

**UNITED STATES DISTRICT COURT FOR THE
MIDDLE DISTRICT OF ALABAMA
EASTERN DIVISION**

2021 MAR 11 P 4:51
THE STATE OF ALABAMA; ROBERT ADERHOLT, Representative for Alabama's 4th Congressional District, in his official and individual capacities; WILLIAM GREEN and CAMARAN WILLIAMS,

Plaintiffs,

v.

UNITED STATES DEPARTMENT OF COMMERCE; GINA RAIMONDO, in her official capacity as Secretary of Commerce; UNITED STATES BUREAU OF THE CENSUS, an agency within the United States Department of Commerce; and RON JARMIN, in his official capacity as Acting Director of the U.S. Census Bureau,

Defendants.

CIVIL ACTION NO. 3:21-CV-211

**THREE-JUDGE COURT REQUESTED
PURSUANT TO 28 U.S.C. § 2284**

**PLAINTIFFS' MOTION FOR A PRELIMINARY INJUNCTION, PETITION FOR A
WRIT OF MANDAMUS, AND MEMORANDUM IN SUPPORT**

Plaintiffs hereby move under Federal Rule of Civil Procedure 65 for an order preliminarily enjoining the defendants from both implementing differential privacy and enforcing the "February 12 Decision" to delay the provision of redistricting data. Plaintiffs additionally, and in the alternative, petition under 28 U.S.C. § 1361 for a writ of mandamus ordering the Secretary to comply with her statutory obligation to provide redistricting data under 13 U.S.C. § 141(c) by March 31, 2021. Plaintiffs offer the memorandum incorporated below in support of their motion and petition.

Because of the impending statutory deadline, Plaintiffs request the Court set a briefing and hearing schedule and propose the following schedule: Defendants' Response due by March 23, 2021; Plaintiffs' Reply by March 26, 2021; and a hearing on this motion on March 29, 2021.

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<i>Cheney v. U.S. Dist. Ct.</i> , 542 U.S. 367 (2004).....	58
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<i>Fed. Election Comm'n v. Democratic Senatorial Campaign Comm.</i> , 454 U.S. 27 (1981).....	40
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<i>Kirkpatrick v. Preisler</i> , 394 U.S. 526 (1969).....	33
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<i>Maryland v. King</i> , 133 S. Ct. 1 (2012).....	55
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<i>United States v. Schmidt</i> , 675 F.3d 1164 (8th Cir. 2012)	38
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U.S. Const. art. I, § 4, cl.1	6
U.S. Const., art. I, § 7	46
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13 U.S.C. § 9	9, 41, 42, 43
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28 U.S.C. § 2201(a)	26
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--	--------

Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act of 1998, Pub. L. No. 105-119, § 209, 111 Stat. 2440 (codified at 13 U.S.C. § 141 note)	passim
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Other Authorities

Albert E. Fontenot, 2020 Census Update, Presentation to the Census Scientific Advisory Committee March 18, 2021, https://perma.cc/A4UM-FHCU	47
Amy Lauger et al., U.S. Census Bureau, <i>Disclosure Avoidance Techniques at the U.S. Census Bureau: Current Practices and Research 2</i> (Sept. 26, 2014), https://perma.cc/2UXQ-SAFL	10
Andrew Reamer, <i>Counting for Dollars 2020: The Role of the Decennial Census in the Geographic Distribution of Federal Funds</i> , Brief 7: Comprehensive Accounting of Census- Guided Federal Spending: Part A: Nationwide Analysis (FY2017), https://perma.cc/WQT9-DBYQ	52
Andrew Reamer, <i>Counting for Dollars 2020</i> , Brief 7: Comprehensive Accounting of Census- Guided Federal Spending: Part B: State Estimates (FY2017), https://perma.cc/8PWU-TM57	52
Antonin Scalia & Bryan A. Garner, <i>Reading Law: The Interpretation of Legal Texts</i> (2012)	38
Census Bureau Statement on Redistricting Data Timeline, U.S. Census Bureau (Feb. 12, 2021), https://perma.cc/A2SZ-7L5Q	25
Census Data Snafu Upends 2022 Elections, Politico (Mar. 1, 2021), https://perma.cc/DZ5N-275Y	7
Cynthia Dwork, <i>Differential Privacy: A Cryptographic Approach to Private Data Analysis</i> , in <i>Privacy, Big Data and the Public Good</i> (Julia Lane et al., eds., 2014)	13
Harvard University Privacy Tools Project, <i>Differential Privacy</i> , https://perma.cc/T7NJ-N397 (last visited Mar. 2, 2021)	13
JASON, <i>Formal Privacy Methods for the 2020 Census</i> (Apr. 2020), https://perma.cc/G8ZM-YNN6	29
Jeff Zalesin, <i>Beyond the Adjustment Wars: Dealing With Uncertainty and Bias in Redistricting Data</i> , 130 Yale L.J. Forum 186, 187-89 (2020)	51
John M. Abowd, U.S. Census Bureau, Presentation to the 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, <i>The U.S. Census Bureau Adopts Differential Privacy</i> (Aug. 23, 2018), https://perma.cc/USZ6-ZPLC	12

John M. Abowd, U.S. Census Bureau, Presentation to the Am. Ass'n for the Advancement of Science, <i>Staring Down the Database Reconstruction Theorem</i> (Feb. 16, 2019), https://perma.cc/P3YV-FXPG	16
Laura McKenna, U.S. Census Bureau, <i>Research & Methodology Directorate: Disclosure Avoidance Techniques Used for the 1960 Through 2010 Decennial Census of Population and Housing Public Use Microdata Samples</i> (Apr. 2019), https://perma.cc/9LBN-5BWV	9, 10, 11
Laura Zayatz et al., U.S. Census Bureau, <i>Disclosure Avoidance for Census 2010 and American Community Survey Five-year Tabular Data Products</i> (Nov. 23, 2009), https://perma.cc/GF4V-QTVA	11
Letter from JASON to U.S. Census Bureau at 5, fig. 1 (Feb. 8, 2021), https://perma.cc/D3RF-TEBA	48
Merriam-Webster's Collegiate Dictionary (10th ed. 1993)	30
Michael B. Hawes, U.S. Census Bureau, <i>Implementing Differential Privacy: Seven Lessons From the 2020 United States Census</i> , Harvard Data Science Review (Apr. 30, 2020), https://perma.cc/DB66-9B5R	18
Michael Hawes, U.S. Census Bureau, <i>Title 13, Differential Privacy, and the 2020 Decennial Census 22</i> (Nov. 13, 2019), https://perma.cc/MRQ2-67WG	13, 16, 17
Mike Mohrman, Letter to Steve Dillingham, Director, U.S. Census Bureau (Feb. 6, 2020), https://perma.cc/MC3G-62PT	21
Mike Mohrman, <i>The Challenge of Differential Privacy: Confidentiality vs. Usability</i> (Sept. 15, 2020), https://perma.cc/4FA7-G4EF	20
Nat'l Conf. of State Legislatures, <i>Differential Privacy for Census Data Explained</i> (Feb. 1, 2021), https://perma.cc/DA93-36GA	10, 15
Nat'l Redistricting Foundation, Letter to Steven Dillingham, Director, U.S. Census Bureau (Apr. 24, 2020), https://perma.cc/3QK8-65VN	21
<i>Press Release: Census Bureau Statement on Redistricting Data Timeline</i> , U.S. Census Bureau (Feb. 12, 2021), https://perma.cc/TY9T-UNDM	24
<i>Random House College Dictionary 1337</i> (revised ed. 1975)	29
Simson L. Garfinkel, John M. Abowd, & Sarah Powazek, <i>Issues Encountered Deploying Differential Privacy 3</i> (Sept. 6, 2018), https://perma.cc/7TZQ-AFTD	14, 17

Simson L. Garfinkel, U.S. Census Bureau, <i>Modernizing Disclosure Avoidance: Report on the 2020 Disclosure Avoidance Subsystem as Implemented for the 2018 End-to-End Test</i> (Sept. 15, 2017), https://perma.cc/4J8B-ZEXM	12
Steven Ruggles et al., <i>Differential Privacy and Census Data: Implications for Social and Economic Research</i> , 109 AEA Papers and Proceedings (May 2019), https://perma.cc/GW29-GNAV	12, 16, 17, 43
U.S. Census Bureau, 2010 Demonstration Data Products (rev. Apr. 16, 2020), https://perma.cc/KK5M-KLRL	18
U.S. Census Bureau, <i>2020 Census Operational Plan: A New Design for the 21st Century—Version 4.0</i> (Dec. 2018)	13, 39
U.S. Census Bureau, <i>2020 Census Response Rate Update: 99.98% Complete Nationwide</i> (Oct. 19, 2020), https://perma.cc/MFE3-8PDP	48
U.S. Census Bureau, <i>2020 Census State Redistricting Data (Public Law 94-171) Summary File 7-3</i> (Feb. 2021), https://perma.cc/9HWC-492T	15
U.S. Census Bureau, <i>2020 Disclosure Avoidance System Updates</i> (Feb. 23, 2021), https://perma.cc/D6VJ-N5Z3	14, 18, 35, 49
U.S. Census Bureau, <i>2020: Census: Our Mission to Count Everyone</i> (Dec. 2020), https://perma.cc/43R7-LNAL	1
U.S. Census Bureau, <i>Adapting Field Operations To Meet Unprecedented Challenges</i> (Mar. 1, 2021), https://perma.cc/AU4S-9GXC	48
U.S. Census Bureau, <i>Census Data Processing 101</i> (Feb. 11, 2020), https://perma.cc/E8JK-4S9V	48
U.S. Census Bureau, <i>U.S. Department of Commerce Secretary Wilbur Ross and U.S. Census Bureau Director Steven Dillingham Statement on 2020 Census Operational Adjustments Due to COVID-19</i> (Apr. 13, 2020), https://perma.cc/C2RG-UXBX	45

INTRODUCTION

This case is about (1) the Census Bureau’s unprecedented decision to report skewed, inaccurate redistricting data to the States in place of the tabulations of population the Bureau is required by statute to provide, and (2) the Bureau’s decision to ignore its statutory deadline for reporting redistricting data.

Every ten years, the Census Bureau conducts the monumental task of “counting the whole number of persons in each State.” U.S. Const. amend. XIV, § 2. The decennial census’s importance is hard to overstate, as the tabulations of population the Bureau produces to the President and the States will shift political power between the States and within them, and will direct the flow of billions of dollars in federal and state funding. Thus, the Bureau’s mission is “to count everyone once, only once, and in the right place.”¹ And then the Bureau must report to States detailed “[t]abulations of population” at the sub-state level so States can draw new congressional, legislative, and other representative districts. 13 U.S.C. § 141(c). But with this census, for the first time ever, rather than provide States the actual results of the count, the Bureau intends to provide numbers produced by a still developing confidential algorithm. And in addition to abandoning its duty to provide true population data to the States, the Bureau has refused to produce redistricting data on time. Both decisions violate the law, harming Alabama and its residents. And both decisions should be immediately enjoined. *See* Complaint, Doc. 1.

First, the manipulated numbers. Congress has ordered the Secretary of Commerce to report to each State accurate “[t]abulations of population” for subparts of each State for use in “legislative apportionment or districting of such State.” 13 U.S.C. § 141(c). But the Secretary of Commerce, through the Census Bureau, has announced that she will instead provide the States purposefully

¹ *See* U.S. Census Bureau, 2020: *Census: Our Mission to Count Everyone* (Dec. 2020), <https://perma.cc/43R7-LNAL>.

flawed population tabulations. The Bureau intends to use a statistical method called differential privacy to intentionally skew the population tabulations given to States to use for redistricting. Thus, the Bureau might “count everyone once,” and “only once,” but it won’t count them “in the right place.”² In fact, the *only* counts that will be unaltered by differential privacy will be the total population of each State, the total housing units at the census block level, and the number of group quarters facilities by type at the census block level. *All other tabulations*—including how many people live in a census block, town, or county—will be intentionally scrambled, denying Alabama accurate information about where Alabamians actually live.

Without relief from this Court, Plaintiffs will be irreparably harmed by this decision. It will violate Alabama’s right to receive lawfully composed population tabulations at the sub-state level, harm the State’s sovereign interest in drawing districts that provide its citizens fair representation, and increase the chance that Alabama will face litigation over its redistricting decisions. Relatedly, Representative Robert Aderholt, William Green, Camaran Williams, and others across the State will face a substantial risk that their voting power will be diluted when the Bureau purposefully misreports the number of people living in different areas of the State. That is why Congress has determined that the unlawful use of statistical methods to formulate redistricting data harms congressional representatives and the people whose representation could be affected. *See* Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act of 1998, Pub. L. No. 105-119, § 209(d), 111 Stat. 2440 (codified at 13 U.S.C. § 141 note).

Second, the unlawful delay. Not only does the Bureau intend to produce false redistricting numbers; it intends to produce numbers half a year behind schedule. Congress required the Bureau to engage in a five-year collaborative process with the States to ensure delivery of redistricting

² *See id.*

data by no later than March 31, 2021. *See* 13 U.S.C. § 141(c). Alabama upheld its end of the deal, but the Bureau has unilaterally decided that it will instead submit data to the States by September 30, 2021. The Bureau has no authority to grant itself this extension and deprive Alabama of information to which it is entitled. That is especially so because the Bureau's delay imposes substantial costs on Alabama as the State seeks to meet its constitutional obligations and run its 2022 statewide elections effectively and in accordance with State law.

Plaintiffs thus respectfully move this Court for a preliminary injunction under Federal Rule of Civil Procedure 65. They ask the Court to (1) enjoin Defendants from using differential privacy in connection with the 2020 census, and (2) enjoin Defendants from delaying the release of the redistricting data to the States. In the alternative, Plaintiffs petition the Court for a writ of mandamus under 28 U.S.C. § 1361 requiring Defendants to meet the statutory March 31 deadline for releasing the redistricting data.

