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

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.	No. 3:21-CV-211-RAH-ECM-KCN

PLAINTIFFS' REPLY IN SUPPORT OF COMBINED MOTION FOR A PRELIMINARY INJUNCTION AND PETITION FOR A WRIT OF MANDAMUS

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> *We are not a think tank, a university, or a for profit business chasing after deep pocketed clients, we are a service to the country.… We must ensure we are providing data that can be used for the needs of all communities. I will still promote and defend what we end up producing. However, I am trying to underscore the point that we have all heard[,] and that you and I have heard directly from our nation's voting rights enforcement agents in the Voting Section at DoJ, that accurate data is critical especially for small areas. The data must reflect what is seen in the real world because it is used to change how the real world interacts with itself and with its government. This does not mean I do not understand our obligation to protect the public's data,* ***it just appears that in our zeal to protect the data we are harming the very same people we are protecting***.
>
> Ex. 1, September 30, 2020 Email from James Whitehorne, Chief of the Redistricting & Voting Rights Data Office at the U.S. Census Bureau, to John Abowd, Associate Director and Chief Scientist at the U.S. Census Bureau

"Harming the very same people we are protecting" is an apt description of the Census Bureau's use of differential privacy to intentionally inject error into the census data States need to redistrict. In preparation for redistricting, the Secretary of Commerce and Alabama agreed on "a plan identifying the geographic areas for which specific tabulations of population [within Alabama] are desired." 13 U.S.C. § 141(c). And the Secretary's duty to provide "tabulations of population" for each census block in the State requires her to provide the actual numbers of people Defendants counted during the census — not some other numbers generated by the Bureau. Don't just take our word for it. As late as September 2020, the Bureau stated that it was "*legally mandated*" to provide "*error-free disclosure of block-level population totals under Public Law 94*."[1]

What changed? Dr. John Abowd—the Bureau's Chief Scientist and chief proponent of differential privacy — determined that if accurate block-level population totals were reported to the

[1] *See* Ex. 2, U.S. Census Bureau, Statistical Expertise & General Research Topics 11 (Sept. 2020), https://perma.cc/Z6JK-RLY5 (emphasis added); *see also* Ex. 3, 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 (Continued) (Sept. 15, 2017), https://perma.cc/H325-562D (referencing 2000 DOJ agreement to hold block population, block voting age population, and block householders and vacancies counties exact for State redistricting tabulations).

States, his preferred method of disclosure avoidance would "break."[2] The solution? Break the law instead. As Abowd put it, no more "garbage about being legally required to hold certain populations invariant."[3]

Having disposed of that "garbage," Defendants now present a radical new reading of Section 141(c) by which States are no longer entitled to accurate tabulations of population—only tabulations that "represent the sub-state population" in some way, shape, or form that suits Defendants' fancy. Resp., Doc. 41 at 32.[4] When Plaintiffs asked in their motion for a preliminary injunction whether "assigning every Alabamian to Birmingham would violate Alabama's right under subsection 141(c) to tabulations of population for specific geographic areas," doc. 3 at 44, the question was meant to be rhetorical. They didn't realize this was actually Defendants' position.

The absurdities don't stop there. Defendants claim that Alabama isn't harmed by the Bureau's delay or its inaccurate tabulations because the State could always conduct its own census. Resp., Doc. 41 at 35-36. (Elsewhere they provide important qualifiers: The Department of Justice will use the *Census Bureau*'s data "for enforcement of the Voting Rights Act," and conducting a census costs billions of dollars. *Id.* at 5, 22. No harm indeed.) They assert that the Bureau's decision to blow past the March 31 deadline for delivering the tabulations is not final agency action, *id.* at 69—even though the Bureau did in fact blow past the March 31 deadline. And they assert that the final tabulations will be free from "improper or partisan manipulation," Resp., doc. 41 at 15, even as they boast that the accuracy of certain racial or ethnic groups will take priority over the accuracy of other groups when it comes to the zero-sum allocation of the privacy loss budget, Abowd Decl., doc. 41-1 at 35. But Congress required accurate tabulations drawn from the actual

[2] *See* Ex. 4, Email from John Abowd to Ron Jarmin (Jul. 7, 2020).
[3] *See* Ex. 5, Email from John Abowd to Gary Benedetto (Jul. 28, 2020).
[4] Citations are to the ECF-stamped page numbers.

enumeration precisely to guard against the dangers of such manipulation. *See generally* 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). Indeed, the Census Bureau's "tuning" of the top-down algorithm through "large numbers of TDA runs"[5] calls to mind Justice Kagan's concern about the appearance of manipulation in the redistricting context: "While bygone mapmakers may have drafted three or four alternative districting plans, today's mapmakers can generate thousands of possibilities at the touch of a key—and then choose the one giving their party maximum advantage…." *Rucho v. Common Cause*, 139 S. Ct. 2484, 2513 (2019) (Kagan, J., dissenting).

It almost seems like that's the entire point, because the Bureau's stated reason for implementing differential privacy is so spectacularly flawed. As Dr. Steven Ruggles, the developer of the world's largest census database and director of the Institute for Social Research and Data Innovation at the University of Minnesota (and a former member of the Census Scientific Advisory Committee) shows, the problem differential privacy was allegedly meant to fix does not exist. *See* Ex. 6, Ruggles Expert Report at 5-11. For instance, most "matches" in the Bureau's database reconstruction simulation appear to have occurred purely by chance, or at similar rates. *Id.* at 7-8. In fact, Ruggles concludes, "the much-vaunted database reconstruction technique does not perform significantly better than a crude random number generator combined with a simple assignment rule for race and ethnicity." *Id.* at 8. As for the bottom-line number—the Bureau's purported re-identification of 17% of census respondents—it seems a bit ridiculous to conclude that guessing a person's race or ethnicity correctly 1 out of 6 times constitutes "re-identification" in any real sense

[5] U.S. Census Bureau, *Meeting Redistricting Data Requirements: Accuracy Targets* (Apr. 7, 2021), https://perma.cc/Y3LP-NVR7.

of the word. Were it otherwise, the Census Bureau has been flagrantly violating its privacy obligations for nearly a century. Moreover, even that 17% number is too generous, for as Defendant Ron Jarmin noted in 2019, the outside attacker couldn't even be sure she was right that often without "access to confidential internal Census Bureau information."[6]

On the other hand, the results of unnecessarily skewing population numbers and other characteristics will harm the Plaintiffs. To be sure, the Bureau asserts that as it races to complete its novel system (months behind schedule), it will likely address many of the anomalies that have appeared in its previous four sample datasets, in part by increasing its privacy loss budget to make the final tabulations less inaccurate. But the final tabulations will still be intentionally skewed, and there will still be no way for Alabama to tell how many people live where based on the actual enumeration. That will cause significant problems when it comes to using the flawed data to "change how the real world interacts with itself and with its government" (as Whitehorne put it),[7] such as drawing Congressional and legislative districts that comply with one-person, one-vote and the Voting Rights Act. And by increasing the privacy loss budget, the final privacy risk (as Defendants define it) under differential privacy will likely be similar to—or worse than—the privacy risk (again, as Defendants define it) present when only traditional disclosure avoidance methods are used. *See* Ex. 6, Ruggles Expert Report at 16-19. In other words, because the final tabulations will still be intentionally and unlawfully skewed, these changes by the Bureau will simply mean that Defendants are now sure to violate *both* their accuracy obligation under 13 U.S.C. § 141(c) *and* their privacy obligations under 13 U.S.C. §§ 8-9 (as Defendants misinterpret them) to protect every single characteristic against an all-knowing theoretical adversary. Worse still, unlike with

[6] Ex. 7, Ron Jarmin, U.S. Census Bureau, *Census Bureau Adopts Cutting Edge Privacy Protections for 2020 Census* (Feb. 15, 2019), https://perma.cc/54R7-YJQS.
[7] Ex. 1, Email from James Whitehorne to John Abowd (Sept. 30, 2020).

past methods of disclosure avoidance, differential privacy's added losses in privacy "may be trivial or they may be very risky under real world conditions" because "Differential Privacy does not distinguish" between the two. *See* Amicus Br. of Prof. Jane Bambauer, Doc. 33 at 17.

Defendants need not violate either statute. Contra Defendants' blindered reading, the privacy protections of 13 U.S.C. §§ 8 and 9 do not mandate the protection of every characteristic from the made-up threat of an attacker who knows every bit of information except for one. Not only would such a reading produce absurd results and make the Bureau's past 92 years of releases patently illegal, but it forces the Census Act into conflict with itself, simultaneously requiring and forbidding Defendants from providing accurate redistricting data to the States. Congress did no such thing. Defendants can comply with both statutory requirements, just as they have done in decades past.

As for remedy, Plaintiffs do not ask the Court to take over the decennial census. This is no programmatic attack. Rather, Plaintiffs ask for injunctive relief that stems the harm caused by two discrete actions by Defendants: delaying release of the redistricting data by five months, and altering the reported population numbers through the application of differential privacy. As discussed below, there are many ways to remedy these problems. So long as they comply with the law, *how* Defendants clean up their mess is their choice. But the Court can provide relief by ordering Defendants to hold population counts invariant at the block level and to deliver the population tabulations no later than July 31, 2021—within the three-month window contemplated by Congress between the release of the apportionment data (now April 30) and the release of the redistricting tabulations. Plaintiffs will be irreparably harmed if the Court does not do so.

ARGUMENT

I. Plaintiffs Have Standing To Sue.

"The 'irreducible constitutional minimum' of standing consists of three elements." *Spokeo, Inc. v. Robins*, 136 S. Ct. 1540, 1547 (2016) (quoting *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560 (1992)). Plaintiffs must have "(1) suffered an injury in fact, (2) that is fairly traceable to the challenged conduct of the defendant, and (3) that is likely to be redressed by a favorable judicial decision." *Id.* And because "standing is not dispensed in gross," at least one Plaintiff "must demonstrate standing for each claim he seeks to press." *Town of Chester v. Laroe Ests., Inc.*, 137 S. Ct. 1645, 1650 (2017) (citations omitted). Plaintiffs have met these requirements for both their differential privacy and their delay claims.

A. Defendants' Application of Differential Privacy Harms Plaintiffs. This Court Can Redress These Harms.

In their Complaint and preliminary injunction motion, Plaintiffs demonstrated a number of harms flowing from the Bureau's implementation of differential privacy. *See* Compl., Doc. 1 at 32-37; Mot., Doc. 3 at 40-47, 61-67. Those harms can be abated by this Court. Defendants nonetheless contend that Plaintiffs haven't suffered a single injury, that any injury Plaintiffs have experienced was not caused by Defendants, and that the Court is powerless to do anything even if Defendants are responsible for Plaintiffs' harm. Resp., Doc. 41 at 24-46. No, no, and no.

1. Differential Privacy Harms Plaintiffs.

"To establish injury in fact, a plaintiff must show that he or she suffered 'an invasion of a legally protected interest' that is 'concrete and particularized' and 'actual or imminent, not conjectural or hypothetical.'" *Spokeo*, 136 S. Ct. at 1548 (quoting *Lujan*, 504 U.S. at 560). Plaintiffs have done so here. Among other things, the Bureau's application of differential privacy: breaches the Secretary's commitment to provide Alabama with accurate tabulations of population; causes

the State to rely to its detriment on the Secretary's promise to deliver population tabulations; harms Plaintiffs' Congressionally granted informational right to receive accurate tabulations; impedes the State's sovereign interest in drawing fair and lawful legislative and congressional districts; subjects the State to near-certain litigation; unfairly distributes federal funding within and among States; creates a substantial risk that the individual Plaintiffs' voting rights will be diluted; and harms the individual Plaintiffs' right to accurate redistricting data under Section 209.

