 731 (1983).

21. *Id.* at 740.

22. Evenwel v. Abbott, 136 S. Ct. 1120, 1124 n.2 (2016); *see also* Marylanders for Fair Representation, Inc. v. Schaefer, 849 F. Supp. 1022, 1033 (D. Md. 1994) (three-judge court) (requiring no justification for a maximum population deviation of 9.84 percent).

23. Brown v. Thomson, 462 U.S. 835, 843 (1983) (alteration in original) (quoting Mahan v. Howell, 410 U.S. 315, 328 (1973)).

24. *Id.* at 852 (quoting *Mahan*, 410 U.S. at 326).

25. In congressional redistricting, by contrast, it is relatively clear that the state must equalize total population, as measured by the census. *See Karcher*, 462 U.S. at 745-47 (Stevens, J., concurring); Joseph Fishkin, *Taking Virtual Representation Seriously*, 59 Wm. & Mary L. Rev. 1681, 1725-26 (2018).

overwhelmingly base their redistricting plans on the total population of the jurisdiction, as measured by the most recent decennial census data.[26] The Court, in turn, evaluates compliance with the equal-population rule by examining population deviations as measured by the census.[27] It indulges the legal fiction that census figures remain current as evidence of actual population until superseded by the next census, despite acknowledged population changes during the decade.[28] Although the Court upheld a state legislative map based on registered voters in one of its early malapportionment cases,[29] the Court recently has treated that case as a special circumstance and has expressed a normative preference for total population as the redistricting population base.[30] Congress, meanwhile, has

26. *See Evenwel*, 136 S. Ct. at 1124; Peter Wagner, *Breaking the Census: Redistricting in an Era of Mass Incarceration*, 38 WM. MITCHELL L. REV. 1241, 1247 (2012) ("[S]tate and local governments are required by federal law to redistrict each decade and typically use the decennial census to do so . . . because the data is high quality and free."). A few states adjust the census figures in some way before redistricting. Hawaii, Kansas, and Washington "exclude certain non-permanent residents, including nonresident members of the military" from their redistricting population bases. *Evenwel*, 136 S. Ct. at 1124 n.3 (citing HAW. CONST. art. IV, § 4; KAN. CONST. art. 10, § 1(a); and WASH. CONST. art. II, § 43(5)); *see also* KAN. STAT. ANN. §§ 11-301, 11-302, 11-304 (2020) (governing adjustment of census data to exclude non-permanent Kansas residents). Nine states — California, Colorado, Delaware, Maryland, Nevada, New Jersey, New York, Washington, and Virginia — currently have statutes requiring adjustments to census data to count incarcerated people at home rather than in prison or jail for congressional redistricting, state legislative redistricting, or both. *See* CAL. ELEC. CODE § 21003 (West 2020); COLO. REV. STAT. ANN. § 2-2-902 (West 2020); DEL. CODE ANN. tit. 29, § 804A (2020); MD. CODE ANN., STATE GOV'T § 2-2A-01 (LexisNexis 2020); NEV. REV. STAT. § 360.288 (2020); N.J. STAT. ANN. § 52:4-1.2 (West 2020); VA. CODE ANN. § 24.2-314 (2020); WASH. REV. CODE § 44.05.140 (2020). New Hampshire has a constitutional provision authorizing the exclusion of "non residents temporarily residing in this state," N.H. CONST. pt. 2, art. 9-a, but the state actually uses unadjusted census data. *See* Brief for the States of New York et al. as Amici Curiae in Support of Appellees at 9 n.29, *Evenwel*, 136 S. Ct. 1120 (No. 14-940), 2015 WL 5719756, at *9 ("New Hampshire's constitution authorizes its legislature to enact a statute to deduct non-permanent residents from the Census's total-population count but no such statute currently exists." (internal citation omitted)). The Nebraska and Maine constitutions facially require the states to exclude non-U.S. citizens. ME. CONST. art. IV, pt. 1, § 2; NEB. CONST. art. III, § 5. In practice, however, Maine and Nebraska include non-U.S. citizens in their population bases. *Evenwel*, 136 S. Ct. at 1124 n.3.

27. *Evenwel*, 136 S. Ct. at 1131 ("[F]rom *Reynolds* on, the Court has consistently looked to total-population figures when evaluating whether districting maps violate the Equal Protection Clause by deviating impermissibly from perfect population equality."); *see also Brown*, 462 U.S. at 837-41; Connor v. Finch, 431 U.S. 407, 416-17 (1977).

28. *See* Georgia v. Ashcroft, 539 U.S. 461, 488 n.2 (2003), *superseded by statute on other grounds*.

29. Burns v. Richardson, 384 U.S. 73, 96-97 (1966).

30. *See Evenwel*, 136 S. Ct. at 1124 (characterizing *Burns* as "holding Hawaii could use a registered-voter population base because of 'Hawaii's special population problems' — in particular, its substantial temporary military population" (quoting *Burns*, 384 U.S. at 93-94)); *id.* at 1132 ("By ensuring that each representative is subject to requests and suggestions from the same

facilitated redistricting based on total census population by setting up a detailed process for the Census Bureau to follow in providing redistricting data to the states.[31]

Even as the courts, Congress, and state and local redistricting authorities have converged on the census as the dominant measure of population equality between districts,[32] it has long been widely understood that the census contains errors and, more importantly, that these counting errors are not randomly distributed within states.[33] Census research has shown that specific groups are persistently and disproportionately undercounted, including the Black, Hispanic, and American Indian or Alaskan Native populations; home renters; and young

---

number of constituents, total-population apportionment promotes equitable and effective representation.").

31. 13 U.S.C. § 141(c) (2018).

32. *See supra* notes 26-28 and accompanying text.

33. *See* Wisconsin v. City of New York, 517 U.S. 1, 17 (1996). The Census Bureau typically employs two basic approaches to assessing census coverage, or the extent to which the census captures the true population: dual-system estimation and demographic analysis. WILLIAM P. O'HARE, DIFFERENTIAL UNDERCOUNTS IN THE U.S. CENSUS: WHO IS MISSED? 25 (2019). To simplify, dual-system estimation involves surveying a sample of the population in an operation conducted independently from the census, matching the survey responses with census data, and using the results to estimate how close the census came to capturing the true size of the population. *Id.* at 28-29. Demographic analysis, by contrast, estimates change in a population over time by using data on births, deaths, and migration. *Id.* at 26.

children.[34] Assuming that people with similar characteristics have some tendency to live close together,[35] this differential undercount of *groups* will translate into a differential undercount of *places*.