Relief is necessary *now*. As Congress has recognized, "the decennial enumeration of the population is a complex and vast undertaking, and if such enumeration is conducted in a manner that does not comply with the requirements of the Constitution or laws of the United States, it would be impracticable for the States to obtain, and the courts of the United States to provide, meaningful relief after such enumeration has been conducted." Pub. L. No. 105-119, § 209(a)(8). That is particularly true here. Depending on how differential privacy is implemented, the Census Bureau may argue that it will be impossible to unscramble the egg by ever delivering the accurate numbers without creating significant privacy risks from the release of two datasets. In that case, absent immediate action by this Court, the true population tabulations will never be known. On the other hand, even if corrected tabulations could one day be released, publishing the faulty numbers first will irreparably harm Plaintiffs. States like Alabama are already facing a time-crunch in

their redistricting schedules due to Defendants' delay. Redistricting will thus begin as soon as the Bureau delivers the population tabulations. If the Bureau then releases a second set of tabulations, States will be forced to scrap their redistricting plans and begin the process anew—or face a barrage of lawsuits for relying on the flawed tabulations. Either way, injunctive relief from this Court is needed to prevent these harms.

BACKGROUND

A. Congress Requires Defendants to Provide “Tabulations of Population” for States to Use for Redistricting.

Under the Constitution, representation in the House of Representatives is “apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed.” U.S. Const. amend XIV, § 2. There are two main components of this apportionment. The first is the division of congressional seats among the 50 States. The second is the redistricting process within each State that follows that division. *See Dep’t of Commerce v. U.S. House of Representatives*, 525 U.S. 316, 328-34 (1999) (discussing the “purposes” of apportionment).

To determine the “whole number of persons in each State,” an “actual Enumeration”—the decennial census—is required every ten years, “in such Manner as [Congress] shall by Law direct.” U.S. Const. art I, § 2, cl. 3. Congress enacted the Census Act to direct the “Manner” in which the decennial census occurs. *See generally* 13 U.S.C. § 1 *et seq.* Under the Act, the Secretary of Commerce, who oversees the U.S. Census Bureau, is required to, “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.” 13 U.S.C. § 141(a).

Following the census, the Secretary has two primary sets of population numbers she must report. The first is “[t]he tabulation of total population by States” that is used for “the apportionment of Representatives in Congress among the several States.” *Id.* § 141(b). The Secretary must send that tabulation to the President within 9 months of the census date. *Id.* The second is the “[t]abulations of population” for specific areas within the States for the States to use for redistricting. *Id.* § 141(c). The Secretary must send those tabulations to the States within “one year after the decennial census date.” *Id.* Both sets of numbers must be accurate so they can be used for the purposes Congress intended—apportionment and redistricting.

This lawsuit primarily concerns the second set of numbers—the tabulations of population provided to the States for redistricting. Congress created a multi-year process for the Census Bureau and the States to work together to ensure that the Bureau provides the State the population tabulations it needs for redistricting. The process begins “not later than April 1 of the fourth year preceding the decennial census date,” when the Secretary is required to establish criteria for States’ “plan[s] identifying the geographic areas for which specific tabulations of population are desired.” *Id.* “Such criteria shall include requirements which assure that such plan shall be developed in a nonpartisan manner.” *Id.*

Then, “not later than 3 years before the decennial census date,” the “officers or public bodies having initial responsibility for the legislative apportionment or districting of each State may ... submit to the Secretary a plan identifying the geographic areas for which specific tabulations of population are desired.” *Id.* These plans must meet the criteria set by the Secretary. If they do not, the Secretary “shall consult to the extent necessary with such officers or public bodies” to bring the plan into compliance. *Id.* Alabama timely submitted, and the Secretary approved, a plan

identifying the geographic areas for which tabulations of population are needed. *See* Ex. 1, Declaration of Donna Overton Loftin, at 2 (“Loftin Declaration”); Ex. 2, Declaration of Sen. James McClendon, at 1-2 (“McClendon Declaration”).

After plans are finalized and approved, “[t]abulations of populations for the areas identified in any plan approved by the Secretary shall be completed by him as expeditiously as possible after the decennial census date and reported to the Governor of the State involved and to the officers or public bodies having responsibility for legislative apportionment or districting of such State.” 13 U.S.C. § 141(c). The “tabulations of population of each State requesting a tabulation plan, and basic tabulations of population of each other State, shall, in any event, be completed, reported, and transmitted to each respective State within one year after the decennial census date.” *Id.*

The Act defines “decennial census date” as April 1 of the year in which the decennial census takes place. *Id.* § 141(a). One year from April 1 is March 31 of the following year. So, for the 2020 decennial census, the Secretary “shall” transmit the tabulations of populations for redistricting by March 31, 2021.

B. Alabama Relies on the Census Bureau’s “Tabulations of Population” to be Accurately and Timely Reported.

Article I of the Constitution grants States the authority to regulate the “Times, Places and Manner of holding Elections for Senators and Representatives.” U.S. Const. art. I, § 4, cl.1. This language confers upon States the “authority to provide a complete code for congressional elections ...; in short, to enact the numerous requirements as to procedure and safeguards which experience shows are necessary in order to enforce the fundamental right involved.” *Smiley v. Holm*, 285 U.S. 355, 366 (1932).

Federal law informs Alabama’s State-law reapportionment and redistricting requirements. Pursuant to the U.S. Constitution, States must draw congressional districts equal in number to the

number of seats the States are apportioned based on their populations. *See* U.S. Const., art. I, § 2, cl.3. Additionally, the one-person-one-vote principle requires that States draw legislative districts that are nearly equivalent in population. *See Evenwel v. Abbott*, 136 S. Ct. 1120, 1123-24 (2016). To abide by these principles, States like Alabama rely on the Census Act’s guarantee that the Bureau will provide timely and accurate redistricting data. *See* 13 U.S.C. § 141(c). Alabama relies on this data for many different functions, including legislative and congressional apportionment. *See* Ex. 1, Loftin Declaration at 2. The reapportionment and redistricting data required under the Census Act thus further Alabama’s sovereign interests in ensuring its representative districts are fairly drawn and that they are sufficiently equal in population to meet the Constitution’s requirements.

Alabama has expressly tied its redistricting processes to the Bureau’s decennial census numbers. *See* Ala. Const. art. IX, §§ 197-200. So have many other States.³ The Alabama Constitution, for instance, requires that the State Legislature use the number of inhabitants, as reported by the Census Bureau, to apportion the seats in the State House and State Senate. *See* Ala. Const. art. IX, §§ 197-98. The Legislature must also conduct legislative redistricting based on the Census Bureau’s tabulations. *See* Ala. Const. art. IX, §§ 199-200. The Alabama Legislature cannot practically conduct these tasks without accurate redistricting data from the Census Bureau. *See* Ex. 1, Loftin Declaration at 2 (“Because each of Alabama’s electoral districts is based on population as reported by the decennial census results, the [Permanent Legislative Committee and Reapportionment] cannot redistrict until these results are released.”).

³ *See Census Data Snafu Upends 2022 Elections*, Politico (Mar. 1, 2021), <https://perma.cc/DZ5N-275Y> (“At least nine states have constitutional or statutory deadlines to redraw their maps, according to the National Conference of State Legislatures”).

Redistricting is not the only election-related process in Alabama tied to the arrival of new census data. As the Deputy Chief of Staff and Director of Elections for the Alabama Secretary of State's Office has attested, once redistricting is completed, "[e]ach of the more than 3 million registered voters in Alabama must be assigned to the correct congressional, State, and local districts." *See* Ex. 3, Declaration of Clay S. Helms, at 2 ("Helms Declaration"). "[O]f course, where a voter lives determines which races the voter can participate in." *Id.* But assigning voters to their correct districts is no small feat. In 50 of Alabama's 67 counties, "the Boards of Registrars perform the reassignment process manually," requiring "officials to pore over maps and lengthy lists of voters to ensure that each voter is correctly assigned to his or her correct precinct." *Id.* at 2. "This task can take a county's Board of Registrars up to 6 months." *Id.* "For example, in 2017, following redistricting litigation, the Alabama Legislature drew remedial House and Senate plans that altered only a portion of the districts in each plan. Even though only some districts were affected, local election officials struggled to complete the district assignment process in in 6 months." *Id.* at 3. By law, though, the voter reassignment process must be complete before the primary election rolls around—and absentee voting begins 55 days before election day. Ala. Code §§ 17-11-5(b); 17-11-12. For Alabama's statewide 2022 primary elections, absentee voting will begin March 30, 2022. *See* Ex. 3, Helms Declaration at 3. If the Bureau were to heed its statutory obligations and deliver the redistricting data no later than March 31, 2021, Alabama's Boards of Registrars shouldn't have a problem reassigning Alabama's registered voters to their correct precincts and districts before absentee voting begins. But the Bureau's delays in delivering the data will force the Legislature to delay redistricting, and the Boards of Registrars will be left with precious little time to assign voters to their new voting districts before voting begins.

The candidates who run in Alabama's elections also rely on timely and accurate census data. *See* Ex. 3, Helms Declaration at 4. For one, many elected positions in Alabama State government have residency requirements for candidates, *see, e.g.*, Ala. Const. art. IV, § 47, so it is important for these candidates to know where district lines will fall as early as possible. For another, candidates intending to participate in the 2022 primary election may begin soliciting and accepting contributions on May 24, 2021, Ala. Code § 17-5-7(b)(2), and must file a declaration of candidacy by January 28, 2022, *see id.* § 17-13-5(a). And independent candidates and minor political parties must also submit signatures of registered voters who are eligible to vote in the election at issue to achieve ballot access. Ex. 3, Helms Declaration at 4. "The State has faced lengthy litigation in the past when the time for gathering signatures was shortened." *Id.*

C. The Census Bureau Adopts a Statistical Method Called "Differential Privacy" That Will Cause the "Tabulations of Population" Used for Redistricting to be Inaccurate.

1. The Census Bureau Has Relied on Various Disclosure Avoidance Methods to Successfully Protect the Privacy of Census Respondents in the Past.

Congress requires that the Census Bureau protect the private information of those who participate in the decennial census. *See* 13 U.S.C. § 9. In particular, the Bureau may not "make any publication whereby the data furnished by any particular establishment or individual ... can be identified." *Id.* § 9(a)(2). The Bureau has used a number of disclosure avoidance methods to successfully protect the identity of census respondents in recent censuses.⁴

For example, in the 2010 census, first, and most basically, before releasing any files with data at the respondent level ("microdata"), the Bureau removed the direct identifiers of the respondents—their names, addresses, telephone numbers, and the like.⁵

⁴ *See generally* Laura McKenna, U.S. Census Bureau, *Research & Methodology Directorate: Disclosure Avoidance Techniques Used for the 1960 Through 2010 Decennial Census of Population and Housing Public Use Microdata Samples* (Apr. 2019), <https://perma.cc/9LBN-5BWV>.

⁵ *Id.* at 4.

Second, the Bureau used topcoding and bottom-coding to mask outliers in data involving continuous variables, “such as age and dollar amounts.”⁶ “When topcoding, the top 0.5 percent of all values or the top 3.0 percent of all nonzero values (whichever effects the least amount of records) are cut off” and replaced with the topcode cut-off value “or the mean or interpolated median of all topcoded values.”⁷ So, for example, someone whose age is 95 may have her age instead recorded as 90 to ensure that she does not stick out in an uncrowded census block. Bottom-coding works the same way, just on the other end of the distribution.⁸

Third, the Bureau set minimal weighted-population thresholds that needed to be met before it released data regarding that population. For example, categorical variables needed to have “at least 10,000 people nationwide in each published category.”⁹ If the threshold was not met for a certain category, the category would be combined with another one (or ones) until it was. The categories would then be recoded as a broader interval and published that way.¹⁰ The Bureau also recoded or rounded the numbers for certain “categorical and continuous variables,” such as property taxes and responses involving certain dollar amounts.¹¹

Fourth, and most significantly, the Bureau used data swapping of household data in the 2000 and 2010 censuses to protect the identity of records with a high risk of disclosure.¹² Data swapping works like this: “Consider a census block with just 20 people in it, including one Filipino American. Without any disclosure avoidance effort, it might be possible to figure out the identity

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

⁹ Amy Lauger et al., U.S. Census Bureau, *Disclosure Avoidance Techniques at the U.S. Census Bureau: Current Practices and Research* 2 (Sept. 26, 2014), <https://perma.cc/2UXQ-SAFL>

¹⁰ *Id.*

¹¹ See McKenna, *supra*, at 4.

¹² See Nat’l Conf. of State Legislatures, *Differential Privacy for Census Data Explained* (Feb. 1, 2021), <https://perma.cc/DA93-36GA>.

of that individual. With data swapping, the Filipino American's data might be swapped with that of an Anglo American from a nearby census block—a census block where other Filipino Americans reside. The details for the person would be aggregated with others, and therefore not identifiable, and yet the total population in both census blocks would remain accurate.”¹³

Data swapping was the “primary way of protecting Census 2010 ... tabular data products.”¹⁴ Notably, not all data are swapped between households when this technique is used. Rather, “[o]nly records which [a]re unique in their block based on a set of key demographic variables” are swapped.¹⁵ All other variables—most importantly, the population numbers—are left undisturbed. Additionally, because the swaps typically occur within the same general geographic area—“for example, across [census] tracts but within the same county”¹⁶—the error rate (that is, the number of “false” household reports caused by swapping) is reduced as census data are viewed at higher levels of geographic scope. In this way, race data, for instance, can remain relatively “true” for a state or federal legislative district, even if the household records within that district are swapped with those in nearby census blocks. Errors are pushed to the geographic boundaries.