Informational Harms and Breach of Commitment. In the Census Act, Congress created a multi-year process by which States may obtain "specific tabulations of population" for the "geographic areas" desired by the State to redistrict. *See* 13 U.S.C. § 141(c). The process begins "not later than April 1 of the fourth year preceding the decennial census date," when the Secretary establishes criteria for State plans. *Id.* It continues "not later than 3 years before the decennial census date," when the State officers "having initial responsibility for the legislative apportionment or districting of each State" submit their plans to the Secretary. *Id.* And it concludes "within one year after the decennial census date," when the Secretary must transmit the redistricting tabulations "to each respective State." *Id.* Congress thus provided the participating States with an informational right to population tabulations with accurate population counts that can be used for redistricting. And in Section 209, Congress extended that right to "any resident of a State whose congressional representation or district could be changed as a result of the use of a statistical method." Pub. L. No. 105-119, § 209(d)(1)-(2). The violation of this right is an Article III harm. *See Spokeo*, 136 S. Ct. 1549-50 (citing *FEC v. Akins*, 524 U.S. 11, 20-25 (1998) (confirming that a group of voters' "inability to obtain information" that Congress had decided to make public is a sufficient injury in fact to satisfy Article III) and *Pub. Citizen v. Dep't of Just.*, 491 U.S. 440, 449 (1989) (holding that advocacy organizations' inability to obtain information subject to disclosure under

the Federal Advisory Committee Act "constitutes a sufficiently distinct injury to provide standing to sue")). Indeed, "the illegal deprivation of information" is "[a] prime example" of "the violation of a procedural right set out in a statute [that] will necessarily result in the harm that Congress was trying to prevent." *Muransky v. Godiva Chocolatier, Inc.*, 979 F.3d 917, 929-30 (11th Cir. 2020) (en banc). It "is not a 'bare' procedural violation, or one that is 'divorced from any concrete harm.'" *Id.* at 930. Because Sections 141(c) and 209 "protect[] against a lack of information," Defendants' "denial of access to" accurate redistricting data "is a concrete injury" to all Plaintiffs. *Id.*

In addition, Alabama has long relied on accurate population tabulations from the Secretary to draw its legislative and congressional districts. *See* Mot., Doc. 3 at 15-20. It did so again for this upcoming redistricting cycle. *See* Loftin Decl., Doc. 3-1 at 2-3; McClendon Decl., Doc. 3-2 at 2-3. The State submitted "a plan identifying the geographic areas for which specific tabulations of population are desired," 13 U.S.C. § 141(c), and relied on the Secretary to provide the tabulations as required by Congress. Apparently, that reliance was to the State's detriment. Now Defendants claim that Plaintiffs will not be harmed—and the Secretary's statutory duty will be fulfilled—so long as the Secretary produces some kind of data in tabular form. *See* Resp., Doc. 41 at 24. Then they resort to argument-by-gotcha and reason that because Plaintiffs referred to the inaccurate tabulations as "tabulations," Plaintiffs have "themselves prove[d] the point" that the Secretary will fulfill her statutory mandate if she produces tabulations with any data in them. *See id.* at 24 ("Plaintiffs do not dispute that the Secretary will provide to the State data in such an arranged form [as a tabulation]. Hence, Alabama will receive 'tabulations.'"); *id.* at 25 ("[Plaintiffs] admit that the tabulations that the Secretary will deliver are, in fact, 'tabulations of population.'").

This reasoning proves a bit too much. By reading out the word "population" in "tabulation[s] of population," Defendants seem to contend that the Census Bureau really could "assign[]

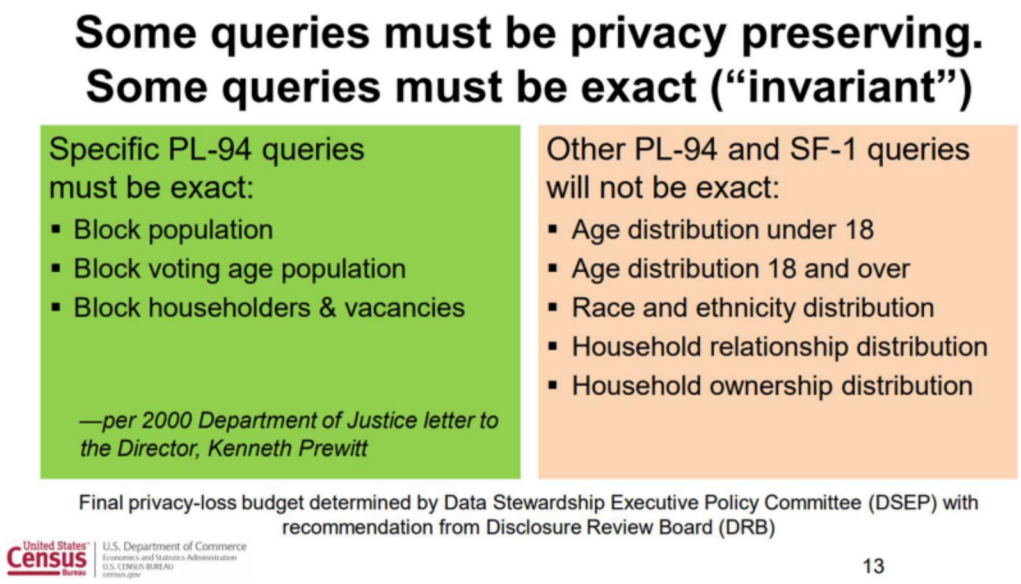
every Alabamian to Birmingham" in the population tabulations. *See* Mot., Doc. 3 at 44. That not only seems wrong, it *is* wrong for at least two reasons. First, it's clear from the text of the statute that, at the very least, the tabulations of *population* must include the *population* counts as enumerated. Congress did not require the Secretary to provide worthless tabulations "to the officers or public bodies having responsibility for legislative apportionment or districting" in each State as an empty exercise in paper shuffling. 13 U.S.C. § 141(c); *cf.* Antonin Scalia & Bryan A. Garner, *Reading Law: The Interpretation of Legal Texts* 63-64 (2012) (explaining that "[a] textually permissible interpretation that furthers rather than obstructs the document's purpose should be favored").[8] Indeed, not to borrow too much from Defendants' flawed reasoning, but it seems notable that even the Census Bureau refers to the tabulations produced under 13 U.S.C. § 141(c) as "P.L. 94-171 Redistricting Data."[9] The data are *for* redistricting. The Census Bureau cannot simply produce bad data in tabular form and tell the States "you're welcome."

Second, Alabama has long relied on the tabulations to include the population counts as enumerated, unaffected by any disclosure avoidance methods. *See* Ex. 6, Ruggles Expert Report at 2-3. Indeed, not too long ago the Census Bureau itself acknowledged that the total population counts and the block voting age population counts *had* to remain invariant to comply with 13 U.S.C. § 141(c). As Simson L. Garfinkel, the Census Bureau's Chief of the Center for Disclosure Avoidance Research, noted, that had long been the understanding of both the Census Bureau and the Department of Justice:

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[8] For the same reason, Defendants' rejoinder regarding sampling of the P.L. 94-171 data fails. Resp., Doc. 41 at 28-29. As 13 U.S.C. § 141 makes clear, the population tabulations used for redistricting are tied to the decennial census and must reflect the "population" there enumerated. Thus, just as the Bureau cannot fudge the numbers it gives to the President for the apportionment, neither can it fudge the numbers it gives to the States for redistricting. That is true with or without § 195's additional prohibition of sampling in the apportionment data.

[9] *See, e.g.*, U.S. Census Bureau, Decennial Census P.L. 94-171 Redistricting Data (Mar. 15, 2021), https://perma.cc/MF5A-CMQK.



Ex. 3, 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 (Continued)* (Sept. 15, 2017), https://perma.cc/H325-562D.

Notably, Garfinkel gave his presentation on September 15, 2017—a year *after* Alabama submitted its request for specific population tabulations. *See* Loftin Decl., Doc. 3-1 at 3. And as Garfinkel notes, the Bureau's understanding that it was required to hold block population and block voting age population invariant was no new thing; it was memorialized in an agreement with the Department of Justice in 2000. Accordingly, because the Secretary had reported true population numbers in the P.L. 94-171 data for so long, Plaintiffs reasonably relied on the Secretary doing so again. After all, just months ago, the Bureau was still stating that it was "*legally mandated*" to provide "*error-free disclosure of block-level population totals under Public Law 94*."[10]

Yet in November 2020—four years after Alabama submitted its request, and just four months before the redistricting data were due the Bureau abruptly changed course and determined that it would *not* report the enumerated population and voting age population counts to the

[10] *See* Ex. 2, U.S. Census Bureau, Statistical Expertise & General Research Topics 11 (Sept. 2020), https://perma.cc/Z6JK-RLY5 (emphasis added).

States. *See* Ex. 8, U.S. Census Bureau, Invariants Set for 2020 Census Data Products (Nov. 24, 2020), https://perma.cc/JET7-WDCL. Why? Not because the law changed, but because—according to Abowd—holding the population counts invariant would "break" differential privacy. *See* Ex. 4, Email from John Abowd to Ron Jarmin (Jul. 7, 2020). Thus, it appears Defendants decided to break the law instead. The Bureau prioritized Abowd's project and quietly removed its past references to the law's requirements. *Compare, e.g.*, Aref N. Dajani et al., Presentation to Census Scientific Advisory Committee, *The Modernization of Statistical Disclosure Limitation at the U.S. Census Bureau* 6 (Sept. 2017), https://perma.cc/5GKQ-LVRR (noting that, "[b]y agreement with the Department of Justice (2000), the Census Bureau will provide exact counts at the Census block level for the following variables: Number of people: total, age 18+ (voting age), and less than age 18…."), *with* John M. Abowd et al., *The Modernization of Statistical Disclosure Limitation at the U.S. Census Bureau* (July 2020), https://perma.cc/634N-4XPU (removing reference to these legal requirements and the DOJ agreement).

These actions were unlawful because they ignored Plaintiffs' cognizable reliance interests for no good reason (in fact, for very bad reasons). *See Dep't of Homeland Sec. v. Regents of the Univ. of Cal.*, 140 S. Ct. 1891, 1914 (2020) (noting that "[w]hen an agency changes course … it must be cognizant that longstanding policies may have engendered serious reliance interests that must be taken into account" (cleaned up and citation omitted)). But the Bureau's decisions also harmed Plaintiffs. Again, the State reasonably thought it would be getting the "legally mandated error-free disclosure of block-level population totals" that Defendants had previously provided.[11] Then, after the enumeration had been completed and the redistricting data were months away from being released, the Bureau abruptly changed course. As a result, Alabama will either be forced to

[11] *See* Ex. 2, U.S. Census Bureau, Statistical Expertise & General Research Topics 11 (Sept. 2020), https://perma.cc/Z6JK-RLY5 (emphasis added).

redistrict with tabulations it and everyone else knows are false, or (as Defendants suggest) conduct its own census. These are significant harms caused by Defendants' actions.

Defendants also assert that Plaintiffs will not be harmed by the false population tabulations because the statistical error introduced by differential privacy may in fact cause the numbers to reflect more closely "the actual (but inherently unknowable) population of a given census block on Census Day." Resp., Doc. 41 at 31. Of course, it's just as likely that the introduced error will cause the reported numbers to deviate even more significantly from "the actual (but inherently unknowable) population." Regardless, for redistricting it's the "actual enumeration" that matters. Speaking at a time when the intra-state population counts were held constant, the Supreme Court explained: "Even if one cannot say with certainty that one district is larger than another merely because it has a higher census count, one *can* say with certainty that the district with a larger census count is more likely to be larger than the other district than it is to be smaller or the same size." *Karcher v. Daggett*, 462 U.S. 725, 738 (1983). Hence, "because the census count represents the best population data available, it is the only basis for good-faith attempts to achieve population equality." *Id.* Once the numbers in the population tabulations are divorced from the actual enumeration, though, all bets are off. Either States will be forced to conduct their own censuses if they desire an actual count, or they can redistrict with numbers that do not reflect the census count. Either way they will be harmed.

Sovereign injury. Alabama has a sovereign interest in drawing fair congressional and legislative districts that comply with one-person, one-vote and the requirements of the Voting Rights Act. *See* Mot., Doc. 3 at 44-46. Defendants discount this interest by pointing out that the State hasn't been sued—yet—and suggesting that if Alabama "believes that the future census redistricting data will be unsuitable for apportionment and redistricting, Alabama may conduct its own

census." Resp., Doc. 41 at 34-35. Neither argument is valid. The State's interest in drawing fair districts for its residents is independent of whether it will get sued—though there *is* a substantial risk that it will get sued. *E.g.*, *Ala. Legis. Black Caucus v. Alabama*, 989 F. Supp. 2d 1227, 1235 (M.D. Ala. 2013) (collecting cases), *vacated and remanded on other grounds*, 575 U.S. 254 (2015). Just as "a legislative body has a judicially cognizable interest in matters affecting its composition," *U.S. House of Representatives v. U.S. Dep't of Com.*, 11 F. Supp. 2d 76, 87 (D.D.C. 1998), so too does a State have an interest in how its electoral districts are composed. Blinding the State to where its residents live harms that interest.

As for Defendants' "build your own census" argument, the State participates in the P.L. 94-171 process so it doesn't have to conduct its own census. P.L. 94-171 was enacted in 1975 precisely so States wouldn't have to conduct their own censuses, but could instead "cooperate with the Census Bureau in defining the geographic areas for which they would receive small area population counts for redistricting." Margo Anderson, *Baker v. Carr, the Census, and the Political and Statistical Geography of the United States: The Origin and Impact of Public Law 94-171*, 62 Case W. Res. L. Rev. 1153, 1168 (2012). That's the Congressional bargain on which Alabama has long relied. In any event, Defendants indicate that conducting a census is time-consuming and expensive work that cost the Bureau over $15 billion. *See* Thieme Decl., Doc. 41-2 at 3. Even if the State could conduct its own census at this late hour (it can't), Defendants are not picking up the tab, so either way the State is harmed.