This geography-based undercount implies that maps that facially appear to provide equal representation for equal numbers of people are likely to leave specific communities underrepresented in the legislature. Take the hypothetical example of a redistricting plan where every district has perfectly equal census population, but District 1's population is disproportionately Black compared to the rest of the jurisdiction. Other things being equal, District 1 is likely to be overpopulated, based on the historical undercount of Black communities in the census. This imbalance forces each District 1 resident to compete with too many fellow constituents for a fair share of the local legislator's attention and reduces the aggregate legislative representation of District 1's residents.[36]

The Supreme Court has long been aware that the census is less than fully accurate,[37] but this awareness has had little apparent effect on the Court's malapportionment jurisprudence. Particularly in the congressional redistricting context, the Court has been forthright about its willingness to assume that the census is accurate, despite knowing that the truth is more complicated. In 1983,

---

34. *See* 1 U.S. Census Bureau, *History: 2000 Census of Population and Housing*, U.S. DEP'T COM. 14 (2009) [hereinafter Census Bureau, Volume 1], https://www.census.gov/history/pdf /Census2000v1.pdf [https://perma.cc/Z5ZN-6RYH] ("Evaluations of past decennial censuses revealed a persistent greater-than-average net undercount of minorities and other hard-to-count population groups and areas."); 2 U.S. Census Bureau, *History: 2000 Census of Population and Housing*, U.S. DEP'T COM. 481 (2009), https://www.census.gov/history/pdf /Census2000v2.pdf [https://perma.cc/FS2K-AEKA] ("The undercount has been a significant issue in census-taking since the first census in 1790. . . . By the 1960s, the Census Bureau had increasing evidence that African Americans and other minorities were undercounted at higher-than-average rates. Evaluations of the census since that time have indicated that this 'differential undercount' also affects young adult males and renters."); U.S. Census Bureau Decennial Stat. Stud. Div., *Investigating the 2010 Undercount of Young Children—Examining Data Collected During Coverage Followup*, U.S. DEP'T COM. 1 (2017), https://www2.census.gov /programs-surveys/decennial/2020/program-management/final-analysis-reports/2020 -2017_05-undercount-children-examining-data.pdf [https://perma.cc/5LVP-2SBY] ("The Census Bureau acknowledges the long-standing undercount of children under the age of 5 in decennial censuses and in Census Bureau surveys."); Memorandum from Patrick J. Cantwell, Assistant Div. Chief, Sampling & Estimation Decennial Statistical Studies Div., to David C. Whitford, Chief, Decennial Statistical Studies Div. 1-2, 18 (May 22, 2012), https://www .census.gov/coverage_measurement/pdfs/g01.pdf [https://perma.cc/R27S-KU3U].

35. *See* Aaron Williams & Armand Emamdjomeh, *America Is More Diverse Than Ever—but Still Segregated*, WASH. POST (May 10, 2018), https://www.washingtonpost.com/graphics/2018 /national/segregation-us-cities [https://perma.cc/4KUT-P5L4].

36. *See* Evenwel v. Abbott, 136 S. Ct. 1120, 1124 (2016); Reynolds v. Sims, 377 U.S. 533, 562 (1964) (explaining the constitutional harm to residents of overpopulated districts).

37. *See* Gaffney v. Cummings, 412 U.S. 735, 745-46 (1973).

in *Karcher v. Daggett*, the Court made clear that *any* practicably avoidable deviation from perfect census-population equality in a congressional district map must be adequately justified. Even a deviation so small that it falls within the census's predictable margin of error is unconstitutional unless it has an adequate justification.[38] As the Court explained, "because the census count represents the best population data available, it is the only basis for good-faith attempts to achieve population equality."[39]

Lower courts have faithfully followed *Karcher* in holding congressional redistricting plans to a stringent standard of census-population equality. For example, one district court struck down a Pennsylvania congressional redistricting plan because, according to official 2000 Census data, the most populated district had nineteen more residents than the least populated district.[40]

The Supreme Court has struck a more ambivalent tone about presuming an accurate census in state and local legislative redistricting cases. In *Gaffney v. Cummings*, the Court cited the reality of census error as one reason why courts should not insist on perfect population equality between state legislative districts: "The 'population' of a legislative district is just not that knowable to be used for such refined judgments."[41] However, *Gaffney* has not led to the adoption of a flexible rule of reason to reduce courts' reliance on precise census figures in state and local legislative malapportionment cases. Instead, the Court has settled on a bright-line mathematical threshold for presumptively unconstitutional inequalities. As already noted, a state or local legislative map is presumed unconstitutional if it has a maximum population deviation of ten percent or greater.[42] Under this doctrine, courts act as if district populations are quite "knowable" and proceed to make "refined judgments" about the size of population deviations to determine whether they require justification.[43]

The Court's willingness to treat the census as accurate does have limits, at least in state and local malapportionment cases. In *Mahan v. Howell*, the Court reviewed Virginia's state legislative redistricting plan in which the districts appeared to have sufficiently equal census population.[44] In fact, the district court determined—and the parties did not dispute—that the census was inaccurate.

---

38. Karcher v. Daggett, 462 U.S. 725, 734 (1983).

39. *Id.* at 738 (internal quotation marks and citations omitted).

40. Vieth v. Pennsylvania, 195 F. Supp. 2d 672, 675 (M.D. Pa. 2002).

41. Gaffney v. Cummings, 412 U.S. 735, 745-46 (1973) (footnote omitted).

42. Evenwel v. Abbott, 136 S. Ct. 1120, 1124 n.2 (2016); *see also* Marylanders for Fair Representation, Inc. v. Schaefer, 849 F. Supp. 1022, 1033 (D. Md. 1994) (three-judge court) (requiring no justification for a maximum population deviation of 9.84 percent).

43. *Gaffney*, 412 U.S. at 746.

44. 410 U.S. 315, 330 (1973).

Specifically, the district court noted that the census counted about 36,700 members of the Navy as residents of a census tract within the Fifth Senatorial District. However, only about 8,100 actually lived in that tract.[45] The district court found, and the Supreme Court affirmed, that correcting this error in the census revealed "significant population disparities" that called for a judicial remedy.[46] As I will elaborate below,[47] *Mahan* remains an important and underappreciated case for its recognition that courts need not always "accord conclusive weight to the legislative reliance on census figures."[48] Nevertheless, the *Mahan* Court expressly noted that its willingness to look behind the census in that case arose from "unusual, if not unique, circumstances."[49] To date there is no significant case law deploying *Mahan* as a tool to counteract the effects of census undercounts on redistricting.

B. *Waiting in Vain for an Adjusted Census*

As the Court has settled into its habit of treating census data as all-but-conclusive evidence of actual population, many lawyers and academics have argued that the Census Bureau should attempt to make the census more accurate by replacing traditional census counts with statistically adjusted population figures.[50] The idea of adjusting the census was hotly debated around the 1980, 1990, and 2000 censuses — a controversy with both technical and political dimensions.

Ahead of the 1980 Census, statisticians at the Census Bureau and elsewhere actively debated whether it was scientifically feasible to improve the census by applying statistical adjustment based on the results of dual-system estimation.[51] The Census Bureau decided against the proposal in 1980, citing its lack of confidence in the methods available to accomplish the adjustment.[52]

A decade later, the Bureau staff proposed a plan to adjust the 1990 Census figures. But President George H.W. Bush's Secretary of Commerce, Robert

---

45. *Id.* at 330-31.

46. *Id.* at 332.

47. *See infra* Part II.

48. *Mahan*, 410 U.S. at 331.