Fifth, the Bureau has also used partially synthetic data to protect records at group quarters for which data swapping is not an option. (Records from a nursing home group quarters, for example, cannot be swapped for those at a nearby college dorm.)¹⁷ To create partially synthetic data, the data are modeled according to a general linearized model and records that may cause a disclosure risk are flagged. “Th[e] variable values that are causing the disclosure risk problem in a given

¹³ *Id.*

¹⁴ Laura Zayatz et al., U.S. Census Bureau, *Disclosure Avoidance for Census 2010 and American Community Survey Five-year Tabular Data Products* 11 (Nov. 23, 2009), <https://perma.cc/GF4V-QTVA>.

¹⁵ *Id.* at 4.

¹⁶ McKenna, *supra*, at 5

¹⁷ *See id.*

unique record are then blanked and replaced with values generated from the model.”¹⁸ Importantly, “[g]eography and type of [group quarters] are never altered, and the numbers of people of less than age 18 and age 18 or more are never changed.”¹⁹ Thus, States are still given an accurate picture of how many people are present at each address and whether they are of voting age.

These protections worked “extremely well.”²⁰ “Indeed, there is not a single documented case of anyone outside the Census Bureau revealing the responses of a particular identified person in public use decennial census or [American Community Survey] data.”²¹

2. *The Census Bureau Adopts “Differential Privacy” for the 2020 Census.*

In September 2017, the U.S. Census Bureau announced at its Scientific Advisory Committee meeting that it would be using a disclosure avoidance method called “differential privacy” for the 2020 census.²² John M. Abowd, the Chief Scientist and Associate Director for Research Methodology at the Census Bureau, publicly announced the decision the following August at the Association of Computing Machinery’s Special Interest Group on Knowledge, Discovery, and Data Mining’s annual conference in London.²³ Three months after that, differential privacy was added to the fourth (and latest) version of the Bureau’s 2020 Census Operational Plan. *See* Ex. 4, U.S. Census Bureau, *2020 Census Operational Plan: A New Design for the 21st Century—Version 4.0* 135, 139-40 (Dec. 2018).

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ Steven Ruggles et al., *Differential Privacy and Census Data: Implications for Social and Economic Research*, 109 AEA Papers and Proceedings 404 (May 2019), <https://perma.cc/GW29-GNAV>.

²¹ *Id.*

²² *See* Simson L. Garfinkel, U.S. Census Bureau, *Modernizing Disclosure Avoidance: Report on the 2020 Disclosure Avoidance Subsystem as Implemented for the 2018 End-to-End Test* (Sept. 15, 2017), <https://perma.cc/4J8B-ZEXM>.

²³ *See* John M. Abowd, U.S. Census Bureau, Presentation to the 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, *The U.S. Census Bureau Adopts Differential Privacy* (Aug. 23, 2018), <https://perma.cc/USZ6-ZPLC>.

Differential privacy is a “formal privacy” method that “inject[s] a precisely calibrated amount of noise”—intentional error—“into the data to control the privacy risk of any calculation or statistic.”²⁴ “[T]he goal of differential privacy is to obscure the presence or absence of any individual, or small group of individuals,” from the dataset.²⁵ The dataset “is said to be differentially private if by looking at the output, one cannot tell whether any individual’s data was included in the original dataset or not.”²⁶ To accomplish this goal, data are intentionally skewed by a statistical method to reduce the risk of re-identification of the true responses. *See generally* Ex. 5, Expert Report of Dr. Michael Barber (“Barber Expert Report”) (explaining how differential privacy works).

Under differential privacy, the accuracy of the data is viewed as a direct trade-off with privacy. Because differential privacy results from mathematically scrambling the true numbers, “perfect privacy would result in completely useless data,” while “perfect accuracy would result in releasing the data in fully identifiable form.”²⁷ The chosen blend of accuracy and privacy results in a measure called the “privacy-loss budget” or “Epsilon” (ϵ). Dialing the epsilon up to infinity results in perfect accuracy but theoretically imperfect privacy, whereas setting the epsilon at zero results in perfect privacy but useless data. *See* Ex. 5, Barber Expert Report at 10-11.

The global privacy-loss budget for the 2020 census has not been set. Nor has there been a formal mechanism for outside input or participation—from the political branches or otherwise—

²⁴ Michael Hawes, U.S. Census Bureau, *Title 13, Differential Privacy, and the 2020 Decennial Census* 22 (Nov. 13, 2019), <https://perma.cc/MRQ2-67WG>; *see also* JASON, *Formal Privacy Methods for the 2020 Census* (Apr. 2020), <https://perma.cc/G8ZM-YNN6>.

²⁵ *See* Cynthia Dwork, *Differential Privacy: A Cryptographic Approach to Private Data Analysis*, in *Privacy, Big Data and the Public Good* 302-03 (Julia Lane et al., eds., 2014).

²⁶ Harvard University Privacy Tools Project, *Differential Privacy*, <https://perma.cc/T7NJ-N397> (last visited Mar. 2, 2021).

²⁷ Hawes, *Title 13, Differential Privacy, and the 2020 Decennial Census*, *supra*, at 22 (cleaned up).

in that decision, even though “[t]he proponents of differential privacy ... have always maintained that the setting of [the privacy-loss budget] is a policy question, not a technical one.”²⁸ The Bureau did not provide notice in the Federal Register of its decision to adopt differential privacy for the 2020 census. Nor did it otherwise seek public comment before the decision was made. The closest it came was a July 2018 solicitation of feedback “to understand how the public uses decennial census data products”—but that solicitation occurred *after* the Bureau had already determined that it would be using the new method for the 2020 census, and it expressly *excluded* feedback regarding the Bureau’s redistricting products. *See* Soliciting Feedback From Users on 2020 Census Data Products, 83 Fed. Reg. 34,111 (July 19, 2018). Nor did that solicitation mention differential privacy or disclosure avoidance methods in any case. *Id.*

Instead, the Census Bureau’s Data Stewardship Executive Policy Committee is expected to set the global privacy-loss budget in early June 2021.²⁹ But the Bureau *has* already determined the “invariants”—i.e., unaltered numbers—that it will provide the States for redistricting. They will be (and *only* will be): (1) the total population of each State, (2) the total housing units at the census block level, and (3) the number of group quarters facilities by type at the census block level.³⁰ (By comparison, “[i]n 2010, at the *block level*, total population, voting age population, total housing units, occupancy status, group quarters count and group quarters type were all held invariant.” *See* Ex. 5, Barber Expert Report at 9 (emphasis added).) All other tabulations—such as how many people live in a census block, or how many of those people identify as a certain race—

²⁸ Simson L. Garfinkel, John M. Abowd, & Sarah Powazek, *Issues Encountered Deploying Differential Privacy* 3 (Sept. 6, 2018), <https://perma.cc/7TZQ-AFTD>.

²⁹ *See* U.S. Census Bureau, *2020 Disclosure Avoidance System Updates* (Feb. 23, 2021), <https://perma.cc/D6VJ-N5Z3>.

³⁰ *See* U.S. Census Bureau, *2020 Census State Redistricting Data (Public Law 94-171) Summary File 7-3* (Feb. 2021), <https://perma.cc/9HWC-492T>.

will be skewed intentionally. Not only that, but the variant tabulations will be skewed in a way that affects different populations differently. “Rural areas will see a greater variance from the raw data than urban areas.”³¹ “Smaller subpopulations, such as specific racial groups, will be affected more than larger racial or ethnic groups.”³² And “[t]he impact on states will vary, depending on their overall demographics.”³³

3. *Differential Privacy is Unnecessary and Unproven in the Census Context.*

The Bureau’s purported reason for using differential privacy is a concern in that the rise in computer power, coupled with the proliferation of databases containing individuals’ personal information, creates a risk that someone could use outside data sources along with information from the census tabulations to re-create individual level data.³⁴

To explore this risk, the Census Bureau conducted an internal database reconstruction experiment “that sought to identify the age, sex, race, and Hispanic origin for the population of each of the 6.3 million inhabited census blocks in the 2010 census” from the publicly released tabular data.³⁵ The analysts were purportedly able to use publicly released 2010 census data to reconstruct individual-level microdata with the block, sex, age, race, and ethnicity characteristics for 46% of the population—meaning that the analysts were able to group those characteristics together correctly, but without personal identifying information like a name or address to match.³⁶ The analysts then purportedly linked the block, sex, and age characteristics they had reconstructed to commercial databases, which provided possible re-identification matches for 45% of the population.³⁷ The

³¹ Nat’l Conf. of State Legislatures, *supra*.

³² *Id.*

³³ *Id.*

³⁴ See Hawes, *Title 13, Differential Privacy, and the 2020 Decennial Census*, *supra*, at 13.

³⁵ Ruggles et al., *supra*, at 404; see Hawes, *Title 13, Differential Privacy, and the 2020 Decennial Census*, *supra*, at 17-18.

³⁶ Hawes, *Title 13, Differential Privacy, and the 2020 Decennial Census*, *supra*, at 18.

³⁷ *Id.*

name, block, sex, age, race, and ethnicity characteristics from the commercial data—the putative matches—were then compared to the confidential Census data to see if they had in fact been positive re-identifications. A little over a third of this subset were matches—the race and ethnicity for those characteristic sets had been “learned exactly, not statistically.”³⁸

Notably, the experiment did not prove that someone *without* the Census’s confidential database—called the Hundred-percent Detail File—could match the characteristics learned from the published tabular datasets with personal identifying information such as names or Social Security numbers from external databases with any degree of reliability or certainty.³⁹ In other words, no person engaging in reconstruction can know if her “reconstructed” dataset bears any similarity to the true dataset unless she can cross-reference it with the unredacted Hundred-percent Detail File. But no one outside of the Census Bureau can do that—which is also why no one can run the same experiment the Census did, and why details of the experiment have not been published. Census analysts, therefore, concluded that “the risk of re-identification is small.”⁴⁰

Indeed, as experts outside the Census Bureau explained, the test showed that “the system worked as designed: because of the combination of swapping, imputation and editing, reporting error in the census, error in the identified credit agency file, and errors introduced in the microdata reconstruction, there [wa]s sufficient uncertainty in the data to make positive identification by an outsider impossible.”⁴¹ The existing protections “worked extremely well to” prevent an outside

³⁸ John M. Abowd, U.S. Census Bureau, Presentation to the Am. Ass’n for the Advancement of Science, *Staring Down the Database Reconstruction Theorem* (Feb. 16, 2019), <https://perma.cc/P3YV-FXPG>.

³⁹ Ruggles et al., *supra*, at 405 (“Reconstructing microdata from tabular data does not by itself allow identification of respondents; to determine who the individuals actually are, one would then have to match their characteristics to an external identified database (including, for example, names or Social Security numbers) in a conventional re-identification attack.”).

⁴⁰ Abowd, *The U.S. Census Bureau Adopts Differential Privacy*, *supra*, at 15.

⁴¹ Ruggles et al., *supra*, at 405.

adversary from being able to “positively identify which person provided a particular response.”⁴² To date, there has not been “a single documented case of anyone outside the Census Bureau revealing the responses of a particular identified person in public use decennial census or [American Community Survey] data.”⁴³

Differential privacy is also unproven in the apportionment context. As Census Bureau officials have noted, “[d]ifferential privacy is less than 15 years old, and most existing mechanisms were created for computer science applications, not the needs of official statistical agencies.”⁴⁴ “[T]he situation is analogous to the state of Public Key Cryptography in 1989.”⁴⁵ As a result, the Bureau has faced numerous challenges as it seeks to impose a still-developing theory of privacy onto the decennial census. For example, the Bureau has “lacked subject matter experts skilled in the theory and practice of differential privacy,” as well as “toolkits for performing differential privacy calculations for verifying the correctness of specific implementations.”⁴⁶ Then there have been the practical challenges of translating a new theory into workable data for users. As one Census Bureau advisor has recognized: “It may be confusing to say that a town has a negative, fractional number of individuals with a particular combination of uncommon attributes.”⁴⁷

⁴² *Id.* at 404.

⁴³ *Id.*

⁴⁴ Garfinkel et al., *Issues Encountered Deploying Differential Privacy*, *supra*, at 3.1.

⁴⁵ *Id.* at 3.2.

⁴⁶ *Id.*

⁴⁷ Michael B. Hawes, U.S. Census Bureau, *Implementing Differential Privacy: Seven Lessons From the 2020 United States Census*, Harvard Data Science Review (Apr. 30, 2020), <https://perma.cc/DB66-9B5R>. The Bureau fixed this problem by imposing a non-negativity constraint on the algorithm, which in turn makes the results even less accurate. *See* Ex. 5, Barber Expert Report at 13-14 (explaining that “[t]he combination of the non-negativity constraint and population invariants consistently leads to bias increasing counts of small subgroups and small geographic units and decreasing counts of larger subgroups and geographic units.” (citation omitted))).

4. *Differential Privacy Will Result in Inaccurate Population Tabulations.*

Because differential privacy intentionally skews all population numbers save for the total population of each State, this scrambling of the data risks rendering it “essentially unusable and unreliable at geographies below the statewide level for redistricting and other purposes.” Ex. 6, Expert Report of Thomas M. Bryan, *Census 2020: Differential Privacy Analysis Alabama Case Study 4* (“Bryan Expert Report”). In October 2019, the Census Bureau released a set of demonstration data for various census stakeholders to review.⁴⁸ The Bureau also released additional demonstration data in May, September, and November of 2020.⁴⁹ This data applied differential privacy to the 2010 census data for certain States as a means of testing the novel approach to disclosure avoidance. For the demonstration data products, the Census Bureau set a more conservative privacy-loss budget than it expects will be set for the 2020 census—meaning that the demonstration data will have more “noise (error) than should be expected in the final 2020 Census data products.”⁵⁰ But the final numbers will still be erroneous—and intentionally so. They will just be less wrong than the demonstration numbers were.

The demonstration data have shown that differential privacy—no matter where the epsilon value is set—inhibits a State’s right to draw fair lines. Simply put, differential privacy forces States to draw districts using false numbers about how many and what type of people reside in a census block, block group, tract, or county. Not only that, but as demographer Thomas Bryan notes in his expert report: Differential privacy “has been in development at the Census Bureau for many years, and we are currently in the time frame we would be preparing for the release of the data under

⁴⁸ See U.S. Census Bureau, 2010 Demonstration Data Products (rev. Apr. 16, 2020), <https://perma.cc/KK5M-KLRL>.