Federal Funding. Inaccurate census data will also affect the distribution of federal funding by sending those funds to the wrong place. *See* Mot., Doc. 3 at 63-66. Defendants' rejoinder is to say that "to the extent that Alabama's funding would be affected by differential privacy, it will result in a *windfall* to the State" because rural and urban areas will be treated differently by the

differential privacy algorithm. Resp., Doc. 41 at 37. This misunderstands Plaintiffs' harm. As Representative Aderholt explained, "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." Aderholt Decl., Doc. 3-11 at 5. The misallocation of federal funding harms the State—which will have both winners *and* losers—as well as Representative Aderholt in his work in Congress. *Id.*

As for Defendants' invocation of the Supreme Court's decision in *Trump v. New York*, 141 S. Ct. 530 (2020), two significant differences make reliance on the decision inapposite. For one, the Court's decision that it lacked jurisdiction to hear the plaintiffs' challenge to the President's memorandum excluding illegal aliens from the apportionment base relied on both standing doctrine and ripeness concerns. *See id.* at 535. "Ripeness reflects constitutional considerations that implicate Article III limitations on judicial power, as well as prudential reasons for refusing to exercise jurisdiction." *Stolt-Nielsen S.A. v. AnimalFeeds Int'l Corp.*, 559 U.S. 662, 670 n.2 (2010) (quotations omitted). To the extent the Court's opinion rested on prudential ripeness, such concerns have no purchase here because Section 209 "eliminated any prudential concerns in this case." *See Dep't of Com. v. U.S. House of Representatives*, 525 U.S. 316, 328 (1999). For another, the challenged action here is far more certain than the action in *Trump*. In that case, the "President qualified his directive by providing that the Secretary should gather information 'to the extent practicable,'" and it was entirely unclear whether or how the President would exclude illegal aliens from the apportionment base. *Trump*, 141 S. Ct. at 535. But here the die has been cast. The Bureau has committed to using differential privacy and to holding only three categories of data constant—total population of each State, total housing units at the census block level, and the number of group quarters facilities by type at the census block level. Because the intrastate population counts

will *not* be reported as enumerated, they—or at least a significant portion of them—will necessarily be false, making it substantially likely that federal resources will be misallocated within the State.

Vote Dilution. It is also substantially likely that the voting rights of the individual Plaintiffs will be harmed. *See* Mot., Doc. 3 at 46-47. Defendants dismiss these concerns because the individual Plaintiffs' votes haven't yet been diluted since their districts haven't been drawn. They also argue that Plaintiffs "have not pointed the Court to any case where census operations were enjoined on the grounds that resulting census data might lead States to redistrict in a manner that violated the one-person-one-vote principle." Resp., Doc. 41 at 52.

The Supreme Court's decision in *Department of Commerce v. U.S. House of Representatives*, 525 U.S. 316 (1999), resolves both objections. That case (which was actually two cases combined on appeal) concerned a pre-census challenge to the Bureau's plan to use statistical sampling to determine the population for the apportionment. *Id.* at 320. The Court held that the Bureau's plan was unlawful. *Id.* at 334. Before reaching that question, though, the Court specifically found that the plaintiffs in the underlying *Gavin* case had demonstrated standing "on the basis of the expected effects of the use of sampling in the 2000 census *on intrastate redistricting.*" *Id.* at 332 (emphasis added). Citing *Karcher*'s statement that the census count provides "the only basis for good-faith attempts to achieve population equality," *id.* at 334 (quoting *Karcher*, 462 U.S. at 438), the Court held that the parties living in the districts likely to be affected by sampling "have a strong claim that they will be injured by the Bureau's plan because their votes will be diluted vis-à-vis residents of counties with larger 'undercount' rates," *id.* The Court also explained: "[T]he *threat* of vote dilution … is concrete and actual or imminent, not conjectural or hypothetical." *Id.* at 332 (cleaned up, citation omitted, and emphasis added)).

So it is here. Plaintiffs have shown that the application of differential privacy—like the Bureau's previous plan to introduce sampling—is substantially likely to harm the individual Plaintiffs because of its expected effects on intrastate redistricting. *See* Mot., Doc. 3 at 33-34. That threat is not conjectural or hypothetical; it is real because, even if the Bureau improves its differential privacy algorithm, the Bureau does not plan to hold the intrastate population counts invariant.[12] And while none of the three individual Plaintiffs knows for sure whether Bureau officials will select redistricting data that favors or harms him (though Mr. Green, as an urban voter, will be particularly likely to be harmed, *cf.* Resp., doc. 41 at 37-38), Plaintiffs need not wait for the roulette pistol to fire before seeking relief. *See Davis v. FEC*, 554 U.S. 724, 735 (2008) ("[T]he injury required for standing need not be actualized."). And, particularly since "we will never be able to assess the … accuracy of the" manipulated data "by comparing it to the results of" the actual count, *House of Reps.*, 525 U.S. at 349 (Scalia, J., concurring in part), it is "not necessary for this Court to wait until the [districts have been drawn] to consider the issues presented here, because such a pause would result in extreme—possibly irremediable—hardship." *Id.* at 332.

2. Defendants Are Applying Differential Privacy, Thus Causing Plaintiffs' Harm.

Because the Census Bureau is the one implementing differential privacy to skew the population tabulations, it is clear Plaintiffs' harms are "fairly traceable to the challenged conduct" of Defendants. *Spokeo*, 136 S. Ct. at 1547. "[E]ven harms that flow indirectly from the action in

[12] Indeed, Abowd indicates in his declaration that the *fifth* iteration of the differential privacy experiment (to be released after the date of this filing) will make certain changes. Abowd now says that "the privacy-loss budget for the final demonstration product is set to ensure the accuracy of racial demographics for voting districts as small as 500 individuals." Doc. 41-1 at 37 ¶70. And he specifies that this information will be "tuned" to be accurate only for the largest racial group. While it is unclear what the term "voting districts" here refers to (Congressional District, state legislative district, state senate district, voting precinct, etc.), there are many "spine" and "off-spine" geographies that have fewer than 500 people, and there is no indication of accuracy for the second-largest racial group in any "voting district." As Professor Andy Beveridge has noted, fully one out of every five "voter tabulation districts" in the United States have fewer than 500 people, nearly one out of every three census places have fewer than 500 people, and 99% of census blocks have fewer than 500 people. Andy Beveridge, *Sixteen States Sue to Block Census Bureau Data Privacy Method* (Apr. 19, 2021), https://perma.cc/WEJ9-TEXY.

question can be said to be fairly traceable to that action for standing purposes." *Focus on the Family v. Pinellas Suncoast Transit Auth.*, 344 F.3d 1263, 1273 (11th Cir. 2003) (quotation marks and citation omitted).

Defendants' counterarguments are unavailing. The first is that Plaintiffs—not Defendants—shot themselves in the foot because the Alabama Legislature erroneously relied on the Census Bureau to produce accurate population tabulations instead of ordering a census itself. Resp., Doc. 41 at 43. This is silly. The reliance was reasonable, long-standing, and supported by statute and Supreme Court precedent. Telling the State to go build its own multi-billion-dollar census in response to Defendants' last-minute breach hardly severs the line of traceability.

Defendants' second argument is that "Plaintiffs maintain that differential privacy will result in inaccurate numbers, but they have identified no other feasible, Census Act-compliant disclosure-avoidance methodology that would produce more accurate numbers." Resp., Doc. 41 at 43. But it's not Plaintiffs' job to tell Defendants *how* to clean up their mess. And as detailed below, the Bureau has many options to produce accurate tabulations in compliance with § 141(c), Plaintiffs' reliance interests, and the Census Act's privacy requirements. For instance, the Bureau could revert to the disclosure avoidance methods used in 2010 with great success. *See* Mot., Doc. 3 at 20-23; Ex. 6, Ruggles Expert Report at 13-16; *see also* Amicus Br. of Prof. Jane Bambauer, Doc. 33 at 17-23. Or it could alter the amount of data, or the privacy settings, for releases of the other more granular data that gives the Bureau concern. *See* Ex. 6, Ruggles Expert Report at 14-16. Or Defendants could fix the "problem" some other way. The important part is that these examples show that Plaintiffs' harms are caused by Defendants and that, as explained next, the harms are redressable by this Court.

3. The Harms Caused By Differential Privacy Are Redressable.

This Court can redress the harms caused by Defendants' application of differential privacy. "To have Article III standing, a plaintiff need not demonstrate anything 'more than … a substantial likelihood' of redressability." *Wilding v. DNC Servs. Corp.*, 941 F.3d 1116, 1126727 (11th Cir. 2019) (alterations in original) (quoting *Duke Power Co. v. Envtl. Study Grp.*, 438 U.S. 59, 79 (1978)). The remedy here is to order the "legally mandated error-free disclosure of block-level population totals under Public Law 94."[13] That would redress Plaintiffs' harms.

Defendants claim they can't do this because they are required by 13 U.S.C. §§ 8 and 9 to skew the numbers. *See* Resp., Doc. 41 at 45-46. As detailed below, that's neither factually nor legally correct. It's not factually correct because the re-identification attacks the Census Bureau relies on did not show a true threat to privacy. *See* Ex. 6, Ruggles Expert Report at 5-11. And it's not legally correct because Defendants fundamentally misunderstand Congress's privacy directive. As the Census Bureau itself explained in *Baldridge v. Shapiro*, 455 U.S. 345 (1982), "all *raw* census data relating to particular individuals or establishments (as distinguished from *aggregate statistical data*) is subject to the confidentiality mandate of the Census Act." Reply Br. of Petrs., *Baldridge v. Shapiro*, No. 80-1436, 1981 WL 389926, at *3 (Nov. 25, 1981) (emphasis added). The population tabulations Plaintiffs seek are not "raw census data," but "aggregate statistical data."

Moreover, even if Defendants were right in their interpretation of the Census Act's privacy requirements, that does not mean that they can violate the Act's requirement in § 141(c) to give accurate redistricting population tabulations to the States. The Bureau must comply with both mandates. Again, one way to do that is this: present the P.L. 94-171 redistricting data unperturbed, or

[13] *See* Ex. 2, U.S. Census Bureau, Statistical Expertise & General Research Topics 11 (Sept. 2020), https://perma.cc/Z6JK-RLY5 (emphasis added).

at least with the population and voting-age population counts held invariant. *See* Ex. 6, Ruggles Expert Report at 15-16. Even by the Bureau's standards, that data alone would not allow anyone to succeed in a re-identification attack because they contain so few variables. *Id.* Rather, to succeed in the attack, an adversary would also need the tables the Bureau publishes in *other* datasets, such as Summary File 1 and Summary File 2, which the Bureau typically publishes in the months and years following release of the redistricting data.[14] It is *those* datasets that contain the vast majority of characteristics that, when combined with outside information, present the theoretical privacy risk claimed by Defendants. *Id.* As Abowd noted in his declaration, the Census Bureau used the 2010 Summary File 1 dataset—not simply the P.L. 94-171 redistricting tabulations—to conduct its re-identification attack simulation. That dataset included "the 2010 P.L. 94-171 Redistricting Data Summary File, the 2010 Advanced Group Quarters Data Summary File, *and* the bulk of the demographic and housing characteristics released from the 2010 Census in tabular format." Abowd

[14] The Census Bureau describes the Summary File 1 dataset this way: "Summary File 1 (SF 1) contains the data compiled from the questions asked of all people and about every housing unit. Population items include sex, age, race, Hispanic or Latino origin, household relationship, household type, household size, family type, family size, and group quarters. Housing items include occupancy status, vacancy status, and tenure (whether a housing unit is owner-occupied or renter-occupied). There are 177 population tables (identified with a 'P') and 58 housing tables (identified with an 'H') shown down to the block level; 82 population tables (identified with a 'PCT') and 4 housing tables (identified with an 'HCT') shown down to the census tract level; and 10 population tables (identified with a 'PCO') shown down to the county level, for a total of 331 tables. The SF 1 Urban/Rural Update added 2 PCT tables, increasing the total number to 333 tables. There are 14 population tables and 4 housing tables shown down to the block level and 5 population tables shown down to the census tract level that are repeated by the major race and Hispanic or Latino groups. SF 1 includes population and housing characteristics for the total population, population totals for an extensive list of race (American Indian and Alaska Native tribes, Asian, and Native Hawaiian and Other Pacific Islander) and Hispanic or Latino groups, and population and housing characteristics for a limited list of race and Hispanic or Latino groups. Population and housing items may be cross-tabulated." U.S. Census Bureau, Summary File 1 Dataset, https://perma.cc/38JG-RAFD.

The Summary File 2 dataset has additional detail, though provided only at the census tract level, rather than down to the census block level: "Summary File 2 (SF 2) contains the 100-percent data (the information compiled from the questions asked of all people and about every housing unit). Population items include sex, age, race, Hispanic or Latino, household relationship, and group quarters. Housing items include occupancy status, vacancy status, and tenure (owner occupied or renter occupied). SF 2 includes population characteristics, such as sex by age, average household size, house-hold type, relationship by household type (including living alone), unmarried-partner households, nonrelatives by household type, and own children under 18 years by family type and age. The file includes housing characteristics, such as tenure, tenure by age of householder, and tenure by household size for occupied housing units." U.S. Census Bureau, Summary File 2 Dataset, https://perma.cc/S276-KY59.

Decl., Doc. 41-1 at 63 (emphasis added). Simply put, "[t]he sparse data available in the redistricting file is insufficient to allow database reconstruction; only in combination with other tables can database reconstruction even be attempted." Ex. 6, Ruggles Expert Report at 15.