49. *Id.*

50. *See, e.g.*, Samuel Issacharoff & Allan J. Lichtman, *The Census Undercount and Minority Representation: The Constitutional Obligation of the States to Guarantee Equal Representation*, 13 Rev. Litig. 1 (1993); *Demography and Distrust*, *supra* note 3.

51. Margo J. Anderson, The American Census: A Social History 235 (2015). As noted above, *supra* note 33, dual-system estimation is one of the Census Bureau's longstanding methods of measuring the accuracy of the census.

52. *Id.* at 240.

Mosbacher, overruled the majority of the Bureau's experts and decided to publish only unadjusted census figures.[53]

Secretary Mosbacher's decision against adjusting the 1990 Census gave rise to landmark litigation over the relationship between representational equality and census accuracy under the Constitution. The Supreme Court unanimously decided, in *Wisconsin v. City of New York*, that "the 'good-faith effort to achieve population equality' required of a State conducting intrastate redistricting does not translate into a requirement that the Federal Government conduct a census that is as accurate as possible."[54] The Court applied a deferential test, demanding only that the Secretary's decision bear "a reasonable relationship to the accomplishment of an actual enumeration of the population, keeping in mind the constitutional purpose of the census."[55] The Court permitted the unadjusted 1990 Census data to remain the official figures, and all but foreclosed any future judicial finding that the Constitution requires an adjusted census.[56]

In the run up to the 2000 Census, the Bureau developed a plan to incorporate statistical sampling into the operational design of the 2000 Census, both to streamline the Bureau's field operation and to adjust the count.[57] The Supreme Court largely halted this plan in 1999 on statutory grounds.[58]

---

53. *Id.* The Census Bureau did produce adjusted figures for its own use, and the California Assembly ultimately succeeded in making those figures public under the Freedom of Information Act. *See* Assembly of Cal. v. U.S. Dep't of Commerce, 968 F.2d 916 (9th Cir. 1992). However, by the time the Assembly received the adjusted data in January 1993, it was too late to use the data for state-level redistricting. Assembly of Cal. v. U.S. Dep't of Commerce, No. S-91-990WBS/JFM, 1993 WL 188328, at *3 n.6 (E.D. Cal. May 28, 1993). There appears to be no case law from the 1990 redistricting cycle on whether these adjusted figures could be used in malapportionment litigation as evidence that the official census data are inaccurate.

54. 517 U.S. 1, 16-17 (1996).

55. *Id.* at 20.

56. The Court's opinion leaves a narrow opening for a finding that the federal government must adjust the census when failure to do so would demonstrably harm both the census's "distributive accuracy" (proportional coverage) and its "numerical accuracy" (counting the correct number of individuals). *See id.* at 17-18 (approving Secretary Mosbacher's decision as reflective of a preference for distributive accuracy over numerical accuracy).

57. Census Bureau, Volume 1, *supra* note 34, at 11-12.

58. Dep't of Commerce v. U.S. House of Representatives, 525 U.S. 316, 343 (1999). The relevant statute provides: "Except for the determination of population for purposes of apportionment of Representatives in Congress among the several States, the Secretary [of Commerce] shall, if he considers it feasible, authorize the use of the statistical method known as 'sampling' in carrying out the provisions of this title." 13 U.S.C. 195 (2018). The Court interpreted this provision to prohibit the use of sampling to produce congressional reapportionment data. *Dep't of Commerce*, 525 U.S. at 340.

II. LITIGATING DATA BIAS ISSUES WITHOUT AN ADJUSTED CENSUS

With no adjusted census competing with the official count for the title of "the best population data available,"[59] courts are rarely asked to second-guess the accuracy of the census in malapportionment litigation. But, as I will argue below, it would be a mistake to assume that courts must shut their eyes to evidence of inaccuracy and bias in census data when such evidence is offered. This Part makes a legal argument for considering census undercounts in malapportionment litigation, and then provides an overview of some types of evidence that litigants could use to prove these undercounts at trial.

A. The Case for Judicial Openness to Evidence of Census Inaccuracy and Bias

To help clarify what is at stake, imagine a redistricting case with the following facts. The West Dakota Senate consists of 100 members elected from single-member districts. The 2020 Census shows that West Dakota's population is exactly one million.[60] The ideal population for a West Dakota Senate district is ten thousand. The state legislature adopts a senate redistricting plan in which, according to 2020 Census data, the most populous district (District A) has 10,470 residents, and the least populous district (District B) has 9,530. Measured with 2020 Census figures, this map has a maximum population deviation of 9.4 percent.[61] A resident of District A brings a lawsuit, claiming that the map is unconstitutionally malapportioned. The plaintiff does not allege any bad-faith motive on the part of the state. However, the plaintiff does allege that because of bias in the 2020 Census data, District A's real population is significantly higher than the 2020 Census reflects, and District B's real population is significantly lower. If the correct population figures were available, the plaintiff alleges, they would show that the real maximum population deviation exceeds ten percent. The government moves to dismiss the complaint, arguing that, absent a showing of bad faith, no justification is required for a maximum population deviation that falls below ten percent, as measured by official Census Bureau data.

In adjudicating this hypothetical motion to dismiss, the court would find remarkably little precedent directly guiding its decision. The leading authority on

---

59. Karcher v. Daggett, 462 U.S. 725, 738 (1983).

60. *See* 13 U.S.C. § 141(a) (2018) ("The Secretary [of Commerce] shall, in the year 1980 and every 10 years thereafter, take a decennial census of population as of the first day of April of such year.").

61. *See* Evenwel v. Abbott, 136 S. Ct. 1120, 1124 n.2 (2016) ("Maximum population deviation is the sum of the percentage deviations from perfect population equality of the most- and least-populated districts.").

point is *Mahan v. Howell*[62] — a case that supports the plaintiff in West Dakota without directly addressing the precise issue in that motion.

As noted above,[63] the Supreme Court in *Mahan* approved the district court's refusal to "accord conclusive weight to the legislative reliance on census figures" where those census figures contained known errors that resulted in malapportioned districts.[64] By its terms, *Mahan* holds only that courts may find malapportionment based on *discrete, undisputed* inaccuracies in census data, even though the census data facially appear to show properly apportioned districts.[65] This narrow holding could be distinguished from the West Dakota hypothetical, where the alleged inaccuracy of the census is disputed and cannot be precisely quantified. However, focusing on the formal narrowness of what the *Mahan* Court held risks missing the broader theoretical significance of what the Court did. By looking beyond the published census data and subjecting those data to rebuttal, the Court acted on the premise that — in the context of malapportionment litigation concerning state and local legislatures — the census's role is to provide *evidence* of the actual distribution of population, not to define the relevant population conclusively. *Mahan* thus provides the foundation for what courts could develop into a clearly established doctrine allowing plaintiffs in malapportionment litigation to present evidence that the census undercounts some geographic parts of the jurisdiction more than others.