⁴⁹ See U.S. Census Bureau, *2020 Disclosure Avoidance System Updates* (Feb. 23, 2021), <https://perma.cc/D6VJ-N5Z3>.

⁵⁰ *Id.*

statutory timetables. And the Census Bureau has not yet produced a data product that is even remotely usable by the end user community—including state and local governments for the purpose of redistricting.” Ex. 6, Bryan Expert Report at 5.

Indeed, the level of falsity introduced by differential privacy is unlike past disclosure avoidance methods in significant ways—both in kind and in degree. Most significantly, when data swapping was used to protect small populations, the “total population, voting age population, total housing units, occupancy status, group quarters count and group quarters type were all held invariant” at the census-block level. *See* Ex. 5, Barber Expert Report at 9. In other words, the Bureau provided the States the actual number of people the Bureau counted in each census block. No longer. Under differential privacy, the population numbers themselves are manipulated (save for the statewide level). This is a new kind of error being purposefully introduced into redistricting data. The result is that the States will not know where their residents were counted.

And whereas the errors caused by swapping between adjacent census blocks were largely cancelled out as one looks at higher census geographies⁵¹ because the adjacent blocks are combined together, the same is not true for the errors caused by differential privacy. Those errors can compound as census blocks are combined to form larger census geographies because the population totals and characteristics in adjacent blocks are skewed at random. Unlike in years past, then, “[d]ifferential privacy will mean that, except at the state level, population and voting age population will not be reported as enumerated. And, race and ethnicity data are likely to be farther from

⁵¹ Census data are broken up into ever smaller levels of geographic areas called “census geographies.” There are two different classifications of census geography—“on the spine” and “off the spine.” The “on the spine” geographies are, from largest to smallest: Nation, Regions, Divisions, States, Counties, Census Tracts, Block Groups, and Blocks. “Off the spine” geographies are designations for defining other areas of geography for various statistical or other purposes. Some examples of “off the spine” census geographies are: Zip Codes, School Districts, Congressional Districts, Economic Places, Voting Districts, Urban Areas, and Metropolitan Areas.

the ‘as enumerated’ data than in past decades, when data swapping was used to protect small populations.” Ex. 5, Barber Expert Report at 9 (quotation marks and citation omitted).

Examples from the demonstration data prove the point. In the State of Washington, for instance, application of differential privacy “displaced nearly 18% of Washington’s population at the census block level.”⁵² When applied to smaller census geographies, the problems became worse. Census blocks with a small number of housing units had much higher populations than were reported by the true 2010 numbers, while blocks with more than 20 housing units had lower populations than they should have had. “In terms of household population, census blocks with only one housing unit had collectively 64,195 more people after applying [differential privacy]. There were also 15,253 people in census blocks that had housing but no population in the original 2010 data. Together, these numbers represent 79,448 people.”⁵³

Nor were the falsities introduced by differential privacy evenly distributed across populations. An extreme example is the census block that contains Washington’s Correction Center for Women. In the original 2010 census, the census block was, understandably, approximately 99% female. After the application of differential privacy, the same census block was reported to be only 25% female.⁵⁴ Data concerning racial characteristics have been similarly skewed. As the National Redistricting Foundation reported, “initial analyses suggest that the Bureau’s differential privacy proposal can produce inaccurate counts for minority communities by reallocating population from larger minority groups to smaller ones and by geographically dispersing concentrated minority

⁵² Mike Mohrman, *The Challenge of Differential Privacy: Confidentiality vs. Usability* (Sept. 15, 2020), <https://perma.cc/4FA7-G4EF>.

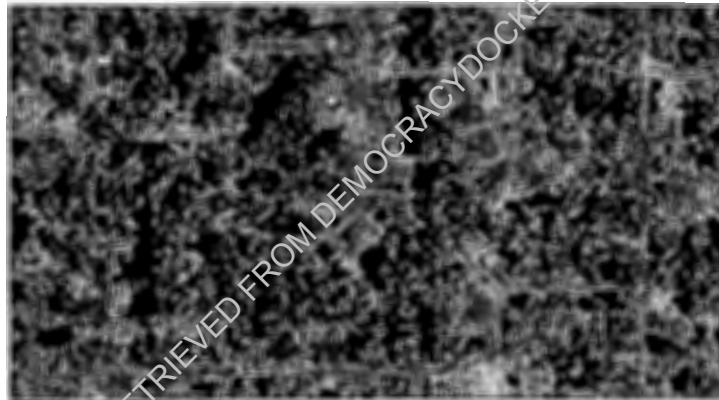
⁵³ *Id.*

⁵⁴ See Mike Mohrman, Letter to Steve Dillingham, Director, U.S. Census Bureau (Feb. 6, 2020), <https://perma.cc/MC3G-62PT>.

populations—precisely the kinds of inaccuracies that would work against the viability of majority-minority districts.”⁵⁵

Such abnormalities appeared in the Alabama data as well. For example, whereas the “2010 Census had 131 children residing in five blocks without adults”—likely reflecting a boarding school or another kind of group quarters for children—the differential privacy algorithm produced over “141,817 children residing in 13,842 blocks without adults.” Ex. 6, Bryan Expert Report at 11. Four of the blocks were reported to have over seventy children residing without adults—though it is clear that two of those blocks consist of single-family neighborhoods:

Block 010730118032035 is a tree lined single family neighborhood on the north side of Birmingham, where it is simply implausible that there are no adults.



⁵⁵ Nat’l Redistricting Foundation, Letter to Steven Dillingham, Director, U.S. Census Bureau (Apr. 24, 2020), <https://perma.cc/3QK8-65VN>.

Block 010970024001008 is a tree lined single family neighborhood in Mobile south of US 90 where again it is simply implausible that no adults live here.



Id. at 13. The application of differential privacy likewise “turned 30,338 blocks with one or more [people of voting age] into blocks with zero [people of voting age.]” *Id.* at 11.

The November 2020 demonstration data also skewed the 2010 tabulations enough to create a population deviation in Alabama’s Congressional districts on a level that courts have found, in other contexts, to violate voters’ equal population rights:⁵⁶

⁵⁶ See *Veith v. Pennsylvania*, 195 F. Supp. 2d 672 (M.D. Pa. 2002) (three-judge court).

Congressional District	2010 Actual Population	2010 Actual Population Deviation	Differential Privacy Population (Demonstration Data)	Differential Privacy Deviation (Demonstration Data)
1	682820	+1	682747	-73
2	682820	+1	682791	-29
3	682819	-1	682844	+25
4	682819	-1	682820	+1
5	682819	-1	682820	+1
6	682819	-1	682688	-131
7	682820	+1	683026	+206

Ex. 6, Bryan Expert Report at 21.

Then there are the outsized effects differential privacy has on the tabulations of minority populations. For instance, in Alabama there were “19,666 blocks in which [differential privacy] reported zero Hispanic persons of voting age while the 2010 Census reported one or more Hispanic persons of voting age in these same blocks,” and “38,010 blocks in which [differential privacy] reported zero Black Non-Hispanic persons of voting age, while the 2010 Census reported one or more Black non-Hispanic persons in the same blocks.” *Id.* at 12. “Looking in the opposite direction, there were ... 7,384 blocks in which the 2010 Census reported 1 or more Hispanic persons of voting age while [differential privacy] reported zero Hispanic persons of voting age in these same blocks,” and “8,073 blocks in which the 2010 Census reported 1 or more Black non-Hispanic persons of voting age while DP reported zero Black non-Hispanic persons of voting age in these same blocks.” *Id.*

These falsities were reflected in the numbers for Alabama's 105 state legislative districts. For instance, "[f]or Black / African Americans, there are six districts with both significant numeric and percent differences, which would result in a *significant* change in demographic complexion in these areas" under differential privacy:

Black / African Americans	# Error Voting Age Population, Non-voting Age Population	% Error Voting Age Population, Non-voting Age Population
District 25	-376, +199	-5%, +7%
District 35	+414, -73	+8%, -4%
District 62	+421, -451	+5%, -12%
District 64	-262, +440	-3%, 18%
District 68	-93, -533	-1%, -8%
District 70	-361, +287	-2%, +4%

Id. at 32.

In sum: If the Census Bureau uses differential privacy, the population tabulations it reports to States for redistricting will be inaccurate.

D. The Bureau Delays Release of the "Tabulations of Population."

In addition to the application of differential privacy, the tabulations of population from the 2020 decennial census will differ in another significant way from past releases. On February 12, 2021, the Census Bureau announced that "it will deliver the Public Law 94-171 redistricting data to all states by Sept. 30, 2021." Ex. 7, *Press Release: Census Bureau Statement on Redistricting Data Timeline*, U.S. Census Bureau (Feb. 12, 2021), <https://perma.cc/TY9T-UNDM> (the "February 12 Press Release"); *see also* Ex. 8, James Whitehorne, *Census Bureau Statement on Redistricting Data Timeline*, U.S. Census Bureau (Feb. 12, 2021), <https://perma.cc/A2SZ-7L5Q> (the

“Whitehorne Statement,”; and, together with the February 12 Press Release, the “February 12 Decision”). The Bureau acknowledged that the change marked a “delay[] [in] the Census Bureau’s original plan to deliver the redistricting data to the states by March 31, 2021”—the deadline set by Congress in 13 U.S.C. § 141(c). Ex. 7, February 12 Press Release. The Bureau also announced: “Different from previous censuses, the Census Bureau will deliver the data for all states at once, instead of on a flow basis.” *Id.*

E. Plaintiffs Seek Relief From This Court.

On March 10, 2021, Plaintiffs filed this suit in the Middle District of Alabama and requested a three-judge panel pursuant to 28 U.S.C. § 2284(a) and Public Law No. 105-119, § 209(b), (d)(1) & (2). *See* Doc. 1. The complaint alleges that Defendants are (1) violating Plaintiffs’ rights under 13 U.S.C. § 141(c) and Public Law No. 105-119, § 209 to accurate tabulations of population for redistricting because differential privacy will cause those tabulations to be inaccurate; (2) creating a substantial risk that Plaintiffs Representative Aderholt, Mr. Green, and Mr. Williams will have their votes in local, state, and federal elections diluted; (3) violating the Administrative Procedure Act (“APA”) because the application of differential privacy is not in accordance with law and contrary to constitutional right, (4) violating the APA because the application of differential is arbitrary, capricious, or constitutes an abuse of discretion, (5) violating Plaintiffs’ rights under 13 U.S.C. § 141(c) by failing to produce the population tabulations by the statutory deadline, (6) violating the APA because Defendants’ delay in producing the population tabulations is contrary to law, and (7) violating the APA because Defendants’ delay in producing the population tabulations is arbitrary and capricious. Plaintiffs also claimed entitlement to a writ of mandamus under 28 U.S.C. § 1361.

JURISDICTION

The Court has subject-matter jurisdiction pursuant to 28 U.S.C. §§ 1331, 2201(a), and Public Law No. 105-119, § 209(b). Jurisdiction is also proper under the judicial review provisions of APA, 5 U.S.C. § 702.

LEGAL STANDARD

Plaintiffs are entitled to a preliminary injunction if they show: (1) a likelihood of success on the merits; (2) a likelihood of suffering irreparable harm; (3) that “the threatened injury to the movant outweighs whatever damage the proposed injunction may cause the opposing part[ies]”; and (4) that the injunction would not be adverse to the public interest. *Siegel v. Lepore*, 234 F.3d 1163, 1176 (11th Cir. 2000) (en banc). Alternatively, they are entitled to a writ of mandamus if they have “exhausted all other avenues of relief” and if Defendants owe Plaintiffs “a clear nondiscretionary duty.” *Heckler v. Ringer*, 466 U.S. 602, 616 (1984).

ARGUMENT

This Court should enter an injunction that (1) enjoins Defendants from applying differential privacy to the tabulations of population Alabama is entitled to for redistricting, and (2) enjoins Defendants from delaying the release of the redistricting data beyond the statutory deadline of March 31, 2021. In the alternative, the Court should grant a writ of mandamus requiring the Secretary to comply with her statutory obligation to provide the State with redistricting data by March 31, 2021.

I. Plaintiffs Are Entitled To An Injunction Requiring Defendants To Provide Alabama With Timely And Accurate “Tabulations Of Population” Unaffected By The Application Of Differential Privacy.

Plaintiffs satisfy all four factors needed to obtain a preliminary injunction.

First, Plaintiffs are likely to win on the merits. The application of differential privacy violates Congress’s command in 13 U.S.C. § 141(c) that the Secretary provide States “[t]abulations

of population” for redistricting. Rather than provide Alabama tabulations of population for census blocks, towns, counties and the like, she will provide figures generated by the Bureau’s confidential algorithm. And even if those figures could be considered “tabulations of population,” the Census Act requires *accurate* tabulations, not population counts with intentionally added error. Defendants’ use of differential privacy thus violates subsection 141(c) and Plaintiffs’ rights to population tabulations free from manipulation by unlawful statistical methods that affect districting decisions. *See* Pub. L. No. 105-119, § 209(b), (d). This violation will harm the State’s sovereign interest in drawing districts that provide its citizens fair representation and create a substantial risk that the individual Plaintiffs’ votes will be unconstitutionally diluted.

Defendants’ decision to delay the release of the tabulations is likewise unlawful. Congress set the deadline for the Secretary to provide tabulations of population for redistricting by March 31, 2021. Defendants ignored that directive and instead set their own deadline of September 31, 2021. But the deadline set by Congress is not aspirational. It’s the law. Defendants must follow it.