Notably, unlike with the redistricting tabulations, Defendants are under no obligation under P.L. 94-171 to report the SF1 and SF2 data in any specific form. And to the extent other federal laws require any of the more granular detail in those datasets, the Bureau has the time and discretion to ensure the data are reported responsibly.[15] This means that the Bureau does not get a free pass to skew the required P.L. 94-171 tabulations simply because it chooses to release "an enormous number of [additional] statistics calculated from its collected data." Abowd Decl., Doc. 41-1 at 8. If the Bureau chooses to apply differential privacy to those other datasets that will not impact redistricting—fine. Or if the Bureau chooses to release fewer statistics in the other datasets to reduce the risk of privacy disclosure—also fine. The Bureau retains tremendous discretion regarding those choices, and there is ample time for the Bureau to consider the privacy protections needed for the other datasets after it releases the P.L. 94-171 tabulations. *See* Ex. 6, Ruggles Expert Report at 15-16.[16] But what the Bureau cannot do is what it plans to do: skew the population counts in the redistricting data Congress requires Defendants to provide the States. An order preventing Defendants from doing that would give Plaintiffs relief.

Defendants object that "[a]n order enjoining the use of differential privacy would also only extend the Bureau's delay in providing redistricting data." Resp., Doc. 41 at 46. But that assumes

[15] There may be other federal statutes that require certain of the information provided in SF1 and SF2 to be released, and the Bureau regularly engages with federal agencies, state governments, and other data users to determine what information is legally required and in what format. The SF1 and SF2 files are historically released months after the redistricting data and are generally not used in redistricting. *See* Ex. 6, Ruggles Expert Report at 15-16.

[16] Abowd even indicated his desire to hold back these releases "until there is consensus that the underlying data are fit-for-use." Ex. 14, Email from John Abowd to Danah Boyd (Oct. 7, 2020).

that the alternative disclosure avoidance methods will need to be much altered so they can inject as much error into the data as differential privacy does. As explained below, that's incorrect.

Nor have Defendants satisfactorily explained why reverting to the 2010 disclosure avoidance methods would cause additional delay. Abowd first notes that the Bureau would need "to conduct the requisite software development and testing" before using the disclosure avoidance software previously tested and successfully used in 2010. Doc. 41-1 at 46. And he states that "[t]he 2020 Census's system architecture is completely different from that used in the 2010 Census, and it is thus not possible to simply 'plug in' the disclosure-avoidance system used in 2010." *Id.* But he gives no estimate as to how long this would take or why, and there's good reason to think the 2010 methods could be applied more quickly than still-in-development differential privacy.

First, as Ruggles notes, "[t]he main differences in the system architecture between 2010 and 2020 pertain to the disclosure control software itself," meaning that the Census Edited File (CEF) "will be functionally the same as the 2010 CEF." Ex. 6, Ruggles Expert Report at 13. "Accordingly, there should be few barriers to applying the 2010 software to the 2020 data" because the disclosure avoidance method is applied to the CEF to create what is called the Hundred-percent Detail File (in 2010) or the Microdata Detail File (in 2020). *Id.* "In terms of structure," he explains, the two files are equivalent, "so it is unlikely that using traditional statistical disclosure controls would slow down the tabulation phase." *Id.* Defendants' claimed delay thus appears to be "highly exaggerated." *Id.*

Second, before Ohio sued Defendants on February 25, 2021, over their plan to delay delivery of redistricting data, Defendants' position was that they could not deliver until September 30. *See Ohio v. Raimondo*, No. 3:21-cv-064, 2021 WL 1118049 (S.D. Ohio Mar. 24, 2021). But by the time their response to Ohio's preliminary injunction motion was due, their sense of what was

possible had expanded. Turns out "[i]t would be possible to have fully reviewed redistricting data for all States available by mid to late August," though "the data would be in an older format of data the Census Bureau developed decades ago." *See* Whitehorne Decl., Doc. 11-2 at 9, *Ohio*, No. 3:21-cv-064 (S.D. Ohio Mar. 12, 2021). This litigation too may help Defendants realize they can "jump higher, run faster, or lift more" to timely implement lawful disclosure avoidance methods. Resp., Doc. 41 at 48. And Defendants' ability to use "an older format of data" seems to suggest that the 2010 disclosure avoidance methods can be utilized once again as well.

Finally, enjoining differential privacy need not cause delay because the P.L. 94-171 data is not the cause of Defendants' purported privacy dilemma. The reason the Bureau claims to be unable to release the P.L. 94-171 tabulations quickly is because it needs to skew the data; and it claims it needs to do that because of the privacy risks posed by forthcoming SF1 and SF2 datasets. So, again, here's a solution: release the redistricting tabulations unperturbed or after applying simple disclosure avoidance techniques, and then adjust the SF1 and SF2 datasets as needed. That would allow the Bureau to provide the required redistricting tabulations quickly and accurately. The Court need not impose that exact solution, of course. But it does show that the Defendants can remedy Plaintiffs' harm if the Court requires them to produce population tabulations with true population counts. How Defendants achieve that result is up to them.

B. Defendants' Delay in Releasing the Tabulations of Populations Harms Plaintiffs. This Court Can Redress That Harm.

Plaintiffs have also shown Article III standing to challenge Defendants' decision to unlawfully delay delivering the redistricting tabulations beyond the statutory deadline. Plaintiffs have been harmed by that decision, and the magnitude of the harm *grows* with each passing day Plaintiffs are not afforded relief. Because this Court can provide such relief, it has jurisdiction to do so.

1. The Delay Harms Plaintiffs.

First and foremost, the Bureau's delay prevents the State from effecting its redistricting process in accordance with the Alabama Constitution. See Mot., Doc. 3 at 17-20. Because the Legislature cannot redistrict until the P.L. 94-171 redistricting tabulations are released, Defendants' delay is preventing the Legislature from meeting its constitutional obligations. *See* Loftin Decl., Doc. 3-1. The Bureau has thus prevented the State from "effectuating" its law, thus causing "irreparable injury." *Maryland v. King*, 567 U.S. 1301, 1303 (2012) (Roberts, C.J., in chambers); *see also Muransky*, 979 F.3d at 930-31 (noting that "allegations of wasted time can state a concrete harm for standing purposes").

Defendants point out that the Alabama Constitution contains a failsafe switch to "provide for enumeration of inhabitants for purpose of apportionment of representatives and senators." Ala. Const. art. IX, § 201. But it does so only if the decennial census is either "not taken," or, "when taken," the census "be not full and satisfactory" "as to this state." *Id.* Neither condition applies. There is no dispute that the Bureau is in fact "tak[ing]" a "decennial census of the United States," so the first condition is inapplicable. As to the second, the decennial census has not yet been "taken"—indeed, the Bureau's contention that the census remains incomplete implies as much—meaning the second condition fares no better. Regardless, Defendants' suggestion that Alabama build its own census to evade the harm caused by the Bureau is not a serious one. Forcing the State to invest untold amounts of time and money to create its own redistricting numbers and then be sued for failing to use the "gold standard" of census data—amounts to a "concrete and particularized" injury, too. *Spokeo*, 136 S. Ct. at 1548.

Second, the Bureau's actions compromise "the State's interest in protecting the integrity and reliability of the electoral process." *Crawford v. Marion Cty. Election Bd.*, 553 U.S. 181, 191 (2008) (lead op. of Stevens, J.). Specifically, delivering redistricting data on September 30 will

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. As Clay Helms, the Director of Elections for the Alabama Secretary of State's Office, explained, that is unlikely to be enough time because the reassignments typically take up to six months. *See* Mot., Doc. 3 at 67; Helms Decl., Doc. 3-3 at 2-5. Thus, he stated, the delay "could result in one or more 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." Doc. 3-3 at 3-4. Defendants take Helms to task for using the word "could," and assert that the threatened injury is speculative. Resp., Doc. 41 at 41. Lest there be any doubt, Helms has now clarified that he "did not mean to suggest these eventualities are not likely." Ex. 9, Suppl. Helms Decl. ¶¶ 1-2. Rather, he "believe[s] that at least one of these eventualities is very likely to occur—and that any combination of them could occur—if the Bureau forces the Boards of Registrars to reassign voters on the compressed timeline the Bureau has suggested." *Id.*; *see also id.* at ¶ 4 (explaining why the Board of Registrars cannot begin the reassignment process now).

Finally, as Representative Aderholt explained in his declaration, *see* Aderholt Decl., doc. 3-11, the Bureau's delay harms him both as a candidate and a voter. Defendants retort that the reduced campaign time should redound to his benefit him as an incumbent, Resp., doc. 41 at 37-38, but that is both speculative and irrelevant: The delay forces Rep. Aderholt to adopt new, second-best alternatives to his campaign strategy, thereby injuring him. *See, e.g.*, *Zimmerman v. City of Austin*, 881 F.3d 378, 390 (5th Cir. 2018) ("[C]hanging one's campaign plans or strategies in response to an allegedly injurious law can itself be a sufficient injury to confer standing.").

2. The Delay Is Traceable to the Bureau's February 12 Decision.

These harms are "fairly traceable to the challenged conduct of the defendant[s]," *Spokeo*, 136 S. Ct. at 1547, because Plaintiffs' delay-related harms flow from the Bureau's failure to deliver redistricting data on time. *Focus on the Family*, 344 F.3d at 1273. While Defendants insist that Plaintiffs cannot show traceability "because redistricting is ultimately the responsibility of the State," Resp., doc. 41 at 44, if that were true, the plaintiffs in *House of Representatives* would have never "established standing on the basis of the expected effects of the use of sampling in the 2000 census on intrastate redistricting." 525 U.S. at 332. As for Defendants' contention that traceability is severed "because [Plaintiffs] identify no feasible alternative to producing redistricting data by September 30, 2021," Resp., doc. 41 at 44, while the viability of alternative arrangements might implicate *redressability*, they do not refute traceability. Plaintiffs' injuries are caused by the delayed delivery of redistricting data, and that delay is caused by Defendants.

3. The Delay Is Redressable.

It is substantially likely that Plaintiffs' delay harms can be redressed by this Court. *See Wilding*, 941 F.3d at 1126–27. The Bureau deliberately violated § 141(c)'s statutory deadline, and that decision immediately harmed Plaintiffs. Plaintiffs' injuries are continuing, so the sooner Plaintiffs receive the relief they seek the less harm they will ultimately suffer. And conversely, the longer the Bureau protracts its statutory breach, the more harm Plaintiffs incur. *See, e.g.*, Aderholt Decl., Doc. 3-11 ¶ 22 ("The Census Bureau's delays have a *cascading effect* on my reelection."); *see also* Ex. 9, Suppl. Helms Decl. ¶¶ 1-7. And, as explained above, the Bureau can provide at least partial relief.

Defendants respond that "apportionment will be entirely in Congress's hands"—not the Bureau's—"to accept or reject." Resp., Doc. 41 at 47 (citing 2 U.S.C. § 2a(b)). To the extent De-

fendants are arguing that Plaintiffs' claims are not redressable because ultimate authority for congressional apportionment lies beyond the Bureau, the Supreme Court has twice addressed and expressly rejected similar arguments. *See Utah v. Evans*, 536 U.S. 452, 464 (2002); *Franklin v. Massachusetts*, 505 U.S. 788, 803 (1992). And Plaintiffs need not wait on Congress before drawing state house or senate districts, so that delay is solely Defendants' doing. Besides, Congress—like Plaintiffs—is waiting for the Bureau to provide the data. Thus, the more delay the Bureau imposes on Congress, the more delay Plaintiffs suffer in turn.

More fundamentally, Defendants allege that Plaintiffs lack standing because "Alabama seeks the impossible." Resp., Doc. 41 at 48. To support the assertion, Defendants claim that "it is 'not possible under any scenario for the Census Bureau to produce these data at this time or at any time in the immediate future, and the Census Bureau would be unable to comply with any such order from the Court." *Id.* at 46-47. But Plaintiffs' requested relief is not so limited. Rather, Plaintiffs asked the Court to "enjoin Defendants from delaying the release of data beyond *the earliest possible date this Court determines equitable* and that will allow the State to use the redistricting data during the redistricting process." Compl., Doc. 1 at 52 (emphasis added). It is not too late to ameliorate Plaintiffs' harms. And the relief Plaintiffs seek is not "impossible" in any event. Resp., Doc. 41 at 48. We know the Bureau can produce redistricting data within three months of providing apportionment data because it has always done so. And there is every reason to believe that it could do so again if it dropped differential privacy.[17] As Ruggles explains in his declaration, "[g]iven that the most complex remaining aspect of census processing that remains to be completed is the

[17] Indeed, Michael Thieme's declaration indicates that the CUF was completed March 10, and that the CEF will be completed by mid-June. *See* Doc. 41-2 at 17-20. The CUF file contains the accurate population information by census block and is used to produce the statewide population totals for the apportionment count. The CEF then takes this file and appends detailed demographic data. In 2010, the Bureau produced the P.L. 94-171 redistricting data from the CEF in 27 days. Doc. 41-2 at 21. If a similar schedule is kept this year, the P.L. 94-171 data could be disseminated by July 31, 2021.

final execution of differential privacy, it is more plausible that substituting the simpler, well-understood protocols from 2010 could actually speed the processing time." Ex. 6, Ruggles Expert Report at 14. The Bureau has several viable disclosure-avoidance methods aside from differential privacy. *Id.* at 13-16. It should choose one, and in so doing mitigate the harm of its delay.