Unfortunately, it appears that the lower courts have not uniformly internalized even *Mahan*'s basic holding, let alone its broader implications. Courts sometimes suggest that when official figures from the decennial census appear to show acceptable equality between district populations, they provide an absolute safe harbor from malapportionment claims.[66] In one particularly illustrative case, *Dean v. Leake*, the Census Bureau itself acknowledged and corrected errors in the official 2000 Census redistricting data for North Carolina.[67] After being informed of the errors, North Carolina adopted state legislative redistricting plans based on the official, uncorrected data.[68] As measured by the corrected data

---

62. 410 U.S. 315 (1973).

63. *See supra* text accompanying notes 44-49.

64. *Mahan*, 410 U.S. at 331.

65. *Id.* at 331-32.

66. *See, e.g.*, Members of Cal. Democratic Cong. Delegation v. Eu, 790 F. Supp. 925, 928 (N.D. Cal. 1992) (stating in a congressional redistricting case that "constitutional and Voting Rights Act challenges to redistricting must be based upon the reported census figures"), *rev'd on other grounds sub nom.* Benavidez v. Eu, 34 F.3d 825 (9th Cir. 1994).

67. 550 F. Supp. 2d 594, 601 (E.D.N.C. 2008).

68. *Id.*

(but not by the uncorrected data), these maps had maximum population devia-
tions exceeding ten percent.[69] Without discussing (or even citing) *Mahan*, the
court held that North Carolina had no "duty to use the corrected census data,"
and therefore no unconstitutional malapportionment could be shown.[70] This
conclusion conflicts with *Mahan*, and future courts should not follow it.

But it is not enough for courts simply to reject *Dean* and apply *Mahan* in
cases that closely track *Mahan*'s facts. *Mahan*'s willingness to treat the census as
rebuttable (though highly probative) evidence of population is praiseworthy and
deserves to be extended to all malapportionment litigation. This doctrinal de-
velopment would strengthen the important constitutional right to equitable leg-
islative representation. As the Supreme Court recognized in *Wesberry v. Sanders*
and *Reynolds v. Sims*, "districts containing widely varied numbers of inhabitants"
tend to function as "vote-diluting discrimination" against voters in the most
populated districts.[71] Nonvoters, too, have a moral claim to legislative represen-
tation that reflects the real population of their communities; living in overpop-
ulated districts dilutes their access to constituent services and their ability to in-
fluence their representative's position on policy issues that affect them.[72] Even if
the precise theoretical basis for an individual constitutional right to equally pop-
ulated districts is somewhat obscure,[73] it is difficult to deny that judicial protec-
tion against malapportionment structurally improves American democracy by
replacing entrenched minority rule with something closer to majority rule.[74] All
this is to say, there is genuine value in providing equal legislative representation
for equal numbers of *people*—not merely for equal numbers of census-reported
persons.

The right to equally-apportioned legislative representation deserves a judi-
cial remedy. A doctrine excluding extrinsic evidence of census inaccuracy—com-
bined with the Supreme Court's unwillingness to compel an adjusted census[75]
or otherwise dictate census methodology[76]—would leave U.S. residents' interest

---

69. *Id.* at 602-03, 603 n.15.

70. *Id.* at 605.

71. Reynolds v. Sims, 377 U.S. 533, 563 (1964) (quoting Wesberry v. Sanders, 376 U.S. 1, 8 (1964)).

72. Evenwel v. Abbott, 136 S. Ct. 1120, 1132 (2016).

73. *See* Justin Levitt, *Citizenship and the Census*, 119 COLUM. L. REV. 1355, 1393 n.170 (2019).

74. *See* Guy-Uriel E. Charles & Luis Fuentes-Rohwer, *Reynolds Reconsidered*, 67 ALA. L. REV. 485, 520, 524-25 (2015); *see also* Karcher v. Daggett, 462 U.S. 725, 751-52 (1983) (Stevens, J., con-
curring) (noting that "[i]t is easy to recognize the element of unfairness in allowing" extreme
disparities in district populations, even if one questions the significance of small disparities).

75. *See* Wisconsin v. City of New York, 517 U.S. 1, 24 (1996).

76. *See id.* at 23.

in equal legislative representation all but completely at the mercy of the Census Bureau (and its political supervisors in Congress and the executive branch).

This is not an attractive option. To its credit, the Census Bureau has earned an overall reputation for professionalism and expertise.[77] But that reputation is historically contingent and must be continuously earned. The Census Bureau is not an independent agency insulated from political winds.[78] Like any executive agency, the Census Bureau is vulnerable to being coopted by politically motivated executive and legislative officials, who may override the Bureau's career professionals and risk worsening the historical undercount in the process. The Trump Administration's failed attempt to add a citizenship question to the 2020 Census based on what the Supreme Court aptly described as a "contrived" and pretextual rationale was a high-profile example of this vulnerability.[79] The Administration further raised alarms about the potential politicization of the census in 2020, when it added new senior political appointees to the Census Bureau,[80] then issued a presidential memorandum calling for the unprecedented step of excluding undocumented immigrants from population counts used to reapportion the House of Representatives.[81] Moreover, the Census Bureau's leadership has mismanaged the Bureau's response to the COVID-19 pandemic, attempting to hasten the end of data collection while career experts say more time is needed due to the health crisis.[82]

The imminent possibility of a worse-than-usual census—together with the knowledge that the census was never perfect to begin with—makes it difficult to stomach the idea of courts placing limitless faith in the census in malapportionment cases. In cases challenging a state's *congressional* redistricting plan as malapportioned, there are countervailing reasons to avoid judicial inquiry into the accuracy of the census; there is, after all, some logic in the notion that the same census figures that govern the distribution of congressional seats to the states

---

77. *See Karcher*, 462 U.S. at 738 ("[T]he census data provide the only reliable—albeit less than perfect—indication of the districts' 'real' relative population levels.").

78. The Census Bureau is a component of the Department of Commerce. 13 U.S.C. § 2 (2018). The President appoints the Director of the Census Bureau and has the unilateral power to fire the Director. 13 U.S.C. § 21(b)(3) (2018).

79. Dep't of Commerce v. New York, 139 S. Ct. 2551, 2574-75 (2019).

80. Michael Wines, *Census Bureau Adds Top-Level Political Posts, Raising Fears for 2020 Count*, N.Y. TIMES (June 23, 2020), https://www.nytimes.com/2020/06/23/us/census-bureau-cogley -korzeniewski.html [https://perma.cc/CL49-YH9K].

81. Presidential Memorandum, *supra* note 8; New York v. Trump, 20-CV-5770 (RCW) (PWH) (JMF), 2020 WL 5422959, at *1-*2 (S.D.N.Y. Sept. 10, 2020) (finding the Memorandum illegal and noting that the exclusion of undocumented immigrants from the congressional apportionment base would be a departure from consistent historical practice).

82. *See* Wang, *supra* note 7.

should similarly control the distribution of congressional representation within each state.[83] But these justifications are particular to the congressional context and should not prevent courts from building on *Mahan* in noncongressional malapportionment cases.