Second, Plaintiffs will be irreparably harmed unless the Court enters an injunction. The application of differential privacy to the tabulations of population will violate Plaintiffs’ statutory and constitutional rights, inhibit the State’s right to fairly redistrict, subject the State to the risk of litigation and liability, and likely cost the State federal funding. The Court will be unable to remedy these harms if Defendants deliver population tabulations infected by differential privacy. On the one hand, depending on how differential privacy is applied, the Census Bureau may show that releasing a second set of accurate tabulations would cause significant privacy risks because the two datasets could be compared. In that case, the egg will be impossible to unscramble. On the other hand, if the actual tabulations could one day be released, the prior publication of the false tabulations will mean that States will have to scuttle their redistricting plans drawn from the false

numbers—or face certain litigation for using the second-rate data. Either way, these harms can be avoided if the Court enters an injunction.

Third, the benefits of an injunction far outweigh any harm to Defendants. The Bureau plans to deliver the apportionment numbers to the President by April 30, but claims that it then needs five additional months—rather than the three contemplated by statute—to deliver the tabulations of populations to the States. It also has announced that it will be conducting additional testing for differential privacy during this extended time and that the privacy loss budget will not be set until June. This shows that part of the Bureau’s delay is caused by the application of differential privacy in place of tested—and effective—methods of disclosure avoidance. Thus, an injunction that requires Defendants to set aside differential privacy *and* release the population tabulations in a timely manner will minimize harm to Defendants by working together. Reverting to past disclosure avoidance methods will not be difficult or time-consuming; Defendants have done it before with great success. These methods will again enable Defendants to meet their statutory obligations to protect respondents’ privacy *while also providing States with actual population tabulations*—something the current plan does not do. And because applying other methods of disclosure avoidance will be quicker than instituting differential privacy, the injunction will also mean that Defendants will be able to release the population tabulations sooner—more in accord with their statutory obligations.

Fourth, an injunction serves the public interest. As a result of Defendants’ actions, States will be forced to redistrict using data that purposefully place people in the wrong place; voters will face a substantial risk that their votes will be diluted; elections will likely be affected; and federal and state governments risk allocating resources to the wrong places. On top of all that, absent an injunction, the correct census data may never be known, and the harms will never be remedied. The public interest strongly favors an injunction.

A. Plaintiffs Are Likely To Prevail on the Merits.

1. *The Application of Differential Privacy Violates the Census Act, Individual Plaintiffs' Constitutional Rights, and Plaintiffs' Rights Under Public Law No. 105-119, § 209.*

Defendants' application of differential privacy is unlawful because it violates Congress's command in 13 U.S.C. § 141(c) for the Secretary to provide Alabama accurate tabulations of population to the State for redistricting. It also violates the constitutional rights of the individual Plaintiffs, who face a substantial risk that their votes will be diluted because of the erroneous data.

1. As explained above, Congress created a multiyear process for States desiring specific redistricting data to work with the Secretary before the decennial census to submit "a plan identifying the geographic areas for which the specific tabulations are desired." *Id.* Alabama submitted such a plan, and the Secretary approved it. *See* Ex. 1, Letter Declaration at 2. Accordingly, Congress directed that the "[t]abulations of population for the areas identified" in Alabama's plan "shall be completed by" the Secretary and given to the State "as expeditiously as possible after the decennial census date ... [but] in any event ... within one year after the decennial census date." 13 U.S.C. § 141(c). Alabama thus has a statutory right to accurate "[t]abulations of population" for geographic areas specific enough to allow for redistricting.

Defendants' refusal to provide this information violates 13 U.S.C. § 141(c) in at least two ways. First, the numbers Defendants will give Alabama are simply not "[t]abulations of population." "The plain-language meaning of 'tabulation of population' is fairly obvious: one counts the number of persons satisfying some required condition(s) and enters that number into a table."⁵⁷

⁵⁷ JASON, *Formal Privacy Methods for the 2020 Census* 93 (Apr. 2020), <https://perma.cc/G8ZM-YYN6>. Indeed, "tabulate" has long been understood to mean "[t]o put or arrange in a tabular, systematic, or condensed form." *The Random House College Dictionary* 1337 (revised ed. 1975); *see also Seymour v. Barabba*, 559 F.2d 806, 809 (D.C. Cir. 1977) ("Our understanding of a 'tabulation' is a computation to ascertain the total of a column of figures, or perhaps counting the

Yet while Defendants may “count” the number of persons residing in various census blocks throughout Alabama, they will not enter “*that* number” into the tables. Rather, they will enter alternative numbers generated by the Bureau’s confidential algorithm. But Congress did not give the Bureau authority to report estimates or values that merely bear some relation to sub-state population counts. It required that the actual numbers be reported.

Indeed, by declining to apply differential privacy to the State-level population counts the Secretary must report to the President, Defendants appear to recognize that actual population counts for States equate to the “tabulation of total population by States.” 13 U.S.C. § 141(b). The “historical precedent of using the ‘actual Enumeration’ for purposes of apportionment, while eschewing estimates based on sampling or other statistical procedures” forecloses any other interpretation. *U.S. House of Representatives*, 525 U.S. at 340. It follows that the “[t]abulations of population” referenced in subsection 141(c) must also be the actual population counts. Courts, after all, should “not lightly assume that Congress silently attaches different meanings to the same term in the same or related statutes,” much less the same section of the same statute. *Azar v. Allina Health Servs.*, 139 S. Ct. 1804, 1812 (2019). Under either subsection 141(b) or 141(c), actual population counts are required, and close enough isn’t good enough.

Were there any doubt about this point, the canon of constitutional avoidance resolves it. “Where an otherwise acceptable construction of a statute would raise serious constitutional problems, the Court will construe the statute to avoid such problems unless such construction is plainly contrary to the intent of Congress.” *Edward J. DeBartolo Corp. v. Fla. Gulf Coast Bldg. & Const.*

names listed in a certain group.”). While the most liberal definition of “tabulate” may include counting rather than simply reformatting the data into tables and lists, this remains a far cry from statistical manipulation deliberately designed to sow error into population numbers. “Tabulate,” Merriam-Webster’s Collegiate Dictionary 1199 (10th ed. 1993) (“2: to count, record, or list systematically.”).

Trades Council, 485 U.S. 568, 575 (1988). Defendants’ interpretation of the Census Act raises serious concerns under the Constitution’s Census Clauses. *See* U.S. Const. Art. I, § 2, cl. 3 & amend XIV, § 2. It is “unquestionably doubtful,” for instance, “whether the constitutional requirement of an ‘actual Enumeration,’ Art. I, § 2, cl. 3, [would be] satisfied” if Defendants applied differential privacy to the population numbers it reports under subsection 141(b). *Cf. U.S. House of Representatives*, 525 U.S. at 346 (Scalia, J., concurring) (applying constitutional-doubt canon to conclude that Census Act prohibits use of statistical sampling). Indeed, that may be one reason Defendants chose *not* to apply differential privacy to those numbers. *See Arizona v. Inter Tribal Council of Az., Inc.*, 570 U.S. 1, 17 (2013) (noting that constitutional-doubt canon applies to agency interpretation of statutes). But subsection 141(c) likewise falls within the Constitution’s ambit: The Enumeration Clause serves the “purposes of apportionment,” and that includes intra-state redistricting. *See Dep’t of Commerce*, 525 U.S. at 328-34. Thus, if the Constitution prohibits Defendants from reporting false numbers for the apportionment of representation in the House of Representatives (which it almost certainly does), it also prohibits Defendants from reporting false numbers to the States for redistricting. At the very least, the constitutional question is raised, and that question can be avoided by construing subsection 141(c) in a way that does not put it in potential conflict with the Constitution.

Notably, pointing to disclosure avoidance methods the Census Bureau has used in the past does not help Defendants evade these points. Differential privacy differs in kind, not just degree. JASON, an independent group of scientists and engineers from whom the Census Bureau has sought third-party review, explains this well. “At the time of the 2010 Census, and with the disclosure avoidance procedures adopted at that time, there seemed to be no significant conflict between the statutory requirements” for Defendants to report accurate “[t]abulations of population”

under subsection 141(c) and to protect the privacy of census respondents under section 9.⁵⁸ “Swapping, for example, preserves population counts in any geographical area. To the extent that swapped individuals were matched for other characteristics (e.g., voting age), counts of persons with matched characteristics would also be preserved.”⁵⁹ In other words, while swapping may change—slightly—the reporting of certain characteristics, the number of people counted in a certain area is still reported accurately in the tabulations. That is important because it is those numbers from which political power is derived and representation is apportioned.

For the 2020 census, though, Defendants have artificially forced the two statutory provisions into conflict. By choosing to report actual and accurate “counts” only for the total population of each State, the total housing units at the census-block level, and the number of group quarter facilities by type at the census-block level, Defendants are refusing to provide Alabama with tabulations of how many of its residents live where. That may comply with Defendants’ privacy obligations (as did past methods), but it violates Defendants’ obligation to report “[t]abulations of population.” There is no reason Defendants cannot comply with both.

Second, even if the numbers Defendants will report constitute “[t]abulations of population,” subsection 141(c) requires accurate, not deliberately inaccurate, numbers to be provided. Any other reading does violence to Congress’s intent, clear from the text of the statute, that Alabama have a right to “specific tabulations of population” for the “geographic areas” identified in the plan it submitted to the Secretary and which the Secretary approved. Defendants’ decision to apply differential privacy will therefore deprive Alabama “of information which it is entitled to receive.” *U.S. House of Representatives v. U.S. Dep’t of Com.*, 11 F. Supp. 2d 76, 85 (D.D.C.

⁵⁸ JASON, *Formal Privacy Methods for the 2020 Census*, *supra*, at 93.

⁵⁹ *Id.*

1998) (three-judge court), *aff'd*, 525 U.S. 316 (1999); *cf. Fed. Election Comm'n v. Akins*, 524 U.S. 11, 24-25 (1998) (recognizing “informational injury”). Surely, for instance, Defendants would agree that assigning every Alabamian to Birmingham would violate Alabama’s right under subsection 141(c) to tabulations of population for specific geographic areas. While Defendants’ final manipulation of the population counts might not be so ambitious, it will be similarly illegal.

By depriving Alabama of the information it is entitled to receive, Defendants will also impede the State’s sovereign interest in drawing fair districts. This is both a separate harm *and* confirmation of the sort of information Congress requires Defendants to provide: population tabulations that can be used for redistricting. *See U.S. House of Representatives*, 525 U.S. at 332-34 (recognizing that unlawful census methods harm States that “use the population numbers generated by the federal decennial census for federal congressional redistricting” or “for their state legislative redistricting”). This means that, for one, the tabulations must at least provide the State the population figures it needs to comply with the Constitution’s one-person, one-vote requirement. The State must be able to “draw congressional districts with populations as close to perfect equality as possible.” *Evenwel v. Abbott*, 136 S. Ct. 1120, 1124 (2016). To do that, the State must know how many people live where, so the tabulations of populations provided by the Secretary must at least provide those figures. Until this census, the Bureau has met that obligation. Under normal circumstances, “the census count represents the ‘best population data available,’ [and] is the only basis for good-faith attempts to achieve population equality.” *Karcher v. Daggett*, 462 U.S. 725, 738 (1983) (quoting *Kirkpatrick v. Preisler*, 394 U.S. 526, 428 (1969)).

For another, the tabulations must allow Alabama to comply with the Voting Rights Act. One of the purposes of Section 2 of the Voting Rights Act is to prevent the State from drawing

districts that “interact[] with social and historical conditions to cause an inequality in the opportunities enjoyed by black and white voters to elect their preferred representatives.” *Thornburg v. Gingles*, 478 U.S. 30, 47 (1986). Ordinarily, a compact and large minority population should be able to elect its candidate of choice. *See id.* at 50-51 (explaining that one of the tests for liability under Section 2 is whether a minority community is “sufficiently large and geographically compact to constitute a majority in a single-member district”). To further its interest in drawing fair districts, then, Alabama needs both actual population data and accurate racial data.

Despite these obligations, Defendants plan to provide the State with inaccurate tabulations—false numbers—except for three broad categories: (1) Alabama’s total population, (2) the total housing units at the census block level, and (3) the number of group quarter facilities by type at the census block level. All other tabulations will be intentionally skewed by differential privacy. That includes the tabulations that normally show how many people live in a census block and how many of those people identify as a certain race—the precise data the State needs to draw fair districts.

As detailed above, and as amply demonstrated in the Bryan Expert Report, *see* Ex. 6, the demonstration data released by the Census Bureau confirm that differential privacy will cause the tabulations of population to be inaccurate. Neighborhoods full of single-family homes were reported to house only children. *See* Ex. 6, Bryan Expert Report at 12-13. Congressional districts drawn from the demonstration data would likely violate one-person, one-vote. *Id.* at 21. And minority populations were misreported to such an extent that voters’ rights under Section 2 of the VRA would likely be violated if the Legislature relied on the demonstration data to draw legislative districts. *Id.* at 22-34.

True, the Bureau has stated that it intends to set a less conservative privacy loss budget for the final tabulations of population than it did for the demonstration products. That should mean that the final tabulations will have less egregious falsities than the demonstration data have had.⁶⁰ But by definition, any application of differential privacy will produce erroneous numbers. That's the entire point. It's just that, according to the Census Bureau, the resulting numbers will be less skewed than they are in the demonstration data—though, of course, there will be no way for anyone outside the Census Bureau to ever confirm that. This violates the Census Act's guarantee that Alabama receive accurate tabulations of population and harms the State's sovereign interest in drawing fair districts based on those tabulations.