II. Plaintiffs Are Likely To Prevail On The Merits.

Plaintiffs are entitled to a preliminary injunction because they have demonstrated that they are likely to succeed on the merits, that they are likely to suffer irreparable harm unless this Court prevents it, that the injury to Plaintiffs outweighs the inconvenience to Defendants caused by an injunction, and that the public interest favors injunctive relief. *See Siegel v. Lepore*, 234 F.3d 1163, 1176 (11th Cir. 2000) (en banc). Defendants contend that Plaintiffs really seek a permanent injunction, Resp., doc. 41 at 48, but that's neither relevant nor true. It's not relevant because the standards are "essentially the same," with "the exception that the plaintiff must show … actual success" on the merits for a permanent injunction which Plaintiffs have done for all but their arbitrary-and-capricious claims, for which Defendants have not provided the administrative record. *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 546 n.12 (1987). And it's not true because it is *Defendants* who have upended the "the last uncontested status quo between the parties," *Canal Auth. of Fla. v. Callaway*, 489 F.2d 567, 576 (5th Cir. 1974), by (1) announcing just months before the redistricting tabulations were due that it would skew the population counts at the census block level, and (2) deciding that it would not meet the March 31 release deadline and would instead publish the final tabulations in September. Those decisions were illegal and must be enjoined.

A. Defendants' Application of Differential Privacy Is Unlawful.

1. The Census Act Requires Accurate Tabulations of Population.

There are two main points of disagreement between Plaintiffs and Defendants when it comes to the Census Act's requirements. The first is what "tabulation[s] of population" means in

§ 141(c). *Compare* Mot., Doc. 3 at 40-44, *with* Resp., Doc. 41 at 24-31. Defendants say it means data that bear some relation—however scant—to the enumerated population numbers arranged in tabular form. *See* Resp., Doc. 41 at 32. As discussed above, Plaintiffs contend that Congress likely did not pass such a useless law and that, instead, the tabulations must reflect the "actual enumeration"—including, most importantly, the invariant intrastate population counts. And a few months ago, when differential privacy proved incapable of delivering these numbers, the Bureau too agreed that Section 141(c) imposed a "legal[] mandate[]" of "error-free disclosure of block-level population totals."[18] The law didn't change in the interim. Only Defendants' adoption of differential privacy did.

The second disagreement concerns the meaning of the Census Act's privacy requirements codified at 13 U.S.C. §§ 8 and 9. The relevant provisions of those sections provide:

> [T]he Secretary may furnish copies of tabulations and other statistical materials which do not disclose the information reported by, or on behalf of, any particular respondent, and may make special statistical compilations and surveys, for departments, agencies, and establishments of the Federal Government, the government of the District of Columbia, the government of any possession or area (including political subdivisions thereof) referred to in section 191(a) of this title, State or local agencies, or other public and private persons and agencies, upon payment of the actual or estimated cost of such work….

13 U.S.C. § 8(b).

> Neither the Secretary, nor any other officer or employee of the Department of Commerce or bureau or agency thereof, or local government census liaison, may…
>
> > (2) make any publication whereby the data furnished by any particular establishment or individual under this title can be identified….

13 U.S.C.A. § 9(a).

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[18] *See* Ex. 2, U.S. Census Bureau, Statistical Expertise & General Research Topics 11 (Sept. 2020), https://perma.cc/Z6JK-RLY5; *see also* Ex. 3, Garfinkel presentation (noting that "per 2000 Department of Justice letter to the Director" of the Bureau, block population and block voting age population "must be exact").

Defendants interpret these requirements to mean that the Census Bureau can never publish characteristic data that matches a characteristic of a respondent. Abowd provides a helpful example: "Any block where the voting-age data are either all 'yes' or all 'no'"—that is, where either everyone is or is not of voting age—"is an exact attribute disclosure assignable to all persons living in that block on [census day]" because it reveals an individual characteristic: voting age.[19] In other words, by publishing data that the hundred people on the census block are all of voting age, we have now learned that the hundred people on the census block are all of voting age. Even more fundamentally, we can add, by publishing data that a hundred people live on the census block, we have now learned that those 100 people live on the census block. According to Defendants, such tautologies violate the Census Act. *See* Ex. 6, Ruggles Expert Report at 12.

If that sounds absurd, that's because it is. In fact, it's unclear clear why Defendants' interpretation would allow them to publish any invariant data at all. The Secretary plans to release the actual population count of how many people live in Alabama. But wouldn't that also reveal an individual characteristic regarding each resident—the state of residence? "Under this new interpretation, the Census Bureau has been in flagrant violation of the law ever since 1929," when Congress enacted the predecessor to §§ 8 and 9. *Id.* That is because "[e]very tabulation of the characteristics of the population necessarily reveals the attributes of individuals," and "[e]very census from 1790 to 2010 has published attributes based on exact numbers counted in the census." *Id.* And again, the longstanding understanding by Defendants has been that such releases are not only okay, but required. *See* Ex. 3, Garfinkel presentation. The only plausible explanation for De-

[19] *See* Ex. 10, John Abowd, Tweetorial: Reconstruction-abetted re-identification attacks and other traditional vulnerabilities (Apr. 7, 2019), https://perma.cc/LUH3-QC8R

fendants' abrupt change is that the statutory requirement ran headlong into the buzzsaw of differential privacy. As Abowd put it, holding the population counts invariant would "break"[20] differential privacy, so the "garbage about being legally required to hold certain populations invariant"[21] had to go.

"That history matters." *Dep't of Com. v. New York*, 139 S. Ct. 2551, 2567 (2019). The "open, widespread, and unchallenged" practice sheds light on the provision's meaning. *See id.* (quoting *NLRB v. Noel Canning*, 573 U.S. 513, 572 (2014) (Scalia, J., concurring in judgment)); *see also Wisconsin v. City of New York*, 517 U.S. 1, 21 (1996) (noting "importance of historical practice" in census context). The Court should thus reject Defendants' "invitation to measure the" legality of the census "by a standard that would seem to render every census since" 1929 unlawful. *New York*, 139 S. Ct. at 2567. Whatever protections §§ 8 and 9 provide, the provisions cannot mean what Defendants say they mean—that the Bureau is forbidden from releasing accurate population and voting age population counts at the census block level.

Other clues bolster this conclusion. For one, Defendants' "sterile literalism … loses sight of the forest for the trees." *Pictet Overseas Inc. v. Helvetia Trust*, 905 F.3d 1183, 1191 (11th Cir. 2018) (W. Pryor, J., concurring) (quoting *N.Y. Tr. Co v. Comm'r of Internal Revenue*, 68 F.2d 19, 20 (2d Cir. 1933) (Hand, J.)). The forest is the rest of the Census Act, the context in which §§ 8 and 9 appear. *See* Scalia & Garner, *Reading Law* 167 ("Perhaps no interpretive fault is more common than the failure to follow the whole-text canon, which calls on the judicial interpreter to consider the entire text, in view of its structure and of the physical and logical relation of its many parts"). Because § 141(c) requires the Secretary to provide tabulations of population reflecting the actual enumeration—at the very least, how many people live where within the State—it is doubtful

[20] *See* Ex. 4, Email from John Abowd to Ron Jarmin (Jul. 7, 2020).
[21] *See* Ex. 5, Email from John Abowd to Gary Benedetto (Jul. 28, 2020).

that another provision of the same Act forbids the Secretary from fulfilling that duty. *See also* Scalia & Garner, *Reading Law* 63-64 ("A textually permissible interpretation that furthers rather than obstructs the document's purpose should be favored"). The same is also true of the Secretary's duty to provide accurate census data under other statutes. *E.g.*, 7 U.S.C. § 361c(c)(2) (allocating funding based on census data); *id.* § 2663(b)(4) (same); 49 U.S.C. § 5305(d)(1)(A)(i) (same); *id.* § 5311(c)(3)(B)(iii) (same). There is no reason to force those provisions into artificial conflict.

Defendants rely heavily on the Supreme Court's decision in *Baldridge v. Shapiro*, 455 U.S. 345 (1982), to support their alternative reading. Resp., Doc. 41 at 61-62. But that case simply confirms that Defendants have seriously misread the statute. In *Baldridge*, city officials sought the master address list the Census Bureau used to conduct the 1980 decennial census—the "addresses, householders' names, number of housing units, types of census inquiry, and, where applicable, the vacancy status of the unit." *Id.* at 349. Understandably, the Court determined that such information was protected by §§ 8 and 9. *Id.* at 359. It explained that "*raw* data reported by or on behalf of individuals was to be held confidential and not available for disclosure." *Id.* at 355 (emphasis added); *see also id.* at 358 (noting that the history "of the Census Act reveals a congressional intent to protect the confidentiality of census information by prohibiting disclosure of *raw* census data reported by or on behalf of individuals" (emphasis added)).

As the Census Bureau's brief in *Baldridge* explained, the key word in those sentences is "raw": "The government's position is that all raw census data relating to particular individuals or establishments (*as distinguished from aggregate statistical data*) is subject to the confidentiality mandate of the Census Act." Reply Br. of Petrs., *Baldridge v. Shapiro*, No. 80-1436, 1981 WL 389926, at *3 (Nov. 25, 1981) (emphasis added). The Bureau then defined "aggregate statistical materials" to mean "totals and subtotals of numerical figures." *Id.* at *7. That is precisely what

Plaintiffs seek: the totals and subtotals of numerical figures reflecting the actual population counts within the State. The plaintiffs in *Baldridge* got that. *See* Br. of Petrs, *Baldridge v. Shapiro*, No. 80-1436, 1981 WL 389922, at *42 (Jul. 13, 1981) ("[T]he Census Bureau provided each local jurisdiction … with aggregate information for each enumeration district, including the number of housing units, the number of vacant units and population totals."). So should these Plaintiffs.

There is no reason Defendants cannot provide that data again. To return to Abowd's voting-age population example, publishing a table showing that everyone in a census block is of voting age does not reveal "raw data" for two reasons. First, the data is processed. Raw data would publish an individual's actual age or birthday—whatever the respondent reported to the Census. That's not what the Bureau publishes. Instead, what the tabulation shows is the processed data stating whether the respondents were of voting age. That's allowed by the Census Act. Second, the data is aggregated—again, not raw. Bob's voting age characteristic is aggregated with Jim's and so on down the census block. It's the aggregated statistic that is published. Again, that's not raw data. It can be published.

To be sure, the Census Bureau understandably takes additional measures to protect the identity of census respondents. Under characteristic swapping, for instance, the Bureau targets individuals whose unique characteristics make them susceptible to being identified, and it swaps the identifying characteristics with those of a respondent in a different census block. *See* Mot., Doc. 3 at 21-22; *see also* Ex. 6, Ruggles Expert Report at 17 (providing example of couple who lived on Liberty Island whose age and race characteristics were swapped). Under any reasonable interpretation of §§ 8 and 9, and certainly under any real-world identification concern, the Bureau's traditional disclosure avoidance methods have protected identities well.

The Bureau responds that its studies show otherwise, and points to a simulated reidentification attack against the 2010 census data that "precisely reconstructed approximately 46% of the 308,745,538 records with their exact race, ethnicity, sex, and age." Resp., Doc. 41 at 11. But this study suffers from basic analytical flaws, which is likely why it has never been subjected to the rigors of peer review. Now that Abowd's declaration has revealed more about the simulated attack, it is even clearer that the attack failed in numerous ways.

First, as Abowd states in his declaration, 57% of the population in the 2010 census were unique as to block, race, ethnicity, sex, and age. Doc. 41-1 at 65-66. That means that 43% of the population shared a census block with someone of the same race, ethnicity, sex, and age. Thus, if the Bureau had randomly selected 1000 respondents from the 2010 census data, the Bureau would expect to match them with another census respondent sharing all their characteristics a full *43%* of the time. This means that the Bureau's "reconstruction" attack—the whole reason for differential privacy—produced a "match rate" of 46% that was hardly any better than random chance.

Ruggles confirmed this with a simple simulation.[22] Looking only at age-sex combinations (for which 44% of the population have unique characteristics for their census block, Abowd Decl., Doc. 41-1 at 65-66), Ruggles found "randomly chosen age-sex combinations would match someone on any given block 54.9% of the time." Ex. 6, Ruggles Expert Report at 7. According to Ruggles, "[t]his means that[ ] the Census Bureau would have been 'correct' on age and sex 55% of the time if they had never looked at the tabular data from 2010, and had instead just assigned ages and sexes to their hypothetical population at random." *Id.* Even more stunning, when Ruggles

[22] "To estimate the percentage of random age-sex combinations that would match someone on a block by chance, [Ruggles] generated 1000 simulated blocks and populated them with random draws from the 2010 single-year-of-age and sex distribution. The simulated blocks conformed to the population-weighted size distribution of blocks observed in the 2010 census. [He] then randomly drew 1000 new age-sex combinations and searched for each of them in each of the 1000 simulated blocks. In 54.9% of cases [he found someone in the simulated block who exactly matched the random age-sex combination. The simulation source code and supporting data files are available at http://users.hist.umn.edu/~ruggles/censim.html." Ex. 6, Ruggles Expert Report at 7 n.4.