That courts should look beyond the decennial census for population evidence is hardly a radical suggestion. In cases under Section 2 of the Voting Rights Act (VRA),[84] courts start with a baseline presumption that the decennial census is accurate, but routinely use other population evidence to update, replace, or contextualize the census.[85] Often, courts consider recent non-census data as evidence of relevant changes in the population since the last census.[86] Courts in VRA cases have also indicated that they are at least open to considering evidence that the census was inaccurate to begin with.[87] Courts in malapportionment

---

83. *See* Wesberry v. Sanders, 376 U.S. 1, 13-15 (1964) (drawing on constitutional history behind congressional apportionment system to justify imposing an analogous system of numerically equal congressional representation within states); *see also* Fishkin, *supra* note 25, at 1725-26 (referring to the argument that "the rules for congressional districting within a state — who ought to count when drawing the lines for House districts — need not be the same as the rules for apportioning seats to states" as "absurd"). Another consideration also supports treating the census as conclusive in congressional malapportionment cases: Because congressional maps are already required to equalize census population as nearly as practicable, it would be difficult to remedy census-based malapportionment in a congressional map by ordering the state to achieve *even smaller* population deviations.

84. 52 U.S.C. § 10301(a) (2018) ("No voting qualification or prerequisite to voting or standard, practice, or procedure shall be imposed or applied by any State or political subdivision in a manner which results in a denial or abridgement of the right of any citizen of the United States to vote on account of race or color . . . .").

85. *See, e.g.*, McNeil v. Springfield Park Dist., 851 F.2d 937, 946 (7th Cir. 1988); Perez v. Pasadena Indep. Sch. Dist., 958 F. Supp. 1196, 1210 (S.D. Tex. 1997) (holding that "[a] court is not confined to United States census data in deciding whether a sufficiently large and geographically compact majority-minority single-member district can be created" as a VRA remedy).

86. *See, e.g.*, Johnson v. DeSoto Cty. Bd. of Comm'rs, 204 F.3d 1335, 1341-42 (11th Cir. 2000) (approving the use of voter registration data as evidence of post-census population changes); Garza v. Cty. of Los Angeles, 918 F.2d 763, 772-73 (9th Cir. 1990). I do not mean to suggest that in the malapportionment context courts should strike down maps based on evidence that the districts have become malapportioned through post-census change in the population. *See* Georgia v. Ashcroft, 539 U.S. 461, 488 n.2 (2003), *superseded by statute on other grounds*. I cite these cases for the more general proposition that courts can and do rely on noncensus evidence of population in election cases.

87. *See* Perez v. Texas, No. 11-CA-360, 2011 WL 9160142, at *11-12 (W.D. Tex. Sept. 2, 2011) (allowing plaintiffs to proceed with VRA challenge using differential census undercount as "one of many factual allegations used to support their [VRA] vote dilution claim"); *Perez*, 958 F. Supp. at 1210-12 (declining to rely on evidence of 1990 Census undercount, but basing this decision on a case-specific assessment of the available evidence); Ward v. Columbus Cty., 782 F. Supp. 1097, 1104 (E.D.N.C. 1991) ("The figures on black [voter] registration as a percentage of the voting age population are inflated because of census undercounting.").

cases should proceed with the same combination of cautiousness and open-mindedness toward non-census evidence of population.

In short, the motion to dismiss in the hypothetical West Dakota case should be denied. Plaintiffs challenging population disparities in state or local legislative redistricting should have an opportunity to prove, through appropriate expert testimony and documentary evidence, that the census is inaccurate and biased, concealing the true size of the map's maximum population deviation. If the plaintiffs sufficiently prove that the real maximum population deviation exceeds ten percent, then the burden should shift to the government to justify the deviation — even though the published census figures by themselves would indicate a maximum population deviation below ten percent.

A nonfrivolous objection to this doctrine is that if state and local governments cannot rely conclusively on the census, it will be difficult for them to predict whether a proposed redistricting plan under consideration would be struck down as malapportioned. However, it bears emphasis that proving a population deviation above ten percent in a state or local legislative redistricting case does not establish liability, but merely shifts the burden of justification. Many justifications for population deviations are recognized as acceptable, including "making districts compact, respecting municipal boundaries, preserving the cores of prior districts, and avoiding contests between incumbent [legislators]."[88]

Moreover, a clearly established doctrine allowing malapportionment plaintiffs to dispute the census would create healthy incentives for state and local governments during the redistricting process. If governments prefer to avoid the trouble of justifying their maps in litigation, then as part of the redistricting process, they may analyze the existing evidence about the accuracy of the census and attempt to draw maps with minimal chances of turning out to breach the ten-percent threshold once more is known about the census's flaws. In pursuit of this goal, governments might seek to adopt plans with census-measured population deviations as close to zero as possible, or they might err slightly on the side of underpopulating districts where the census is expected to produce an undercount.[89]

---

88. Karcher v. Daggett, 462 U.S. 725, 740 (1983).

89. *Cf.* Chen v. City of Houston, 206 F.3d 502, 523 n.15 (5th Cir. 2000) (noting that Houston, believing the adjusted 2000 Census data might later be released, deliberately underpopulated "predominantly minority districts . . . to prevent them from later being viewed as oversized"); Barnett v. City of Chi., 969 F. Supp. 1359, 1373 (N.D. Ill. 1997) ("[T]he drawers of the ward map can adjust for a perceived undercount by 'underpopulating' areas where an undercount occurred and 'overpopulating' other areas"), *rev'd in part on other grounds*, 141 F.3d 699 (7th Cir. 1998).

B. Proving Census Inaccuracy and Bias at Trial

Suppose the West Dakota court denies the motion to dismiss and sets the case for trial. The plaintiff now must prove her allegations about the inaccuracy and bias of the census data. At first blush, this may seem like an unmanageable challenge without an adjusted census. To be sure, adjusted census figures would be highly useful in proving hidden malapportionment. But they are not strictly necessary. Plaintiffs (and their expert witnesses) could draw on at least three existing types of evidence in a viable effort to prove that a map's true maximum population deviation—though impossible to pinpoint—exceeds ten percent. It is impossible to determine in the abstract whether any one of these sources of evidence will be sufficient on its own to make the necessary showing. Ideally, plaintiffs would be prepared to use *all* these sources to make the strongest supportable case.

First, plaintiffs could draw on evidence from the Census Bureau's Post-Enumeration Survey, which uses dual-system estimation to evaluate the accuracy of the decennial census.[90] Following the 2010 Census, the Bureau published several reports that evaluated the census using dual-system estimation.[91] Together, these reports did not amount to an adjusted census but did provide a rich array of data about the overall and distributive accuracy of the 2010 Census. In addition to estimating the accuracy of the census counts for the whole U.S. population[92] and for each state,[93] the Bureau provided coverage estimates broken down by race,[94] Hispanic origin,[95] tenure (i.e., home renters versus owners),[96] age

---

90. U.S. Census Bureau, *2020 Census Detailed Operational Plan for Post-Enumeration Survey (PES) Operations*, U.S. DEP'T COM. 4 (Apr. 16, 2020), https://www2.census.gov/programs-surveys /decennial/2020/program-management/planning-docs/PES-detailed-operational-plan.pdf [https://perma.cc/U8MC-5TCY].