2. For similar reasons, the individual Plaintiffs face a “substantial risk” that their constitutional rights will be violated by Defendants’ application of differential privacy. *See Susan B. Anthony List v. Driehaus*, 573 U.S. 149, 158 (2014). The equal protection component of the Fifth Amendment’s due process clause protects the fundamental right to vote. *See Buckley v. Valeo*, 424 U.S. 1, 93 (1976) (“Equal protection analysis in the Fifth Amendment area is the same as that under the Fourteenth Amendment.”). Absent extraordinary justification, one person’s vote in a congressional election must be worth as much as another’s; and Congressional districts must “be apportioned to achieve population equality ‘as nearly as practicable.’” *Karcher*, 462 U.S. at 730 (quoting *Wesberry v. Sanders*, 376 U.S. 1, 7-8 (1964)). The “as nearly as practicable standard” requires a “good-faith effort to achieve precise mathematical equality.” *Id.* In practice, this requires States to draw congressional districts to mathematic precision of +/- one person. While State legislative districts need not meet the “as nearly as practicable standard,” they must be drawn to be

⁶⁰ *See* U.S. Census Bureau, *2020 Disclosure Avoidance System Updates* (Feb. 23, 2021), <https://perma.cc/D6VJ-N5Z3>.

within a total population variation of +/- 5% to be presumptively constitutional. *See, e.g., Brown v. Thomson*, 462 U.S. 835, 842 (1983).

The Census Bureau's decision to apply differential privacy—and thus supply false redistricting data to Alabama—creates a substantial risk that Plaintiffs Representative Aderholt, Mr. Green, and Mr. Williams will have their votes in local, state, and federal elections diluted. All three individual Plaintiffs vote regularly, and all three of them live in districts that could be affected by differential privacy. *See* Ex. 9, Declaration of Camaran Williams; Ex. 10, Declaration of William Green; Ex. 11, Declaration of Rep. Robert Aderholt. Defendants are not using a good-faith effort to provide as precise data as possible, and, as a result, Alabama, along with its subordinate governmental units, will be forced to redistrict and reapportion numerous representative districts, including congressional districts, with intentionally flawed data. Defendants are responsible for this vote dilution, which violates Plaintiffs' constitutional right to equal protection.

3. The reason the tabulations of population will be skewed is because of the application of an unlawful statistical method. In Public Law No. 105-119, § 209(a)(7), Congress recognized that “the use of ... statistical adjustment in conjunction with an actual enumeration to carry out the census with respect to any segment of the population poses the risk of an inaccurate, invalid, and unconstitutional census.” And as a plurality of the Supreme Court has explained, while an “actual Enumeration” “may not be the most accurate way of determining population ... it may be the most accurate way of determining population with minimal possibility of partisan manipulation.” *U.S. House of Representatives*, 525 U.S. at 348-49 (Scalia, J., concurring in part). “To give Congress”—or Defendants—the “power ... to select among various estimation techniques having credible (or even incredible) ‘expert’ support is to give the party controlling Congress the power to distort representation in its own favor.” *Id.* At the very least, basing census figures on actual numbers

helps to prevent the *appearance* of improper manipulation. *Cf. Utah v. Evans*, 536 U.S. 452, 471-72 (2002) (noting that imputation is allowed because—among other reasons—it is not “susceptible to manipulation” and “manipulation would seem difficult to arrange”).

As a result, while 13 U.S.C. § 141(c) created a statutory right for each State to receive accurate “[t]abulations of population,” Congress extended that informational right to “[a]ny person aggrieved by the use of any statistical method in violation of the Constitution or any provision of law ... in connection with the ... decennial census[] to determine the population for purposes of ... redistricting Members in Congress.” Pub. L. No. 105-119, § 209(b). By applying differential privacy to skew the tabulations of population, Defendants violate Plaintiffs’ rights under Section 209.

Under Section 209, an “aggrieved person” “includes—(1) any resident of a State whose congressional representation or district could be changed as a result of the use of a statistical method challenged in the civil action; (2) any Representative or Senator in Congress; and (3) either House of Congress.” Pub. L. No. 105-119, § 209(d). Plaintiffs are such “aggrieved person[s].” Congressman Aderholt is a “Representative ... in Congress.” *See* Ex. 11, Aderholt Declaration at 2. Representative Aderholt, Mr. Green, and Mr. Williams are “resident[s] of” Alabama “whose representation or district could be changed as a result of the use of a statistical method.” *See id.*; Ex. 10, Green Declaration at 1-2; Ex. 9, Williams Declaration at 2-3. And because Congress created the guarantee of accurate “[t]abulations of population” for *States* to use in their redistricting process, *see* 13 U.S.C. § 141(c), Alabama is an “aggrieved person,” too. *See* Pub. L. No. 105-119 § 209(a)(8) (noting that Congress created § 209(b)’s cause of action because “it would be impracticable *for the States* to obtain ... meaningful relief after such enumeration has been conducted” (emphasis added)); *cf. Georgia v. Evans*, 316 U.S. 159, 162 (1942) (“Nothing in the [Sherman]

Act, its history, or its policy, could justify so restrictive a construction of the word ‘person’ ... as to exclude a State” where “[s]uch a construction would deny all redress to a State ... merely because it is a State”); *United States v. Schmidt*, 675 F.3d 1164, 1169-70 (8th Cir. 2012) (finding that State agencies were “persons” under the Mandatory Victims Restitution Act); *see also* Antonin Scalia & Bryan A. Garner, *Reading Law: The Interpretation of Legal Texts* 132-33 (2012) (collecting cases for proposition that “[t]he verb *to include* introduces examples, not an exhaustive list”).

Differential privacy is also an unlawful “statistical method.” “[T]he term ‘statistical method’ means an activity related to the design, planning, testing, or implementation of the use of representative sampling, or any other statistical procedure, including statistical adjustment, to add or subtract counts to or from the enumeration of the population as a result of statistical interference.” Pub. L. No. 105-119, § 209(h)(1). It is clear that differential privacy falls into this category. As Professor Michael Barber explained: “At its core, the process of ensuring privacy is a combination of sampling and constrained optimization. Privacy is introduced into the data by introducing random error through sampling from statistical distributions with parameters set to a desired level of variance (privacy) Differential privacy is thus an application of statistical processes and methods to adjust the original counts of the Census to protect the privacy of individual[] records.” Ex. 5, Barber Expert Report at 17.

It follows that because differential privacy is a “statistical method” used in violation of 13 U.S.C. § 141(c), and because Plaintiffs are “aggrieved” by that use, Defendants have violated Plaintiffs’ rights under Public Law No. 105-119, § 209(b).

2. *The Application of Differential Privacy Violates the Administrative Procedure Act.*

The APA requires the Court to “hold unlawful and set aside agency action[s]” that are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law,” that are “in excess of statutory jurisdiction, authority, or limitations, or short of statutory right,” and that are “contrary to constitution right.” 5 U.S.C. § 706(2)(A), (B), (C). Defendants’ decision to use differential privacy to manipulate the tabulations of population used for redistricting are all those things.

1. To be reviewable under the APA, the challenged decision must constitute “final agency action.” *Id.* § 704. The Supreme Court has created a two-part test to determine whether this is case. “First, the action must mark the consummation of the agency’s decisionmaking process—it must not be of a merely tentative or interlocutory nature. And second, the action must be one by which rights or obligations have been determined, or from which legal consequences will flow.” *U.S. Army Corps of Eng’rs v. Hawkes Co.*, 136 S. Ct. 1807, 1813 (2016) (quoting *Bennett v. Spear*, 520 U.S. 154, 177-78 (1997)). “The core question is whether the agency has completed its decisionmaking process, and whether the result of that process is one that will directly affect the parties.” *Franklin v. Massachusetts*, 505 U.S. 788, 797 (1992).

Both conditions are met here. First, the Census Bureau has completed its decisionmaking process with regard to whether to apply differential privacy to the 2020 decennial census. The Bureau announced that decision in September 2017, and it was added to the 2020 Census Operational Plan in December 2018. *See* Ex. 4, U.S. Census Bureau, *2020 Census Operational Plan: A New Design for the 21st Century—Version 4.0* 135, 139-40 (Dec. 2018). That Plan states: “The disclosure avoidance methodology that *will be implemented* for the 2020 Census is known as differential privacy. Differential privacy is the scientific term for a method that adds “statistical noise”

to data tables we publish in a way that protects each respondent's identity.” *Id.* at 139 (emphasis added). The Plan also notes: “[T]he Census Bureau *is implementing* the new differential privacy method. This new methodology will be tested and implemented with the 2018 End-to-End Census Test.” *Id.* at 140 (emphasis added). These statements demonstrate that the decision to use differential privacy has been made—done, final. It is not “merely tentative or interlocutory in nature.” *Bennett*, 520 U.S. at 178. To be sure, the Bureau has yet to set the privacy loss budget it will use—that decision is still in the works. But the privacy loss budget—the epsilon—is immaterial. Plaintiffs claim that the application of differential privacy itself—no matter the epsilon—is unlawful. That decision is ripe for review.

Second, it is certain that “legal consequences will flow” from the Census Bureau’s decision to use differential privacy. The decision will cause the Secretary to breach her duty under subsection 141(c) to provide Alabama with accurate tabulations of population for redistricting. It will harm Plaintiffs’ rights under Public Law No. 105-119, § 209(b). And it will force Alabama to draw congressional and legislative districts without accurate data, thus creating a substantial risk that voters like individual Plaintiffs will have their constitutional rights abridged.

The Census Bureau’s decision to adopt differential privacy is contrary to law, contrary to constitutional right, and in excess of statutory authority. *See* 5 U.S.C. § (2)(A), (B), (C). It must be set aside. For the reasons already discussed, the application of differential privacy to the population tabulations given to the States is “inconsistent with the statutory mandate” of 13 U.S.C. § 141(c) and would “frustrate the policy that Congress sought to implement.” *Fed. Election Comm’n v. Democratic Senatorial Campaign Comm.*, 454 U.S. 27, 32 (1981). It would also create a substantial risk that individual Plaintiffs will have their equal protection rights violated. Accordingly, Defendants’ decision violates the APA.

3. The decision violates the APA for another reason: It is arbitrary, capricious, or an abuse of discretion. 5 U.S.C. § 706(2)(A). Agency action is arbitrary and capricious if the agency “has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

Here, the Bureau failed to consider and respond to the impact that its decision to adopt differential privacy will have on the States, including Alabama, which rely on the Bureau’s provision of accurate tabulations of population for redistricting and other purposes. But when agencies are not writing on a blank slate—which, given States’ long reliance on accurate redistricting data, the Bureau was not—they must “assess whether there were reliance interests, determine whether they were significant, and weigh any such interests against competing policy concerns.” *Dep’t of Homeland Sec. v. Regents of the Univ. of Cal.*, 140 S. Ct. 1891, 1915 (2020) (citation omitted). Yet the Bureau did not do this. True, the Bureau sought general feedback “to understand how *the public* uses decennial census data products” as it considered whether to “reduce the amount of detailed data” that is released. *See* 83 Fed. Reg. at 34,111 (emphasis added). But the Bureau specifically explained that it was “*not* seeking feedback on apportionment counts and redistricting data products.” *Id.* (emphasis added). The Bureau drastically changed the nature of the redistricting products without soliciting input from the users of those products—the States.

Not only that, but the Bureau’s explanation for why differential privacy is needed runs counter to the evidence and the Secretary’s statutory mandates. For instance, the Bureau claims

that the confidentiality requirements of 13 U.S.C. § 9 dictate the use of differential privacy.⁶¹ But the Bureau has not shown that traditional disclosure avoidance methods like data swapping are insufficient to meet that need. In reality, those methods have worked extremely well. *See* Ex. 6, Bryan Expert Report at 41 (noting that “w[hile the threat of a confidentiality breach is always present, the Census Bureau has not reported any such breaches from prior census data releases”). And importantly, the other methods of disclosure avoidance allow the Secretary to meet her statutory mandate under subsection 141(c) to deliver accurate tabulations of population to the States—which differential privacy will prevent her from doing.

Even assuming that swapping and past disclosure avoidance methods present some level of privacy risk, the Bureau has not explained how the privacy risk under differential privacy will compare. In other words, the Bureau has not shown that differential privacy works better than the disclosure avoidance methods that were used in 2010. But such a determination is needed for the Bureau to make a rational decision about its adoption. And regardless, even if the Bureau did show that differential privacy works better than traditional disclosure avoidance methods, differential privacy cannot eliminate all risks to privacy without making the data completely worthless. Which means that differential privacy and past practices are, at most, simply in different places on the same sliding scale under 13 U.S.C. § 9. Yet the Bureau has also not explained why § 9 would be violated if it chooses the privacy risk associated with past disclosure avoidance methods but will not be violated if it adopts differential privacy. That, too, demonstrates an arbitrary decisionmaking process. What is clear, though, is that past methods do not violate the Secretary’s obligations to report accurate tabulations of population under subsection 141(c), whereas differential privacy will result in such a violation.

⁶¹ *See* Abowd, *The U.S. Census Bureau Adopts Differential Privacy*, *supra*, at 9.

Moreover, while the Census Bureau adopted differential privacy because of concerns caused by big data, nothing that the Census Bureau publishes *by itself* can even theoretically lead to the disclosure of confidential information if the Bureau applied the disclosure avoidance methods it has used in the past. Confidentiality is only implicated—in theory—when a recipient of census data uses the information published by the Bureau *together with* other datasets. *See* Ruggles et al., *supra*, at 405 (“Reconstructing microdata from tabular data does not by itself allow identification of respondents; to determine who the individuals actually are, one would then have to match their characteristics to an external identified database (including, for example, names or Social Security numbers) in a conventional re-identification attack.”); *see also* Ex. 5, Bryan Expert Report at 59 (explaining that reidentification can occur “when public data are linked to other external data sources” (citation omitted)). Even then, no person outside the Census Bureau attempting to reconstruct the Census Bureau’s dataset can know if she was successful unless she has access to the confidential Hundred-percent Detail File—which no one outside the Bureau does. In any event, if the Census Bureau is concerned about publishing too much information that can be “linked” to other datasets, it could simply publish less information. Reducing the cross tabulations of data tables or reducing the breakdowns of data tables into fewer cells would both serve this purpose. Reducing the amount of information released in other census datasets would, too. The Bureau has not explained why it chose a method that would harm the States, the people, and violate Congress’s command when many other options are available to it that do no such harms.