"assign[ed] everyone on each block the most frequent race and ethnicity of the block, and then randomly [drew] age-sex combinations, then 42.7% of cases in the hypothetical database would be expected to match on *all four characteristics* to a respondent on the same block." *Id.* at 7-8 (emphasis added). Compare that to the Bureau's match rate in its reidentification attack: 46%. As Ruggles concludes, "despite the Census Bureau's enormous investment of resources and computing power, the much-vaunted database reconstruction technique does not perform significantly better than a crude random number generator combined with a simple assignment rule for race and ethnicity." *Id.* at 8.

Second, even accepting that the Bureau had "reconstructed" any useful data, attempts to match it with commercially available data were largely unsuccessful. While the Bureau claims to have "re-identified" 16.85% of the population in its re-identification attack simulation, "[t]hat claim is irresponsible." Ex. 6, Ruggles Expert Report at 9. The "reconstructed" data were usually incorrect and usually failed to "match even the block, age and sex of anyone identified in outside commercial sources." *Id.* at 10. And "[i]n the minority of cases where a hypothetical reconstructed individual d[id] match the block, age, and sex of someone in the commercial data, it usually turn[ed] out that the person identified in the commercial data was not actually enumerated on that block in the census." *Id.* In other words, if an attacker is wrong 5 times out of 6 in guessing the remaining characteristics—race and ethnicity—of census respondents, that level of uncertainty cannot constitute "re-identification" in any real sense of the word. *See also* Amicus Br. of Prof. Jane Bambauer, Doc. 33 at 19 ("The Census Bureau's most recent examination of the 2010 census records found greater number of apparent matches, but the attempted attacks were similarly lousy in making accurate matches.… [T]he researchers were able to make matches on 45% of the records…. However, the vast majority of those matches (62%) were *wrong*." (citation omitted)).

Again, were it otherwise, the Census Bureau has been flagrantly violating its privacy obligations for nearly a century.

Moreover, as now Acting Director of the Census Bureau Ron Jarmin noted in 2019, the outside attacker couldn't even be sure he was right 1 in 6 times without "access to confidential internal Census Bureau information."[23] No one outside the Bureau has that information—and if they did, they'd have no reason to run a reconstruction attack—so this is an important admission. Ruggles breaks it down this way: "Reidentification means confirming the identity of a particular individual and revealing their characteristics without reference to non-public internal census files. It would be impossible to positively identify the characteristics of any particular individual using the database reconstruction without access to non-public internal census information. Accordingly, the Census Bureau's database reconstruction experiment demonstrates that reidentification based on the published census tables is not feasible." Ex. 6, Ruggles Expert Report at 9. JASON—the third-party group whom Defendants use to bolster the supposed need for differential privacy, *see* Resp., Doc. 41 at 11-12—made a similar point: "Such reconstruction of the microdata [from the simulation attack] is not yet a violation of Title 13 since no personal data (e.g. names, addresses, etc.) are used when these tables are built." JASON, *Formal Privacy Methods for the 2020 Census* 29 (Apr. 2020), https://perma.cc/G8ZM-YNN6. Thus, the re-identification attack actually demonstrated the *efficacy* of the Bureau's 2010 disclosure avoidance methods.

Finally, the failure of the reconstruction attack is shown by considering that even under a preposterous worst-case scenario, there is no plausible harm and no reason for conducting the attack. Abowd explains that the "harm" of the re-identification attack is that the "attacker can learn self-response race and ethnicity"— assuming the attacker already knows a respondent's name, age,

[23] Ex. 7, Ron Jarmin, U.S. Census Bureau, *Census Bureau Adopts Cutting Edge Privacy Protections for 2020 Census* (Feb. 15, 2019), https://perma.cc/54R7-YJQS.

sex, and address. Doc. 41-1 at 107. But the attacker is successful at making this guess only 17% of the time. And even in a counterfactual "worst-case scenario" in which the attacker has access to perfect 2010 census data on name, address, sex, and age, the attacker correctly guesses race and ethnicity only 58% of the time. *Id.* at 71 ¶24. This uncertainty shows that no one has been "re-identified." It also shows why no one would ever attempt such an attack, for if the attacker who already possessed perfect data on name, address, sex, and age wanted to make a good guess on race and ethnicity, she could do much better by simply assuming that the respondent possesses the same race and ethnicity as the majority of people in her census block. Ex. 6, Ruggles Expert Report at 7-8. For example, if the attacker knew that respondents lived in a census block where 75% of people were white, he could correctly guess their race 75% of the time by guessing white. He'd have no reason to reconstruct a database that would lead to *less* accurate guesses. Thus, the threat that justified differential privacy and skewed population counts was a wholly phantom menace.

It's also worth pointing out that differential privacy does not even allow the Census Bureau to meet its own interpretation of §§ 8 and 9. Unlike with characteristic swapping, which intentionally targets unique identifiers that make a response a high-risk for personal identification, differential privacy is "a blunt and inefficient instrument for disclosure control." *Id.* at 13. The effect is that as accuracy increases, privacy—as defined by Defendants—decreases. But as the demonstration data show, to have even remotely usable data, the privacy loss budget must be ratcheted up dramatically. Defendants boast they're doing exactly that, *see* Resp., Doc. 41 at 62, but they never explain how the corresponding losses in privacy can cohere with their understanding of §§ 8 or 9 if those provisions prohibit the release of *any* individual characteristic.

The Bureau's (purported) re-identification attacks prove the point. The Census Bureau seems to be planning a privacy loss budget of 12.3 or less for the P.L. 94 redistricting data file.

See Ex. 6, Ruggles Expert Report at 16. And the new demonstration product is set to have a budget of 10.3. *See* Abowd Decl., Doc. 41-1 at 28. But these epsilon levels are "far higher than … ordinarily contemplated by privacy researchers," who generally suggest "runs from 0.01 to 5.0." Ex. 6, Ruggles Expert Report at 16. "Accordingly, one would expect that ε=12.3 would provide a relatively low level of data security." *Id.* That seems to be true: The Census Bureau re-ran the database reconstruction against the 2010 census data after applying differential privacy and concluded that "approximately 7.5% of the noise-infused population would have 'confirmed re-identification' using the same methodology as was employed in the original Census Bureau database reconstruction experiment." *Id.* at 17. That rate is both (1) unlawful under Defendants' interpretation, and (2) in the same vicinity as the rate of purported re-identifications under past methods. *Id.*; *cf.* Amicus Br. of Prof. Jane Bambauer, Doc. 33 at 2 ("[W]hen the Census Bureau applied the same simulation attack methods on data that it had prepared with Differential Privacy standards, confirmed reidentifications were in the same ballpark (about 25 million accurate reidentifications for an epsilon value of 16.)"). Given that, Defendants have not shown why they must violate § 141(c) just so they can also violate §§ 8 and 9 (as they understand them). JASON warned the Bureau in March 2020 that this would happen, but Defendants plowed ahead anyway. *See* JASON, *supra* at 94 ("The proposed use of DP in the 2020 Census, which is by now almost certain, will bring the mandates of Section 214 [which incorporates § 9] and Section 141 into conflict to a substantially greater degree than previously.… Thus, Census will need to adopt a policy that is a sensible compromise between conflicting provisions of law, recognizing that the ultimate adjudication of such policy—should it prove to be controversial—lies elsewhere.").

It gets worse, though. Real-world privacy protection is in fact likely to be *worse* off under differential privacy. As privacy expert Professor Jane Bambauer explains in her amicus brief, when

it comes to actual (as opposed to theoretical) threats, "Differential Privacy is *inferior* to the traditional methods that model different threat scenarios and quantify risks under a range of assumptions." Doc. 33 at 16 (emphasis added). "[T]he quantitative precision of Differential Privacy is actually a drawback," she says, because it "has the patina of mathematical elegance without actually quantifying privacy risks of the sort that most people care about." *Id.* at 16. Under differential privacy, for instance, the greater privacy losses caused by a more robust privacy loss budget "may be trivial or they may be very risky under real world conditions," but it's impossible to know because "Differential Privacy does not distinguish between these two." *Id.* at 17. Importantly, that is not true for traditional methods of disclosure avoidance. *Id.*

Ruggles makes the same point: "By contrast [with traditional disclosure avoidance methods], differential privacy makes no distinctions between high-risk and low-risk cases, so it infuses noise equally across characteristics and populations. This means that to achieve a given level of disclosure control, differential privacy must introduce far more error than would be needed using traditional statistical disclosure control." Ex. 6, Ruggles Expert Report at 18. And, he notes, "[i]t has long been recognized … that there is no direct relationship between the level of ε [or the privacy-loss budget] and the risk of disclosing identities." *Id.* at 16; *id.* ("Because differential privacy does not target variables and circumstances that are vulnerable to attack, in some datasets with strong differential privacy (low ε), disclosure control can be weak."). For this reason, JASON suggested that the Census Bureau "apply swapping as performed for the 2010 census" "[i]n addition to the use of Differential Privacy … so that no unexpected weakness of Differential Privacy as applied can result in a 2020 census with less protection tha[n] 2010." JASON, *supra*, at 98. Apparently, the Bureau rejected this advice. Otherwise, it could not claim that reverting to 2010 methods would somehow cause any delay. *Cf.* Abowd Decl., Doc. 41-1 at 46.

Lastly, differential privacy also presents a significant risk of political manipulation in the census results. Under differential privacy, Census workers have wide discretion to "manage the accuracy" (as Abowd puts it) of the census data as they see fit. *See* Ex. 10, Abowd at 1. Thus, by "tuning" the algorithm just so, or allotting the privacy loss budget in particular ways, bureaucrats can ensure that the population counts and other data are reported more accurately for certain groups—and reported *less* accurately for others. Think rural voters have too much say? There's a technical fix for that. Don't like older voters, or members of a certain racial group? Ditto. And the best (or worst) part is: No one will ever know of the manipulation because the accurate population numbers will never be released.

Such fears could be easy to discount if the Census Bureau *wasn't already prioritizing the accuracy of the data for certain racial and ethnic groups over others*. To be sure, nothing has come to light so far of such blatantly nefarious attempts as the examples above. But manipulation can happen with the best of intentions. For example, after hearing for months and months of the (valid) concerns from the American Indian and Alaska Native communities concerning the impact of differential privacy, Census officials determined that tribal areas would be "given sufficient privacy-loss budget to ensure that those populations are presented accurate to the number of persons in the unit column … essentially invariant and the same precision as the state populations themselves." Abowd Decl., Doc. 41-1 at 34. Plaintiffs agree with part of that decision: The Bureau should provide the AIAN population counts as enumerated. The problem is that allocation of the privacy loss budget is zero-sum. Abowd confirms this: "[T]his solution still requires balancing accuracy and privacy-loss overall. All characteristics cannot have large privacy-loss budget allocations at every geographic level." *Id.* at 34-35. Thus making the data more accurate for one ethnic or racial group will necessarily make the data less accurate for other ethnic or racial groups. As

one Census official noted in opposing the plan to prioritize the AIAN communities: "We cannot promise to do something that blatantly gives one racial group an advantage at the expense of all others." *See* Ex. 11, Email from Benjamin Overholt to Nathaniel Cogley (Oct. 22, 2020); *cf. Shaw v. Reno*, 509 U.S. 630, 643-44 (1993) ("A racial classification, regardless of purported motivation, is presumptively invalid and can be upheld only upon an extraordinary justification.").

Alas, it appears those objections were overruled. They shouldn't have been. To give Defendants the "power … to select among various estimation techniques having credible (or even incredible) 'expert' support is to give the[m] … the power to distort" census results in ways that favor certain groups or parties over others. *U.S. House of Representatives*, 525 U.S. at 348-49 (Scalia, J., concurring in part). A reading of the Census Act that requires such manipulation cannot be the best one, particularly in light of the long history of Congress acting to *prevent* such manipulation. *See* Pub. L. No. 105-119, § 209(a)(7) (recognizing 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"); *cf. Utah*, 536 U.S. at 497-506 (Thomas, J., concurring in part and dissenting in part) (detailing the history of census manipulation and the Founders' efforts to combat it).

For all these reasons, the Court should reject Defendants' misreading of the Census Act. Subsection 141(c) requires the Secretary to provide States with tabulations of the population that include the actual population counts, not intentionally distorted approximations of those numbers. And the privacy guarantees in §§ 8 and 9 do not forbid such release, and thus do not require the Census Bureau's adoption of differential privacy.[24]

[24] The individual Plaintiffs' Equal Protection claims are also likely to succeed for the reasons stated in Plaintiffs' initial motion. *See* Doc. 3 at 46-47. Defendants raise mainly standing objections in response, Doc. 41 at 52, which are addressed above.