91. *See, e.g.*, U.S. Census Bureau, *2010 Census Coverage Measurement Estimation Report: Components of Census Coverage for the Household Population in the United States*, U.S. DEPT. COM. (May 22, 2012) [hereinafter *Census Bureau Components*], https://www2.census.gov/programs -surveys/decennial/2010/technical-documentation/methodology/g-series/g04.pdf [https:// perma.cc/45T4-9U24]; U.S. Census Bureau, *2010 Census Coverage Measurement Estimation Report: Summary of Estimates of Coverage for Persons in the United States*, U.S. DEP'T. COM. 1-2, 18 (May 22, 2012) [hereinafter *Census Bureau Summary*], https://www2.census.gov/programs -surveys/decennial/2010/technical-documentation/methodology/g-series/g01.pdf [https:// perma.cc/R27S-KU3U].

92. *Census Bureau Summary*, *supra* note 91, at 1.

93. *Id.* at 21-22.

94. *Id.* at 15.

95. *Id.* at 15.

96. *Id.* at 17-18.

group,[97] and sex,[98] among other characteristics. The Bureau also published local estimates of coverage for many counties and cities.[99] All of these statistics could help prove that the census understates a redistricting plan's maximum population deviation. For example, evidence that the Black population is significantly undercounted could suggest an undercount in a district where the population is mostly Black. Place-specific coverage estimates for a city contained within a district could be even more probative.

Second, data from the Census Bureau's Population Estimates Program could provide a rough benchmark for the true populations of certain substate geographic units, helping to identify probable local undercounts in the 2020 Census. The Census Bureau publishes annual population estimates for the nation as a whole and for states, counties, cities, and towns, among other geographic units.[100] To simplify greatly, the Bureau produces these estimates by using data about births, deaths, and migration since the last census.[101] Based on the Bureau's own assessment, these estimates are quite accurate, at least down to the county level.[102] If a city, town, or county's 2020 Census count is substantially lower than its contemporaneous population estimate, that discrepancy would provide some evidence of a local undercount.

Third, plaintiffs could appropriately offer qualitative or narrative evidence of methodological flaws and biases in the process of collecting and processing the census data. The recent litigation over the proposed citizenship question illustrates the utility of this type of evidence. Although the winning claim was brought under the Administrative Procedure Act,[103] part of the plaintiffs' successful theory of standing was that the citizenship question would lead to malapportionment by causing a disproportionate undercount.[104]

---

97. *Id.* at 19.

98. *Id.*

99. *See, e.g.*, *Census Bureau Components*, *supra* note 91; *Census Bureau Summary*, *supra* note 91, at 1-2, 18. The Bureau did not measure coverage at these local levels directly, but derived these substate estimates by creating logistic regression models, accounting for multiple variables (including, for example, race and Hispanic origin) that correlated with undercoverage or overcoverage on a nationwide basis. *Id.* at 6.

100. *See Population and Housing Unit Estimates*, U.S. CENSUS BUREAU, https://www.census.gov /programs-surveys/popest.html [https://perma.cc/APY8-F3ZB].

101. *Methodology for the United States Population Estimates: Vintage 2019*, U.S. CENSUS BUREAU 1-2 (Mar. 2020), https://www2.census.gov/programs-surveys/popest/technical-documentation /methodology/2010-2019/natstcopr-methv2.pdf [https://perma.cc/8Z5H-PTGJ].

102. *Id.* at 2.

103. Dep't of Commerce v. New York, 139 S. Ct. 2551, 2574-75 (2019).

104. *Id.* at 2565; New York v. U.S. Dep't of Commerce, 351 F.Supp.3d 502, 593-94 (S.D.N.Y. 2019), *rev'd in part*, 139 S. Ct. 2551 (2019).

At trial, plaintiffs challenging the citizenship question put on extensive evidence that adding the question to the census would disproportionately cause Hispanic households and households including non-U.S. citizens not to self-respond to the census; that the Census Bureau would not be able to make up for this disproportionate drop in self-response by following up in person with non-responding households; that Hispanics and individuals living in households including non-U.S. citizens would therefore be disproportionately undercounted; and that this differential undercount would lead to vote dilution in redistricting.[105] In issuing the first injunction against the citizenship question, the Southern District of New York credited this evidence, concluding that "the addition of a citizenship question will cause an incremental differential net undercount of people who live in noncitizen households of approximately 5.8%, and likely more," that "the citizenship question will cause a nonzero net undercount of Hispanics,"[106] and that these predicted differential undercounts would dilute the power of certain cities and counties in redistricting.[107] In partially affirming the district court, the Supreme Court left these findings of fact undisturbed.[108] The success of the plaintiffs' litigation strategy demonstrates that, even where it is not possible to pinpoint the extent of divergence between "correct" and "incorrect" population data, it is still possible to tell a story, supported with evidence, about how flawed census methods will predictably lead to differential undercounts in specific geographic areas.

Together, these three sources of evidence will often provide an extensive record to support allegations of census inaccuracy. Especially if multiple sources of competent evidence point strongly in the same direction, a court should be willing to conclude that the real maximum population deviation is higher than what the census shows. In a case like the West Dakota hypothetical, where the facial maximum population deviation is already close to ten percent, the plaintiffs would have a realistic chance to shift the burden of justification to the government.

III. DATA BIAS AS A SPECIAL VULNERABILITY FOR CVAP-BASED MAPS

So far, this Essay has focused on redistricting based on the Census Bureau's core redistricting data, which purport to measure total population. However, total-population data may not be the only redistricting population base used in the

---

105. *See* 351 F. Supp. 3d at 578-96.

106. *Id.* at 592.

107. *Id.* at 595.

108. 139 S. Ct. at 2565.

redistricting cycle following the 2020 Census. Some state and local governments may instead try to redistrict their legislatures based on the Census Bureau's forthcoming statistics on citizen voting-age population, which will seek to estimate the number of U.S. citizens over age eighteen living on each census block.[109]

A. The Legal Backdrop for CVAP-Based Redistricting

As discussed above, the overwhelmingly prevalent practice is for state and local governments to draw districts based on total-population data from the census, although some states make minor adjustments to these census data before redistricting.[110] The most notable historical exception to total-population-based redistricting was Hawaii, which used its registered-voter rolls as a redistricting population base until the 1980s.[111] The Supreme Court upheld this practice in 1966 because, at the time, Hawaii had "special population problems"—that is, large numbers of tourists and transient military personnel.[112] However, subsequent case law makes clear that the Constitution provides no blanket license for registered-voter-based redistricting,[113] and that the Supreme Court has at least a normative preference for total-population-based maps.[114]

CVAP-based redistricting would be a new innovation, and there is currently an active debate about its constitutionality.[115] The Supreme Court in *Evenwel v. Abbott* expressly reserved the question of whether "States may draw districts to equalize voter-eligible population rather than total population."[116] This issue could be parsed into several more precise questions, one of which would be: is it presumptively unconstitutional for a state or local legislature to adopt a redistricting plan where the maximum total population deviation exceeds ten percent, *even if* the maximum CVAP deviation falls below ten percent?