In sum, when adopting differential privacy the Bureau did not consider Plaintiffs’ reliance interests, misinterpreted the confidentiality requirements of § 9, failed to explain why past methods of disclosure avoidance are inadequate, and adopted a new statistical method for protecting privacy that would ensure that the Secretary would violate her obligations under subsection 141(c). That

decision was arbitrary and capricious, constitutes an abuse of discretion, and therefore violates the APA.

3. *The February 12 Decision Violates the Census Act.*

Turning now to the Census Bureau's decision to delay releasing the tabulations of population beyond the March 31 deadline, that decision was also unlawful under the Census Act. The violation is simple and clean cut.

First, subsection 141(c) imposes a mandatory deadline on the Secretary to deliver the redistricting tabulations of population to the States by March 31. It states:

Tabulations of population for the areas identified in any [State] plan approved by the Secretary shall be completed by him as expeditiously as possible after the decennial census date and reported to the Governor of the State involved and to the officers or public bodies having responsibility for legislative apportionment or districting of such State, except that such tabulations of population of each State requesting a tabulation plan, and basic tabulations of population of each other State, *shall, in any event, be completed, reported, and transmitted to each respective State within one year after the decennial census date.*

13 U.S.C. § 141(c) (emphasis added). The Act defines “decennial census date” as April 1 of the year in which the decennial census takes place. *Id.* § 141(a). The one-year window from April 1 closes March 31 of the following year. For the 2020 decennial census, then, the Secretary “shall” transmit the tabulations of populations for redistricting by March 31, 2021.

Second, on February 12, 2021, the Census Bureau announced that “it will deliver the Public Law 94-171 redistricting data to all states by Sept. 30, 2021”—not by March 31. Ex. 7, February 12 Press Release at 1.

Ergo, the Secretary will violate subsection 141(c).

The deadline set by Congress is mandatory. According to the statute, the Secretary “shall, in any event” report the tabulations of population to the States by March 31. 13 U.S.C. § 141(c). Congress uses the word “‘shall’ to impose discretionless obligations.” *Lopez v. Davis*, 531 U.S.

230, 241 (2001). Indeed, “[t]he first sign that the statute imposed an obligation is its mandatory language: ‘shall.’ ‘Unlike the word “may,” which implies discretion, the word “shall” usually connotes a requirement.’” *Maine Cmty. Health Options v. United States*, 140 S. Ct. 1308, 1320, (2020) (quoting *Kingdomware Technologies, Inc. v. United States*, 136 S. Ct. 1969, 1977 (2016)).

Congress did not lift the requirement. The Bureau recognized the mandatory nature of the deadline and asked for an extension, but Congress did not provide one. *See Ross v. Nat’l Urban League*, 141 S. Ct. 18, 19 (2020) (Sotomayor, J., dissenting from grant of stay). And interestingly, the extension the Bureau asked for was to deliver redistricting data “to the states no later than July 31, 2021.” *See* U.S. Census Bureau, *U.S. Department of Commerce Secretary Wilbur Ross and U.S. Census Bureau Director Steven Dillingham Statement on 2020 Census Operational Adjustments Due to COVID-19* (Apr. 13, 2020), <https://perma.cc/C2RG-UXBX>. When Congress failed to act on that request, the Bureau purported to grant the extension itself—plus an extra two months.

There is no opt-out provision. While the Bureau claims generally that “COVID-19 delayed census operations significantly,” Ex. 8, Whitehorne Statement, the reason for violating the statute is legally irrelevant. Congress required the Secretary to complete, report, and transmit the State-redistricting numbers within one year “*in any event*.” 13 U.S.C. § 141(c) (emphasis added). There is no reason to think Congress did not mean what it wrote, or that it was unaware that there could be difficulties down the line. *See, e.g., Conn. Nat’l Bank v. Germain*, 503 U.S. 249, 253-54 (1992) (“We have stated time and again that courts must presume that a legislature says in a statute what it means and means in a statute what it says there.”). COVID-19 cannot excuse the Bureau’s failure to comply with the plain text of the Act.

4. *The February 12 Decision Violates the Administrative Procedure Act.*

The February 12 Decision also violates the APA because it is “not in accordance with law” and is “in excess of statutory jurisdiction, authority, or limitations, or short of statutory right.” 5 U.S.C. § 706(2)(A), (B). It is also arbitrary and capricious. *Id.* § 706(2)(A).

The February 12 Decision constitutes final agency action. The question before the Bureau was whether to comply with the statutory deadline of March 31. The Bureau’s determined that it would not. By its own terms, the Decision memorializes a “final[] ... schedule for the redistricting data,” by which the Bureau “will deliver the redistricting data to all states by Sept. 30, 2021.” Ex. 8, Whitehorne Statement. There is nothing left for the Bureau to decide as to whether it will meet the March 31 deadline. The decision “mark[ing] the consummation of the agency’s decisionmaking progress” is that the Bureau will ignore Congress’s command. *Hawkes Co.*, 136 S. Ct. at 1813 (quoting *Bennett*, 520 U.S. at 177-78).

The “legal consequences” of that decision “will flow” directly to Alabama. *Id.* (quoting *Bennett*, 520 U.S. at 178). The decision guarantees that the Secretary will violate the State’s right under subsection 141(c) to receive the redistricting data it is entitled to by March 31. That, in turn, will affect the State’s redistricting plan and cause all sorts of problems for the 2022 election cycle—as explained below when discussing the irreparable harm Plaintiffs will suffer absent an injunction.

For the same reasons the February 12 Decision violates the Census Act, it also violates the APA. The Decision is “not in accordance with law” and is “in excess of statutory jurisdiction, authority, or limitations, or short of statutory right,” 5 U.S.C. § 706(2)(A), (C), because it violates the March 31, 2021 deadline set by Congress. The Secretary may not unilaterally amend—let alone defy—federal law. *See* U.S. Const., art. I, § 7; *Merck Sharp & Dohme Corp. v. Albrecht*, 139 S. Ct. 1668, 1679 (2019) (“[F]or an agency literally has no power to act, let alone pre-empt the validly

enacted legislation of a sovereign State, unless and until Congress confers power upon it.” (quoting *New York v. FERC*, 535 U. S. 1, 18 (2002)).

The February 12 Decision is arbitrary and capricious as well. The Bureau knows that States rely on accurate, timely census data for redistricting. *See* Ex. 8, Whitehorne Statement (recognizing that “[s]ome states have statutory or even state constitutional deadlines and processes that they will have to address due to this delay”). So the Bureau could have considered those reliance interested and attempted to deliver apportionment and redistricting numbers to different States “on a flow basis”—as it has in the past—prioritizing the States whose laws rely on timely receipt of census data. Instead, the Bureau adopted an all-at-once approach without explaining why it was departing from past practice. *Id.* This evinces a disregard of the significant reliance interests States have in the timely production of redistricting data, as well as a lack of a well-thought-out response to the problems created by the Bureau’s own delay. *See Dep’t of Homeland Sec.*, 140 S. Ct. at 1915.

Not only that, but the Bureau “offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Motor Vehicles Mfrs. Ass’n*, 463 U.S. at 43. Of course, it is understandable that the COVID-19 pandemic caused some of the delay experienced by the Census Bureau this past year. But it does not explain why the Bureau has given itself until the end of September to report the tabulations of population to the States.

The Bureau initially set July 31, 2020, as its deadline for concluding the counting portion of the 2020 census (including its non-response follow up operations); and then, due to the pandemic, pushed the deadline back to September 30, 2020.⁶² With both deadlines, the Bureau planned to report apportionment data by December 31, 2020. The Bureau concluded its count on October 15, 2020, two-and-a-half months past its original deadline and 15 days past its adjusted deadline. *See 2020 Census Response Rate Update: 99.98% Complete Nationwide*, U.S. CENSUS BUREAU (Oct. 19, 2020), <https://perma.cc/MFE3-8PDP>. The two-and-a-half month delay past the original July 31 deadline cannot possibly justify a four-month extension for apportionment numbers and a six-month extension for redistricting numbers.

Indeed, the Bureau's unprecedented and unexplained delay is all the less justifiable considering the 2020 census's remarkable success and improvement over its 2010 predecessor. In the Bureau's words: "In all states, the District of Columbia and the Commonwealth of Puerto Rico, more than 99% of all addresses have been accounted for, and in all but one state that number tops 99.9%.... [W]e had not expected to exceed the 2010 self-response rate. ... The Census Bureau was able to meet and overcome many challenges because of our innovative design and use of new technology."⁶³

Furthermore, the Census Bureau recently stated it would finalize the Decennial Response File 2 ("DRF2") numbers over the last weekend of February. *See Joint Case Management Statement, Nat'l Urban League v. Coggins*, No. 5:20-CV-05799-LHK (N.D. Cal. Feb. 24, 2021), ECF

⁶² Albert E. Fontenot, 2020 Census Update, Presentation to the Census Scientific Advisory Committee March 18, 2021 at 2, <https://perma.cc/A4UM-FHCU>.

⁶³ *See* U.S. Census Bureau, *2020 Census Response Rate Update: 99.98% Complete Nationwide* (Oct. 19, 2020), <https://perma.cc/MFE3-8PDP>. *see also* U.S. Census Bureau, *Adapting Field Operations To Meet Unprecedented Challenges* (Mar. 1, 2021), <https://perma.cc/AU4S-9GXC> ("As a result of all these extraordinary efforts, we were able to account for over 99.9% of U.S. addresses in the 2020 Census.").

No. 469, at 3. This means that the Census Bureau has only the Census Unedited File (“CUF”) to complete before reviewing and delivering the final apportionment numbers to the President.⁶⁴ That process typically takes about a month.⁶⁵ And the final counting prior to presentment generally runs on an even shorter timeline.⁶⁶ Thus, waiting almost seven additional months for redistricting numbers implies unusually long CUF and final-review processes, which the Bureau has failed to explain.

In the same vein, the Census Act codifies the expectation that the Bureau can (and will) produce redistricting data from apportionment data within a three-month timeframe. *See* 13 U.S.C. §§ 141(b) (setting nine-month deadline from census date for “tabulation of total population”); 141(c) (setting one-year deadline from census date to “complete[], report[], and transmit[]” tabulations of population for redistricting “to each respective State”). Yet the Bureau granted itself *five* months with which to produce redistricting data following the long-delayed delivery of the apportionment data. *See* Ex. 7, February 12 Press Release (stating that the state-population count will be delivered by April 30 and the redistricting data will be delivered by September 30). And again, the Bureau failed to explain this glaring discrepancy.

It appears that one explanation is the Bureau’s difficulty in implementing differential privacy. Given the existing timelines for implementing differential privacy—the next set of demonstration data will be released by April 30, 2021, and the privacy loss budget is to be set this June—it is likely that the application of differential privacy is contributing to the delay.⁶⁷ But the Bureau

⁶⁴ *See* U.S. Census Bureau, *Census Data Processing 101* (Feb. 11, 2020), <https://perma.cc/E8JK-4S9V>.

⁶⁵ *See* Letter from JASON to U.S. Census Bureau at 5, fig. 1 (Feb. 8, 2021), <https://perma.cc/D3RF-TEBA>.

⁶⁶ *Id.*

⁶⁷ *See* U.S. Census Bureau, *2020 Disclosure Avoidance System Updates* (Feb. 23, 2021), <https://perma.cc/D6VJ-N5Z3>.

may not justify its unlawful delay by citing difficulties with differential privacy. For starters, the Bureau decided to implement differential privacy on its own accord. The Bureau may not, therefore, point to delays resulting from its own initiatives as a legal justification for deliberately ignoring a statutory deadline. Then there's the problem that differential privacy is illegal when applied for redistricting purposes, thus doubly dooming its validity as an excuse for the Bureau's delay in producing redistricting data. The Bureau's unexplained, unreasoned, and unlawful decision to delay the release of the tabulations of population until September 30 is arbitrary and capricious and should be set aside.

B. Without an Injunction, Plaintiffs Will Be Irreparably Harmed.

In addition to being unlawful, Defendants' decisions to implement differential privacy and to delay releasing the tabulations of population will irreparably harm Plaintiffs.

1. The Inaccurate Population Tabulations Will Irreparably Harm Plaintiffs.

Defendants' application of differential privacy will violate Plaintiffs' statutory and constitutional rights, make lawful redistricting difficult, subject the State to the risk of litigation and liability, and likely cost communities in Alabama federal funding and affect the allocation of State educational funding. These harms and others will follow swiftly on the heels of the Bureau's release of skewed data for at least three reasons.

First, the State needs to begin redistricting promptly and thus will need to make use of the Bureau's second-rate data upon its release. There won't be time to wait to see how this Court or the Supreme Court resolves this case.

Second, if Plaintiffs prevail after the skewed data is released and receive accurate data, they will face at least one of two harms. They will either need to redistrict again with the best available data or face certain litigation over the lines they already drew.

And, third, depending on how the Bureau implements differential privacy, there is a risk that once the skewed population tabulations are delivered, the Bureau will be unable to release the unskewed tabulations without causing serious privacy problems from releasing two datasets that could be compared with each other. Defendants might then claim that Plaintiffs' harms are no longer redressable—and they could be right.

Turning to the harms themselves, the Alabama Legislature has relied on the Census Bureau for decades to provide accurate information that can be used for redistricting. But under differential privacy, the Alabama Legislature will not know the actual number of people, or accurate demographic makeup, in any census geography below the level of the State as a whole. As explained above, that will make it difficult for the Legislature to draw legislative and congressional districts with near-equal populations, as the Constitution requires. It will also impede the State's interest in drawing legislative and congressional districts that protect minority voting rights. The application of differential privacy, for instance, will obscure whether minority populations are packed into districts where their voting strength is diluted or spread across districts where they may not be able to elect the candidate of their choice.