2. Section 209 Provides Plaintiffs With a Cause of Action.

As explained in Plaintiffs' motion for a preliminary injunction, *see* Mot., Doc. 3 at 48-49, in § 209 of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act of 1998, Congress created a cause of action for persons harmed by the Census Bureau's use of unlawful statistical methods to seek relief in Court. That cause of action reads:

> Any person aggrieved by the use of any statistical method in violation of the Constitution or any provision of law (other than this Act), in connection with the 2000 or any later decennial census, to determine the population for purposes of the apportionment or redistricting of Members in Congress, may in a civil action obtain declaratory, injunctive, and any other appropriate relief against the use of such method.

Pub. L. No. 105-119, § 209(b), 111 Stat. 2440 (codified at 13 U.S.C. § 141 note).

Defendants do not dispute that Rep. Aderholt, Mr. Green, and Mr. Williams each has a cause of action under this provision to challenge differential privacy. *See* Resp., Doc. 41 at 49-50.[25] Defendants argue that Alabama lacks a similar cause of action, but even if true, the individual Plaintiffs have a cause of action under § 209, and the State has a cause of action under the APA (as do Plaintiffs). Each claim is thus properly before the Court. *See* Compl, Doc. 1 at 45-49.

Defendants' objection lacks merit in any event. Congress enacted the cause of action in § 209 because it recognized that "it would be impracticable *for the States* to obtain, and the court of the United States to provide, meaningful relief after" the census was complete. Pub. L. No. 105-119, § 209(a)(8) (emphasis added). It thus allowed "[a]ny person aggrieved by the use of any statistical method" to file suit, *id.* § 209(b), and expanded the concept of "person aggrieved" to "*include*[]" "(1) any resident of a State whose congressional representation or district could be

[25] In their opposition to Plaintiffs' request for a three-judge court, Defendants did contest that the application of differential privacy qualifies as a "statistical method" within the meaning of § 209. *See* Opp., Doc. 23. The Court preliminarily overruled those objections when it convened the three-judge panel and determined that Plaintiffs "sufficiently alleged an action covered by § 209 and 28 U.S.C. § 2284." Order, Doc. 27 at 6. For the reasons stated in Plaintiffs' reply in support of the three-judge court request, *see* doc. 25, Defendants' objection was based on a factually incorrect understanding of "statistical method."

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," *id.* § 209(d) (emphasis added). Considering that § 209 was created for the benefit of the States, and then appended as a note to § 141(c)—which was also created for the benefit the States, *see* Anderson, *supra*—the context of the Act confirms that Congress's inclusion of other aggrieved persons did not exclude the parties most likely to be affected by the Bureau's malfeasance: the States. That context provides sufficient "statutory intent" to rebut the generic presumption that States are not statutory "persons." *Return Mail, Inc. v. U.S. Postal Serv.*, 139 S. Ct. 1853, 1862 (2019); *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).

3. Plaintiffs Brought Their Claims Neither Too Early Nor Too Late.

The Court should also set aside Defendants' decision to apply differential privacy to the redistricting data as unlawful and arbitrary and capricious. *See* 5 U.S.C. § 706(2)(A), (B), (C). The merits of these claims, and Defendants' objections to them, are sufficiently addressed above and in the initial motion. *See* Mot., Doc. 3 at 50-55. Here, a few notes in response to Defendants' too-early, too-late procedural trap (for these claims and others) will suffice.

First, Defendants contend that Plaintiffs do not challenge agency "action" under the APA, but rather have launched a programmatic attack. Resp., Doc. 41 at 54-55. As the Supreme Court has reminded, "[t]he bite in the phrase 'final action' … is not in the word 'action,' which is meant to cover comprehensively every manner in which an agency may exercise its power." *Whitman v. Am. Trucking Assocs.*, 531 U.S. 457, 478 (2001) (citations omitted). And the APA defines agency

action broadly to include "the whole or part of an agency rule, order, license, sanction relief, or the equivalent or denial thereof, or failure to act." 5 U.S.C. § 551(13). A "rule," in turn, includes "the whole or a part of an agency statement of general or particular applicability and future effect designed to implement, interpret or prescribe law or policy or describing the organization, procedure, or practice requirements of an agency." *Id.* § 551(4). These definitions encompass the Bureau's discrete decision to apply differential privacy in a manner that skews the intrastate population and voting-age population counts at the district block level.

As for Defendants' "programmatic attack" characterization, a programmatic attack occurs where, for example, a litigant "seek[s] *wholesale* improvement of [a] program by court decree," *Lujan*, 497 U.S. at 891, or asks a court to undertake "'hands-on' management" of a government agency, *NAACP v. Bureau of the Census*, 945 F.3d 183, 191 (4th Cir. 2019). Defendants reason that happened here because the Census's "data-processing operations, including disclosure avoidance, 'expressly are tied to one another,' so altering any of these operations 'would impact the efficacy of the others, and inevitably would lead to court involvement in "hands-on" management of the Census Bureau's operations.'" Resp., Doc. 41 at 54 (quoting *NAACP*, 945 F.3d at 191).

But unlike the challengers in *NAACP*, Plaintiffs do not seek "wholesale improvement" of the entire census operation. They request only what they are entitled by law to receive: tabulations of population that accurately reveal the intrastate population counts from the decennial census. *See* 13 U.S.C. § 141(c). To be sure, such an order will have downstream effects. Like any order, it will require Defendants to act, or stop acting, to fulfill the law's mandate. Contra Defendants' intimation, though, there is no too-big-to-fail exception to judicial review. Nor would such an order "inevitably" lead to "hands-on" management of the census. *How* Defendants decide to comply with the order will be up to them. All of that is in stark contrast to what happened in *NAACP*, where the

plaintiffs sought to commandeer many aspects of the Bureau's program. Asserting vague harms of "insufficiency"—"insufficient network of area census offices," "insufficient partnership program staffing," "insufficient testing of 'new protocols,'" "insufficient enumerators," 945 F.3d at 190-91—the *NAACP* plaintiffs sought "an injunction that requires Defendants to propose and implement, *subject to this Court's approval and monitoring*, a plan to ensure that hard-to-count populations will be actually enumerated in the decennial census," *NAACP v. Bureau of the Census*, 399 F. Supp. 3d 406, 422 (D. Md.), *aff'd in part, rev'd in part and remanded*, 945 F.3d 183 (4th Cir. 2019) (emphasis added). That is nothing like this case.

Second, Defendants dispute the timing and finality of the action Plaintiffs challenge. On the one hand, they say, the Bureau's decision to use differential privacy is not final because "[c]ritical details of how the Census Bureau will implement differential privacy have not yet been finalized," Resp., doc. 41 at 57, and the Bureau's action will not be final until "the Secretary delivers the final data to the States," *id.* at 56. On the other hand, they argue, Plaintiffs' claims are barred by laches because "Plaintiffs have delayed considerably in asserting" them. *Id.* at 64.

For their too-early argument, Defendants first turn to *Franklin v. Massachusetts*, 505 U.S. 788 (1992), a case involving a challenge to the Bureau's method of allocating federal overseas employees in the apportionment numbers that cost Massachusetts a congressional seat. The Court held that, because "the action that creates an entitlement to a particular number of Representatives and has a direct effect on the reapportionment is the President's statement to Congress, not the Secretary's report to the President," Massachusetts could not challenge the *Bureau's* decision under the APA. *Id.* at 797; *see id.* (noting that agency action is final under the APA if (1) "the agency has completed its decisionmaking," and (2) the "the result of that process is one that will directly affect the parties"). Likening this case to *Franklin*, Defendants thus contend that "[f]inal action

will occur only when the Secretary delivers the final data to the States, which has not yet occurred." Resp., Doc. 41 at 56. But this case is not *Franklin*. Unlike with the apportionment counts under § 141(b), there is no higher official that needs to weigh in before the Bureau irreversibly implements differential privacy to the redistricting tabulations under § 141(c). And unlike the President, who can tell the Bureau "to reform the census, even after the data are submitted to him," *id.* at 798, the States cannot tell the Bureau to reform the redistricting data once it is released. *Cf. City of New York v. U.S. Dep't of Com.*, 822 F. Supp. 906, 918 (E.D.N.Y. 1993) (noting that *Franklin* "did not involve a situation where … plaintiffs challenge the counts as they are used for intra-state redistricting and for federal fund allocation (emphasis omitted)), *vacated on other grounds*, 34 F.3d 1114 (2d Cir. 1994), *rev'd sub nom. Wisconsin v. City of New York*, 517 U.S. 1 (1996).

More fundamentally, *Franklin* does not stand for the proposition Defendants seem to glean from it—that, because the *President's* handing over to Congress the apportionment data constituted final agency action (as opposed to the Secretary's delivery of the data to the President), anything short of releasing the redistricting data to the States cannot constitute final agency action. *See* Resp., Doc. 41 at 56. *City of Detroit v. Franklin*—on which Defendants also rely for the same contention—proves the point. *See* 4 F.3d 1367 (6th Cir. 1993). Though noting that the Secretary's reporting redistricting data to the States qualified as final agency action, *id.* at 1377 n.6, the Court actually reviewed a later action: the Secretary's refusal to adjust and re-report the redistricting data, *see id.* at 1377-78. By Defendants' logic, the fact of a later decision would necessarily make the release itself not final and unchallengeable. That, of course, was not so. Neither is it so that any other census-related action short of sharing census data cannot constitute final agency action. It can. *See Dep't of Com. v. New York*, 139 S. Ct. 2551, 2578 (2019) (reviewing under the APA the Bureau's decision to include citizenship question on the census form).

Next, Defendants invoke the changing nature of the differential privacy system and argue that the Bureau's decision cannot be final until it "sets the final privacy-loss budget and releases the final numbers." Resp., Doc. 41 at 58. Until that happens, Defendants say, Plaintiffs cannot show "that there will be *any* legal consequences from differential privacy." *Id.*; *see also id.* at 57 (noting that "[c]ritical details of how the Census Bureau will implement differential privacy have not yet been finalized"). To be sure, it is true that Census officials are still working on differential privacy—that's part of the problem given the March 31 deadline. But it is not true that Plaintiffs will escape harm based on any of the decisions left to make. That is because the Bureau has already "finalized"—its word—"the list of 'invariants' for the first set of 2020 Census data products," which includes "the P.L. 94-171 file (redistricting data)":

11/25/2020: Invariants Set for 2020 Census Data Products

On November 24th, the Census Bureau's Data Stewardship Executive Policy Committee (DSEP) finalized the list of "invariants" for the first set of 2020 Census data products. Invariants are statistics that are published without noise infusion.

The first set of data products includes the P.L. 94-171 file (redistricting data), the Demographic Profiles, the Demographic and Housing Characteristics File, and the Congressional District Summary File. These products will be protected using the main TopDown Algorithm (TDA) central to the Disclosure Avoidance System (DAS). We will employ other formal privacy methods to handle the remaining more detailed data tables separately to preserve the greatest degree of accuracy, as they pose difficult and unique privacy challenges.

Per the decision, the following statistics for this first set of products will be invariant at these levels of geography and higher:

- Total population (at the state and state-equivalents level [1])
- Total housing units (at the census block level)
- Number of group quarters facilities by type (at the census block level)

Ex. 8, U.S. Census Bureau, *2020 Disclosure Avoidance System Updates: Invariants Set for 2020 Census Data Products* (Nov. 25, 2020), https://perma.cc/G5WE-S58C.

Thus, as Plaintiffs explained in their Complaint, all other tabulations—"such as how many people live in a census block" will be skewed intentionally. Doc. 1 at 20; *see also id.* at 21 ("The

Bureau's adoption of differential privacy will cause the Bureau, for the first time ever, to purposefully report incorrect population counts to the States to use for redistricting."); *id.* at 29-30 ("Congress did not give the Bureau authority to report estimates or values that merely bear some relation to sub-state population counts. Congress required that the actual numbers be reported."). Defendants do not deny that. But it is the actual population counts within the State that Plaintiffs are entitled to under § 141(c). And it is those same counts that Defendants *will* withhold absent action by this Court. There is nothing uncertain about that. The challenged agency action is final and ripe for review under the APA.

As for their too-late argument, Defendants invoke the doctrine of laches to assert that (1) Plaintiffs delayed in bringing their claims for relief, (2) the delay was inexcusable, and (3) the delay caused Defendants undue prejudice. *See* Resp., Doc. 41 at 63-64. The facts belie such claims. Plaintiffs did not delay, but neither did they rush to court prematurely. It did not become apparent that the Bureau's application of differential privacy would abridge Plaintiffs' rights under § 141(c) until November 24, 2020, when the Data Stewardship Executive Policy Committee set the invariants. Before that day, Plaintiffs "were entitled to presume that the public officials responsible for" producing redistricting data "would act in accordance with the law." *Black Warrior Riverkeeper, Inc. v. U.S. Army Corps of Engineers*, 781 F.3d 1271, 1285 (11th Cir. 2015). And after that day, Plaintiffs had a "reasonable need to fully investigate [their] claims," *id.*, and assess the gravity of the harm Defendants would inflict, which Plaintiffs promptly did, *see* Thomas B. Bryan, *Census 2020: Differential Privacy Analysis – Alabama Case Study*, Doc. 3-6. The short amount of time Plaintiffs took "to properly prepare for" this "complex … litigation … cannot constitute inexcusable delay." *Black Warrior Riverkeeper*, 781 F.3d at 1285. A contrary ruling "would create a powerful and perverse incentive for plaintiffs to file premature and even frivolous suits to avoid the

invocation of laches." *Id.* Nor were Defendants unduly prejudiced in any event. If they are violating the law as alleged, the costs of changing course hardly qualifies as undue prejudice in equity.