To be clear, the best answer to this question is "yes." Total-population-based redistricting is a deeply rooted constitutional tradition that "promotes equitable and effective representation" by providing a limited but meaningful measure of

---

109. *See* Levitt, *supra* note 73, at 1394 (identifying Nebraska, Missouri, and Texas as among the states that have displayed interest in Citizen Voting Age Population by Race and Ethnicity-based redistricting).

110. *See* sources cited *supra* note 26.

111. *See* Travis v. King, 552 F. Supp. 554, 557 (D. Haw. 1982).

112. Burns v. Richardson, 384 U.S. 73, 94 (1966).

113. *Travis*, 552 F. Supp. at 568.

114. *See* Evenwel v. Abbott, 136 S. Ct. 1120, 1132 (2016).

115. *See* Levitt, *supra* note 73, at 1394.

116. 136 S. Ct. at 1133.

representation to children, non-U.S. citizens, and other nonvoters who hold "an important stake in many policy debates."[117] However, there is no guarantee that the Supreme Court will ultimately prohibit the use of CVAP as a population base. It is therefore worth considering other litigation strategies that could be used to challenge specific CVAP-based maps without insisting on a per se constitutional rule against the practice.

The legal principles already advanced in this Essay apply to CVAP-based redistricting just as they apply to total-population-based redistricting. As argued above, plaintiffs challenging a total-population-based map should be allowed to rely on evidence that the Census Bureau's total-population data are inaccurate and biased, making the map's real total-population deviation larger than it appears.[118] By the same token, a court hearing a malapportionment challenge to a CVAP-based map should consider evidence that the map's real maximum CVAP deviation is larger than apparent from the Census Bureau's published estimates. It would be perverse if the law exposed the Census Bureau's traditional redistricting data, which have earned recognition over the decades as "the 'best population data available,'"[119] to greater scrutiny than the Bureau's new CVAP estimates, which have no such pedigree.

B. Flawed Methods Foreshadow Inaccurate CVAP Statistics

As a factual matter, CVAP-based maps drawn after the 2020 Census will probably be *especially* vulnerable to challenge based on inaccuracies in the underlying data. This is because the Census Bureau's CVAP estimates are likely to suffer from inaccuracy and bias well beyond the problems inherent in the Bureau's total-population data.

Some background may help to explain the anticipated quality issues with the Bureau's 2020 CVAP data. The Census Bureau's Public Law 94-171 redistricting data file, which tabulates population information down to the census-block level, does not contain citizenship information.[120] In recent decades, the Bureau has produced estimates of CVAP based on survey responses from a sample of

---

117. *Id.* at 1132.

118. *See supra* Part II.

119. Karcher v. Daggett, 462 U.S. 725, 738 (1983) (quoting Kirkpatrick v. Preisler, 394 U.S. 526, 528 (1969)).

120. *See 2020 Census Prototype Redistricting Data (Public Law 94-171) Summary File from the 2018 End-to-End Census Test*, U.S. CENSUS BUREAU, https://www2.census.gov/programs-surveys /decennial/rdo/about/2020-census-program/Phase3/Phase3_prototype_schematic_final .pdf [https://perma.cc/647Z-NHGS].

U.S. households, but these CVAP estimates are tabulated only at levels of geography larger than census blocks.[121] This lack of granularity is one reason the Census Bureau's CVAP data has historically been seen as unsuitable for redistricting.[122]

The Trump Administration has been planning for several years to produce more granular CVAP data. Secretary of Commerce Wilbur Ross, who oversees the Census Bureau, initially sought to collect citizenship data directly from all U.S. households by adding a citizenship question to the 2020 Census form. However, the Supreme Court blocked the Secretary from adding the citizenship question on Administrative Procedure Act grounds in June 2019.[123] In response, President Trump issued an executive order, directing the Commerce Department to produce citizenship data by using federal and state government records as a substitute for the information the citizenship question would have elicited.[124] Around the same time as the President's executive order, Secretary Ross directed the Census Bureau to "produce [CVAP] information prior to April 1, 2021 that states may use in redistricting."[125]

Following these instructions, the Census Bureau now plans to produce CVAP estimates at the block level after the 2020 Census.[126] To accomplish this, the Bureau is gathering administrative records that contain information on individuals' citizenship status, including driver-license records from state agencies.[127] As of May 2020, the Bureau said it also planned to use citizenship data

---

121. *Post-2020 Census Citizen Voting Age Population by Race and Ethnicity (CVAP) Special Tabulation*, U.S. CENSUS BUREAU 1, https://www2.census.gov/programs-surveys/decennial/rdo /technical-documentation/special-tabulation/CVAP_Post2020_Census_documentation _v5.pdf [https://perma.cc/QL2Z-6TA8] [hereinafter *Post-2020 Census Citizen Voting Age Population*].

122. *See* Levitt, *supra* note 73, at 1394.

123. Dep't of Commerce v. New York, 139 S. Ct. 2551, 2575-76 (2019).

124. Exec. Order No. 13880, 84 Fed. Reg. 33,821, 33,824-25 (July 11, 2019).

125. *Paperwork Reduction Act Program, Information Collection Request 2020 Census - Enumeration Operations 18, OMB Control No. 0607-1006*, U.S. DEP'T COM. (2019), https://www .documentcloud.org/documents/6192581-2020-CensusSupporting-Statement-ARevised -July.html#document/p18/a512146 [https://perma.cc/C9EJ-PBC6].

126. *Post-2020 Census Citizen Voting Age Population*, *supra* note 121, at 2.

127. *See* Mike Schneider, *Census Confirms Drivers' Records Request Tied to Citizenship*, ASSOCIATED PRESS (Oct. 16, 2019), https://apnews.com/584d26aa91fc4004ad147d0a3ba2231e [https:// perma.cc/2JN2-2Q79].

from at least eleven other federal agencies—including the Internal Revenue Service, the Department of Homeland Security, the Social Security Administration, and the Department of State—in the process of compiling CVAP data.[128]

To its credit, the Bureau has been candid about its inability to match each U.S. resident with a reliable record of her current citizenship status. The Bureau aims only to calculate a "citizenship probability" for every person counted in the 2020 Census, knowing that for many individuals, the probability of U.S. citizenship will be nowhere near zero or 100 percent.[129] Under what appears to be the Bureau's current plan, the Bureau will attempt to attach a Protected Identification Key (PIK) to each person recorded in the 2020 Census by matching those census records with "reference files" of federal administrative data.[130] If—and only if—the Bureau is able to assign a PIK to an individual, it will link that individual's census record to state and federal administrative records that appear to relate to the same person. Following this linkage, the Bureau will mathematically model the person's citizenship probability, taking into account "the most current citizenship status from each available citizenship source for the person, as well as the person's other demographic, household, and location information as explanatory variables."[131]

Meanwhile, the Bureau admits it will fail to assign PIKs to some U.S. residents who are counted in the 2020 Census.[132] In those cases, "the person's citizenship probability will be estimated without the benefit of information about his/her citizenship status," instead with "local area information and the person's demographic characteristics" as rough predictors of citizenship status.[133] Once the Bureau has settled on a citizenship probability for each person in the 2020 Census, those probabilities will "be combined with age, race, ethnicity, and location information from the 2020 Census to produce the [CVAP] statistics."[134]

This plan is a recipe for unreliable CVAP data. Almost inevitably, the Census Bureau will impute the wrong citizenship status to so many individuals that its

---

128. *Intended Administrative Data Use in the 2020 Census*, U.S. CENSUS BUREAU (May 1, 2020), https://www2.census.gov/programs-surveys/decennial/2020/program-management /planning-docs/administrative-data-use-2020-census.pdf [https://perma.cc/J88Z-UVDU].