These difficulties make litigation against the State especially likely. *See* Jeff Zalesin, *Beyond the Adjustment Wars: Dealing With Uncertainty and Bias in Redistricting Data*, 130 Yale L.J. Forum 186, 187-89 (2020) (noting that “the Bureau’s adoption of a new system for protecting respondents’ privacy by algorithmically adding error to published data” is one reason “the 2020 Census [is] at risk of being the least accurate census in living memory,” and urging courts to “strike down maps as unconstitutionally malapportioned” even when “the Census Bureau’s official data products in isolation would point to the opposite result”). Liability under the Voting Rights Act is especially worrisome because the legal and factual tests for a finding of liability turn, in part, on

past findings of liability. If Alabama is held liable because it was forced by the Census Bureau to use data tainted by differential privacy, it will be even *more* likely in future suits to be found liable under Section 2. Findings of liability under the Voting Rights Act can also potentially subject Alabama, and its subordinate governmental units, to the “bail-in” provisions of Section 3(c), which would subject the relevant jurisdiction to continual judicial monitoring similar to the pre-clearance provisions of Section 5.

Then there is the financial harm of Defendants’ actions. Alabama communities stand to lose federal funding if the population tabulations are inaccurate because numerous federal programs rely upon the population figures⁶⁸ collected and reported in the decennial census to distribute funds to state and local governments. In Fiscal Year 2017, for example, 176 federal programs relied on local-level census-derived data to distribute federal funding. Roughly a hundred programs relied on state-level census-derived data. And 39 programs relied on both state and local-level census-derived data.⁶⁹ “Forty percent of the[se] programs use[d] census-derived data to determine the geographic areas and households eligible to receive the program’s funding.”⁶⁹

Census-derived eligibility or allocation criteria used by federal programs to distribute funding include an area’s population density (such as rural or urban designation) and its population size (above or below a specified level); the number of persons in rural areas and persons in overcrowded housing; and the category of the geographic area—whether it is large metro, metro, micro, rural, or isolated county.⁷⁰ And the two primary determinants of how census-guided federal spending is

⁶⁸ Andrew Reamer, *Counting for Dollars 2020: The Role of the Decennial Census in the Geographic Distribution of Federal Funds*, Brief 7: Comprehensive Accounting of Census-Guided Federal Spending: Part A: Nationwide Analysis (FY2017), <https://perma.cc/WQT9-DBYQ>.

⁶⁹ *Id.*

⁷⁰ Reamer, Brief 7: Comprehensive Accounting of Census-Guided Federal Spending: Part A, *supra*.

allocated among States are (1) poverty rate and (2) percentage of the population living in a rural area.⁷¹ Differential privacy will affect the application of every one of these factors. As Representative Aderholt attests, “should differential privacy be implemented, a large number of communities will receive a larger portion of federal funding than intended and the reciprocal number of communities will receive a smaller portion of federal funding than intended.” Ex. 11, Aderholt Declaration at 4. “Differential privacy will therefore make any funding by act of Congress that ties funding to population at the sub-state level unreliable and suspect.” *Id.*

In fiscal year 2017, Alabama received approximately \$13 billion through 55 federal spending programs guided by data derived from the 2010 census.⁷² This included approximately \$12 billion in federal financial assistance programs such as Medicaid, student loans, Supplemental Nutrition Assistant Program benefits, and Medicare Part B; \$171 million in federal tax expenditures such as the low income housing tax credit and the new markets tax credit; and \$250 million in federal procurement programs.⁷³ Yet these expenditures are likely to go to the wrong place in the future because “differential privacy is not applied equally across the entire population.” *See* Ex. 5, Barber Expert Report at 13. Rather, “[p]laces with fewer people (rural locations) and areas with smaller, distinctive populations (minority communities) are more likely to be impacted since these are the places where identification is more concerning, and the application of statistical noise is more likely to have a larger impact on the summary statistics derived from altered data.” *Id.* at 13-14; *see also id.* at 14 (“Infusing noise in the data, in comparison to the current disclosure avoidance system, will produce inaccurate patterns of demographic change with higher levels of error found

⁷¹ *See* Andrew Reamer, *Counting for Dollars 2020*, Brief 7: Comprehensive Accounting of Census-Guided Federal Spending: Part B: State Estimates (FY2017), <https://perma.cc/8PWU-TM57>.

⁷² Reamer, *Counting for Dollars 2020: Alabama*, *supra*.

⁷³ *Id.*

in the calculations for non-Hispanic blacks and Hispanics.” (citation omitted)). Thus, “[t]he Census Bureau’s use of differential privacy will result in an inappropriate distribution of funds because the population totals used to assign those funds will be purposely inaccurate.” Ex. 11, Aderholt Declaration at 4.

The differences caused by differential privacy are especially easy to see in the education context. In Fiscal Year 2016, Alabama received approximately \$341 million from four different federal programs that used census-related data to allocate funding for young children. *See* Ex. 6 Bryan Expert Report at 14. Yet “on average across the unified school district of Alabama, there was nearly a 10 percent error in the number of young children ages 0 to 4,” and a “mean absolute percent error for ages 5 to 17 [of] 2.8 percent.” *Id.* at 16. Importantly, however, these averages affected different school districts differently. For instance:

[T]he 2010 Census reported that Clarke County School District had 1,295 children ages 0 to 4, but after [differential privacy] was applied, the number of children ages 0 to 4 was decreased to only 885. This is a reduction of 410 children, or 32 percent.

According to the National Center for Education Statistics, the average class size for public schools in Alabama is about 20 students. The error of 410 students for Clarke County School Districts amounts to about twenty classrooms. If 410 unexpected students show up in the Clarke County School Districts, that will lead to crowded classrooms. On the other hand, building and staffing 20 classrooms that are unneeded because of inaccurate census data would be problematic. That is why getting accurate data on the school-age population is so important.

Id. at 16-17.

So, too, for school-aged populations. The 2010 census reported that 9,548 children ages 5 to 17 lived in the Madison City School District. After differential privacy was applied, “the figure was changed to 8,774.” *Id.* at 17. “This is a decrease of 776, or 9.0 percent.” *Id.* Based on the demonstration data, it is clear that “the level of error introduced [by differential privacy] will result

in a high level of errors for many unified school districts in Alabama for both the pre-school population (ages 0 to 4) and the school-age population (ages 5 to 17).” *Id.* These discrepancies will cause federal dollars to be spent in areas where they are less needed and withheld from the areas that need them most.

These examples are easy to find because accurate census numbers affect so much. Yet while financial harms can usually be remedied (though the other harms suffered by Plaintiffs cannot), these will not be if the Bureau cannot deliver actual tabulations after it releases the skewed data without causing significant privacy concerns. In that case, “we will *never* be able to assess the relative accuracy of the [differential privacy] system used for the 20[20] census by comparing it to the results of a headcount,” *U.S. House of Representatives*, 525 U.S. at 349 (Scalia, J., concurring), for the results of the headcount will never be released. *Cf.* Pub. L. No. 105-119, § 209(a)(8) (recognizing that it is often “impracticable for the States to obtain, and the courts of the United States to provide, meaningful relief” after the census process is complete). And again, if it turns out at the end of this litigation that both tabulations can be released, the State will then be forced to scrap the maps it drew based on the faulty data and begin redistricting again—or face lawsuits for relying on bad data. Either way, Plaintiffs will be irreparably harmed by the application of differential privacy unless this Court enters an injunction.

2. *The Delayed Population Tabulations Will Irreparably Harm Plaintiffs.*

Defendants’ delay in producing the population tabulations will also irreparably harm Plaintiffs. When the federal government prevents a State from applying state law, the State suffers an irreparable harm. *See Maryland v. King*, 133 S. Ct. 1, 3 (2012) (Roberts, C.J., in chambers). The Census Bureau’s February 12 Decision hamstring Alabama’s ability to meet its constitutional obligations and to run its 2022 statewide elections effectively or in accordance with State law. Therefore, it irreparably harms the State.

As explained above, delivering redistricting data on September 30 will also likely leave Alabama's Boards of Registrars at most only four months for reassigning their respective counties' registered voters to their correct precincts and districts. But four months will likely not be enough. The reassignments typically take up to six months because most counties perform the reassignment process manually. *See* Ex. 3, Helms Declaration at 2-3. Requiring the Boards of Registrars to complete the reassignment process on such an abbreviated schedule will result in some or all of the following: "(1) thousands of dollars in unexpected costs incurred by the Boards of Registrars to contract with an entity to assist them in the process; (2) a rushed reassignment process, potentially increasing the likelihood of mistaken reassignments; and (3) less time to notify voters about changes, potentially increasing the likelihood of voter, political party, and candidate confusion." *Id.* at 3-4.

Finally, the Bureau's delay harms candidates like Representative Aderholt by effectively reducing by at least four months the amount of time they can spend campaigning and fundraising. *See* Ex. 3, Helms Declaration at 4-5; Ex. 11, Aderholt Declaration at 5; Ala. Code § 17-5-7(b)(2). As Representative Aderholt puts it: "The Census Bureau's delays have a cascading effect on my bid for reelection. The problem is all the more acute in Alabama's case as, based on estimates, Alabama may lose a congressional district[,] ... which w[ould] result in a myriad of additional complications when the new districts are redrawn. However, in any event, the census delays will result in less time for me to educate voters as to my policy positions, campaign amongst the voters, and introduce myself to any new voters." Ex. 11, Aderholt Declaration at 5.

C. The Benefits of an Injunction Far Outweigh the Costs.

The next factor is whether "the threatened injury to the movant outweighs whatever damage the proposed injunction may cause the opposing part[ies]." *Siegel*, 234 F.3d 1163 at 1176. It does.

Plaintiffs request an injunction that does two things: enjoin Defendants from applying differential privacy to skew the tabulations of population given to the States, and enjoin Defendants from delaying the release of those tabulations beyond the statutory deadline. Because the application of differential privacy is likely contributing to the delay, this relief works in tandem to allow Defendants to meet their twin obligations under subsection 141(c) to provide the States with accurate *and* timely tabulations of population.

To be sure, such relief will cause Defendants to change course. But that Defendants will be forced to stop violating the law is hardly reason to avoid issuing an injunction. And in any event, the requested relief is reasonable. The Bureau has other methods of disclosure avoidance at its disposal. Applying them here will not be overly costly or time-consuming. In fact, it is likely to be far quicker than implementing differential privacy would be. “The Census Bureau has this methodology ‘on the shelf’ and should have immediate access to sufficient human capital in the form of staff and contract experience required to use it in a short period of time.” Ex. 6, Bryan Expert Report at 41.

D. An Injunction Will Serve the Public Interest.

Finally, an injunction will serve the public interest. Federal law requires the Secretary to provide both accurate and timely tabulations of population to the States to use for redistricting. The Secretary is shirking both responsibilities. The effect of that dereliction is substantial and widespread. Voters face a substantial risk that their votes will be diluted as States are forced to rely on false numbers to redistrict; States themselves are deprived of tabulations they are entitled to; elections will likely be upended; and federal and state governments risk allocating resources to the wrong places.

Underlying all those harms is this: Absent an injunction, States—already short on time because of Defendants’ delay—will begin redistricting using the faulty numbers as soon as they

come out. If Plaintiffs ultimately prevail in this litigation, the actual tabulations may eventually be released. If they are, States will be forced to throw away the maps they just drew and start again using the newly available “best population data.” *Karcher*, 462 U.S. at 738 (citation omitted). If they are not, perhaps because releasing the accurate tabulations along with their skewed versions will present real privacy risks, then all the States will be left with is the Bureau’s word that the deviations in the final tabulations were not as bad as they were in the demonstration data. There will be no way to confirm that, of course, and no way to know that the numbers were not improperly manipulated—or will not be improperly manipulated in the future. *Cf. U.S. House of Representatives*, 525 U.S. at 348-49 (Scalia, J., concurring in part) (warning that the application of unlawful statistical methods to census data carries with it the “possibility of partisan manipulation” and the “power to distort representation”). Regardless, then, an injunction should issue to prevent either form of harm.

II. In The Alternative, The Court Should Issue A Writ Of Mandamus.

If the Court determines that it cannot provide the needed relief through an injunction, it should provide partial relief through a writ of mandamus requiring the Secretary to meet the statutory deadline of March 31 to deliver the tabulations of populations for redistricting to the States.

“The district courts shall have original jurisdiction of any action in the nature of mandamus to compel an officer or employee of the United States or any agency thereof to perform a duty owed to the plaintiff.” 28 U.S.C. § 1361. A court may grant a writ of mandamus to a plaintiff who has “exhausted all other avenues of relief” for enforcing “a clear nondiscretionary duty” that the defendant owes to it, *Heckler v. Ringer*, 466 U.S. 602, 616 (1984), and if issuance of the writ is “appropriate under the circumstances,” *Cheney v. U.S. Dist. Ct.*, 542 U.S. 367, 381 (2004).

Here, if the Court determines the State is not entitled to an injunction, then the State has no other avenue of relief to keep the Secretary from breaching a clear nondiscretionary duty. The

Secretary's failure to act in a timely fashion will cause the irreparable harms discussed above, and issuance of "the writ is appropriate under the circumstances." *Cheney*, 542 U.S. at 381. Therefore, if the Court determines that the State is unable to obtain injunctive relief, the Court should issue a writ of mandamus requiring the Secretary to comply with the March 31 deadline imposed by Congress.

CONCLUSION

The Court should grant injunctive relief or, in the alternative, issue a writ of mandamus.

Dated: March 11, 2021

STEVE MARSHALL
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/s/ 

Edmund G. LaCour Jr. (ASB-9182-U81L)
Solicitor General

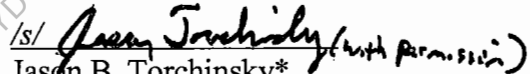
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**pro hac vice application to be filed*

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CERTIFICATE OF SERVICE

I hereby certify that on March 11, 2021, I hand-filed the foregoing with the Clerk of the Court. I further certify that I have on this date mailed a copy of the foregoing to the following parties:

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I further certify that I served a copy of this motion by e-mail upon:

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