B. Defendants' Delay Releasing the Tabulations of Population Is Unlawful.

1. Section 209 Affords Plaintiffs a Cause of Action Because Differential Privacy Contributed to the Delay.

The Bureau's implementation of differential privacy has at least partly contributed to and will continue contributing to the complained-of delay. Accordingly, Pub. L. No. 105-119, § 209 provides Plaintiffs with a cause of action to challenge Defendants' delay.

As explained above, § 209 broadly applies to "[a]ny person aggrieved by the use of any statistical method in violation of the Constitution or any provision of law." *Id.* § 209(b). As threshold matters, Plaintiffs constitute "person[s] aggrieved," *see* doc. 2 at 6-8, and differential privacy constitutes a "statistical method," *see* docs. 25, 27. And despite Defendants' protestations otherwise, *see* Resp., doc. 41 at 65-66, Plaintiffs do not challenge the February 12 press release as such (as though Plaintiffs' problem is with the press release qua press release), but the decision reflected in the press release: the Bureau's decision to delay delivering the redistricting data. There is ample reason to think that delay is caused, at least in part, by differential privacy.

Defendants contend that differential privacy—though months behind schedule—has nothing to do with overdue redistricting data. Their first argument, however, rests on a sleight of hand. Defendants deny "that applying any other appropriate disclosure-avoidance methods *that complied with Title XIII* would allow them to release Redistricting Data any sooner than using Differential Privacy." Ex. 12, Requests for Admission at 1-2 (emphasis added). Defendants' position seems to be that differential privacy or something close to it is the only disclosure-avoidance method that complies with Title XIII's confidentiality requirements. By that logic, the Bureau could spend

the next few years trying and failing to implement differential privacy and still deny that differential privacy "has, at least in part, delayed the release" of data. *Id.* at 1. In any event, as explained above, *see* II.A.1, the purported re-identification attack that is the foundation for differential privacy was a failure. Numerous other "appropriate disclosure-avoidance methods that compl[y] with Title XIII" are out there, if the Bureau will only use them. There is every reason to think the Bureau still has those methods at its disposal. Ex. 6, Ruggles Expert Report at 13-16. JASON even recommended that the Bureau "apply swapping as performed for the 2010 census so that no unexpected weakness of Differential Privacy as applied can result in a 2020 census with less protection than 2010." *See* JASON, *supra*, at 8, 98. If the Bureau followed that advice, it can necessarily apply swapping more quickly than it can apply swapping and then differential privacy. And even if it rejected JASON's advice, "there should be few barriers to applying the 2010 software to the 2020 data." Ex. 6, Ruggles Expert Report at 13.

Second, issues with differential privacy have plagued the Bureau throughout the 2020 census, suggesting that they—at least in part—contributed to the extensive delay. The Bureau "announced its decision to use differential privacy for the 2020 census in September 2017," Resp., doc. 41 at 64, yet differential privacy is *still* a work in progress. Indeed, just this past September, the Census Scientific Advisory Committee noted its reservations with the program's progress:

> The Bureau's implementation of differential privacy has followed an ambitious timeline under any circumstances, even in the absence of a global pandemic or other challenges. The Bureau is operating under enormous time pressure to make the incredibly consequential and irreversible decision on the privacy-loss budget and its allocation. But many implications of this decision for privacy, accuracy, and fitness-for-use are currently unknown. The process by which the Bureau will determine the privacy-loss budget allocation is unclear. Whatever the choice of privacy-loss budget allocation, the Bureau will need to estimate the re-identification risk to ensure sufficient privacy, will need to give users methods for assessing fitness-for-use, and will need to have a backup plan (e.g., allocate some privacy budget) for the future, in case differentially-private data are not fit for some important use cases. The recommended use case catalog development and rigorous analysis for

> priority use cases are important for informing how to allocate the privacy-loss budget across uses.

Ex. 13, U.S. Census Bureau, Census Scientific Advisory Committee Fall 2020 Meeting Recommendations 13-14 (Sept. 17-18, 2020), https://perma.cc/RR3S-XEAU. As a result, the Committee recommended delaying "additional releases after the December apportionment release to allow time" to resolve the significant problems with the system. *Id.* at 15.

That was *September*—six months before the redistricting data were to be released. Then, in October, when confronted with concerns that "more folks are asking for the [differential privacy disclosure avoidance system to take a backseat," Abowd replied: "I don't know how to speed up the work. I agree … that we should hold everything after the redistricting data until there is consensus that the underlying data are fit-for-use. *But there's no way to slow the redistricting [data] long enough to get that*." Ex. 14, Email from John Abowd to Danah Boyd (Oct. 7, 2020) (emphasis added). As fortune would have it, four months later the Bureau announced that it would indeed "slow the redistricting" data. If that decision was unrelated, it sure was serendipitous.

Lastly, Defendants attempt to sever the link between differential privacy and delay by asserting that "the Bureau has allotted approximately three weeks to apply differential privacy, while the disclosure-avoidance procedures used in the 2010 census took nearly four weeks." Resp., Doc. 41 at 66. Of course, there is no practical difference between "approximately three weeks" and "nearly four weeks." More significantly, the Bureau initially allotted itself until no later than March 31, 2021, to have differential privacy applied to the redistricting data, but as of today, "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." Bryan Rep., Doc. 3-6 at 10. Reverting to proven disclosure avoidance methods is far more likely to result in

expeditious production of data than sticking with an unnecessary and experimental approach that the Bureau can't seem to get right.

2. Defendants' Delay Violates the Census Act.

In its February 12 Decision, the Bureau declared it would "deliver the Public Law 94-171 redistricting data to all states by Sept. 30, 2021." Doc. 3-7. This data was due March 31, 2021. 13 U.S.C. § 141(c). The Bureau thus missed the deadline, and, in so doing, violated the Census Act. Defendants do not disagree, and instead argue that Plaintiffs lack a cause of action to sue under the Act. But as explained above and in Plaintiffs' additional briefing on the matter, *see* docs. 2 & 25, § 209 provides Plaintiffs a cause of action. And, as discussed next, Plaintiffs also have a cause of action under the APA. But even if Plaintiffs could not bring suit under § 209 or the APA, this Court's inherent equitable power allows it to enjoin the Bureau from "violating, or planning to violate, federal law." *Armstrong v. Exceptional Child Ctr., Inc.*, 575 U.S. 320, 326-27 (2015).

3. Defendants' Delay Violates the Administrative Procedure Act.

The February 12 Decision constitutes final agency action. The Bureau's decision to delay releasing the redistricting data beyond the statutory deadline marked "the consummation of the [Bureau's] decisionmaking process," and was not "of a merely tentative or interlocutory nature." *U.S. Army Corps of Eng'rs v. Hawkes Co.*, 136 S. Ct. 1807, 1813 (2016). In fact, the statutory deadline has already passed, so it is impossible for the Bureau to claim that it is still considering whether to meet it. The "legal consequences" of that decision have begun flowing, too. *See id.* The decision guaranteed that the Secretary would violate Plaintiffs' rights under § 141(c) to receive timely redistricting data, and Plaintiffs have already been harmed by that decision. Both prongs of "final agency action" are thus satisfied.

Defendants present several arguments in response, most of them (like Defendants' mis-reading of *Franklin*) discussed above. Their main protest here is that "a press release [*i.e.*, the

February 12 Decision] explaining that the Census expects to deliver redistricting data by a certain date did not consummate anything" because it was merely "snapshot" "updat[ing] Census's estimated timeline, and of course, estimates can still change." Resp., Doc. 41 at 69. But it matters not that the Bureau's decision was made public through a press release, as opposed to a more official looking document. Otherwise an agency could evade APA review for any action as long as it communicated the action through public media. Nor does it matter that the Bureau's Decision is theoretically subject to change. For one, the deadline has passed; federal law has already been violated. For another, the possibility of further change is not the test—indeed, if the APA's finality inquiry turned on whether an agency action *could* someday change, virtually no agency action would ever be final. Instead, "[t]he finality requirement is concerned with whether the initial decisionmaker has arrived at a definitive position on the issue that inflicts an actual, concrete injury." *Darby v. Cisneros*, 509 U.S. 137, 144 (1993). The "issue" here was whether to comply with March 31 deadline; the Bureau "arrived at a definitive position" not to; and the decision "inflict[ed] … actual, concrete, injur[ies]." *Id.*

The February 12 Decision was arbitrary and capricious and otherwise not in accordance with law. The February 12 Decision should be set aside because it was arbitrary and capricious. 5 U.S.C. § 706(2)(A). As Plaintiffs initially explained, the Bureau knows that States like Alabama rely on accurate, timely census data for redistricting. Mot, Doc. 3 at 58. Yet the Bureau discounted the States' interests, and did not even attempt to mitigate the harm of delay by producing data on a rolling, or "flow," basis (as it has in the past) or prioritizing States whose laws require timely data. The February 12 Decision thus evinced disregard for the significant reliance interests States have in the timely production of redistricting data, and further revealed a poorly conceived response to the Decision's predictable repercussions. *See Dep't of Homeland Sec.*, 140 S. Ct. at 1915.

Defendants' response amounts to an admission. Offering one sentence to prove the Decision was not arbitrary or capricious, the Bureau *concedes* it could release data to Alabama *weeks* earlier than it currently plans to, but that doing so would delay other States' receipt of data. Doc. 41 at 71. But that is Plaintiffs' point—the Bureau could have provided the data first to those States who would otherwise suffer injury, and it should have planned to do so. The Bureau's own statements show that the February 12 Decision was arbitrary and capricious, and its minimal arguments to the contrary fail.

III. The Equities Warrant Injunctive Relief.

The equities favor swift relief. Absent an injunction, Plaintiffs will be irreparably harmed. Their statutory and constitutional rights will be violated. The State will be forced to redistrict with tabulations of population that do not accurately reflect the population counts within the State (or, yes, as Defendants repeatedly suggest, the State could spend billions of dollars to build its own census, though that would only exacerbate the delay problem). And the harm will be irreparable because the State needs to begin redistricting promptly and so will be forced to use Bureau's second-rate data upon its release. *See* Mot., Doc. 3 at 61-69. Defendants' rejoinders have been addressed at length above. *See* Resp., Doc. 41 at 73-79. The Court should order relief.

IV. In The Alternative, Plaintiffs Are Entitled To A Writ Of Mandamus.

Alternatively, the Court should issue a writ of mandamus requiring the Secretary to deliver the redistricting data to Alabama as soon as possible. Defendants protest that the word "shall" in § 141(c) is merely precatory, even as they concede that "the word 'shall' usually connotes a requirement." Resp., Doc. 40 at 80 (quoting *Maine Cmty. Health Option v. United States*, 140 S. Ct. 1308, 1320 (2020) (emphasis omitted)). And they list previous acts of Congress excusing census delays as "support" for their "conclusion that census deadlines are directory in nature," *id.* at 81, 82 n.7, even though the listing suggests just the opposite. (Why did Congress act if it thought the

Bureau had all the time in the world?) What is notable, though, is what is missing from that listing: any word from the current Congress or the last excusing the Bureau's delay, despite Defendants' request for an extension. The Secretary's duty is mandatory, and this Court should enforce it.

CONCLUSION

In response to an academic's concerns over the differential privacy system, a research contractor at the Census Bureau warned Abowd that responding with "'You have to trust us' ain't gonna work."[26] Yet that is precisely what Abowd and the Defendants offer here. They promise that the final version of the tabulations—whenever they are released—will be fit for use, and urge the Court to trust them and deny Plaintiffs' requested relief. *See* Abowd Decl., Doc. 41-1 at 47; Resp., Doc. 41 at 20. And, they threaten, the Court *must* trust them because the Bureau has gone all-in on differential privacy on a tightened timeline with no Plan B.

As demonstrated above, these arguments are wrong factually and legally. Plaintiffs do not ask the Court to micro-manage the last phases of Census 2020. But the law entitles Plaintiffs to relief, and it is this Court's duty to provide it. And Defendants have a number of ways to deliver accurate redistricting data well before September. Accordingly, this Court should (1) enjoin Defendants from reporting inaccurate population counts to Plaintiffs, and (2) enjoin Defendants from delaying the release of the P.L. 94-171 redistricting data any longer than necessary, and by no event beyond July 31, 2021.

[26] *See* Ex. 14, Email from Danah Boyd to John Abowd (Oct. 5, 2020).

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on April 20, 2021, I filed with the Court and served on all counsel through the CM/ECF system the foregoing document.

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