129. *See Memorandum of Understanding Through Which the U.S. Census Bureau Is Acquiring Administrative Data from the South Carolina Department of Motor Vehicles*, U.S. CENSUS BUREAU 12 [hereinafter *Memorandum of Understanding*], https://assets.documentcloud.org/documents /6989194/July-2-2020-Memorandum-of-Understanding-Between.pdf [https://perma.cc /ADR6-RJYG].

130. *Id.*

131. *Id.*

132. *Id.*

133. *Id.*

134. *Id.*

block-level CVAP figures will be less accurate than its block-level total-population counts. For individuals who are assigned PIKs, the Bureau will make an educated guess based on administrative data linked to the individual. As the Bureau recognizes, "no one source [of citizenship data] is complete and up-to-date."[135] Moreover, at least some of the administrative records the Bureau plans to rely on are of low quality. In particular, state driver-license records have been shown to be unreliable sources of up-to-date citizenship data, because they are not routinely updated to reflect naturalizations of people who were non-U.S. citizens when they applied for a license.[136]

The likelihood of error will be even greater for individuals without PIKs.[137] The Bureau assumes that some significant proportion of individuals without PIKs are undocumented non-U.S. citizens, but admits that any attempt to determine how much of the non-PIK-assigned population fits this description will be "inherently inexact."[138]

Importantly, the problem of U.S. citizens being erroneously treated as likely non-U.S. citizens will fall unequally on different census blocks. One reason for this predictable disparate impact is that foreign-born residents are unevenly distributed throughout the nation.[139] Blocks with higher concentrations of foreign-born residents will tend to have more U.S. citizens who are vulnerable to being mischaracterized as likely non-U.S. citizens based on outdated administrative records. As experience with driver-license records illustrates, administrative records on citizenship can easily be biased in the direction of recording too few U.S. citizens, because records may not be immediately updated to reflect naturalizations. Indeed, a significant number of naturalized U.S. citizens do not have their current citizenship reflected in the Social Security Administration records that form the core of the Census Bureau's reference files.[140] Adding naturalization

---

135. *Id.*

136. *See* Tex. League of United Latin Am. Citizens v. Whitley, No. SA-19-CA-074-FB, 2019 WL 7938511, at *1 (W.D. Tex. Feb. 27, 2019); United States v. Florida, 870 F. Supp. 2d 1346, 1347-48 (N.D. Fla. 2012).

137. *Memorandum of Understanding*, *supra* note 129, at 12 (admitting that the Bureau's methodology will be "much less accurate" for individuals who are not assigned Protected Identification Keys).

138. J. David Brown, Misty L. Heggeness, Suzanne M. Dorinski, Lawrence Warren & Moises Yi, *Understanding the Quality of Alternative Citizenship Data Sources for the 2020 Census*, U.S. CENSUS BUREAU 19-20 (Aug. 2018), https://www2.census.gov/ces/wp/2018/CES-WP-18-38.pdf [https://perma.cc/B7J2-U7JM].

139. Jynnah Radford, *Key Findings About U.S. Immigrants*, PEW RES. CTR. (June 17, 2019), https://www.pewresearch.org/fact-tank/2019/06/17/key-findings-about-u-s-immigrants [https://perma.cc/76MC-XF2V].

140. *Privacy Impact Statement for the Department of Homeland Security (DHS) Immigration-Related Data Sharing with U.S. Census Bureau, DHS/ALL/PIA-079*, U.S. DEP'T HOMELAND SEC. 11-12

records from DHS is only a partial solution to the problem of outdated citizenship records, as those naturalization records are incomplete.[141]

Some of the Census Bureau's plans regarding CVAP estimation may change over the coming months. But insofar as these basic plans (or similarly unsatisfactory ones) remain in place, the Census Bureau's CVAP estimates will likely suffer from a differential undercount of adult U.S. citizens living in certain geographic areas. Plaintiffs' attorneys and expert witnesses in malapportionment litigation against CVAP-based maps should not hesitate to point out the biases in the Census Bureau's estimation methods.

CONCLUSION

The doctrinal ground staked out in this Essay is narrow. I have argued that courts in state and local legislative malapportionment cases should be willing to consider evidence that the published Census Bureau data underlying the map are inaccurate and biased. When this evidence is sufficiently strong, the court should be willing to find a prima facie constitutional violation, even though the published data in isolation would suggest that the population deviations are small enough to be presumptively constitutional. Then, if the government fails to justify its redistricting choices by linking them to a rational and nondiscriminatory policy, the court should invalidate the map. The government would then have a chance to draw a new map with better population equality, taking into account the court's findings of fact about the shortcomings of the census data.

It is difficult to predict just how frequently evidence of census inaccuracy would affect the outcome of malapportionment cases. Nevertheless, our democracy would benefit from having a clearly established doctrine that treats the census as rebuttable evidence of population for redistricting purposes. As the citizenship-question debacle, COVID-19's impact, and the President's recent effort to exclude undocumented immigrants from congressional reapportionment have demonstrated, the census's integrity cannot be guaranteed. That the Census Bureau has produced relatively reliable data in the past does not mean that it will always do so in the future. Especially when the Census Bureau experiments with

(Dec. 20, 2019), https://www.documentcloud.org/documents/6596155-PrivacyImpact -Assessment-for-the-Department-of.html [https://perma.cc/Y3JX-SP82] ("The SSA Numident contains citizenship status for most of the population but the information is not always up to date for foreign-born persons. Prior to the 1970s people were not required to provide evidence of citizenship status when applying for an SSN. Thus, the citizenship status is blank for many older people in the Numident.").

141. *See id.* at 12 ("Individuals who derive citizenship when their parent(s) naturalize also may choose to not obtain a citizenship certificate from [U.S. Citizenship and Immigration Services] but rather apply for an SSN or a passport to establish proof of citizenship.").

novel methods to produce new types of data such as block-level CVAP, there is every reason to suspect that the results will include significant errors.

The fiction that Census Bureau data are perfectly accurate may make redistricting cases easier to adjudicate, but this convenience cannot outweigh the constitutional right to undiluted legislative representation. Communities deserve to know that the Constitution protects them from being disenfranchised by the combined effect of a disproportionate census undercount and a redistricting plan drawn without due regard for the importance of equally populous districts.