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Addressing the Social Cost of Digital Transition: A New Decennial Census for 2020

Greta Byrum

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ADDRESSING THE SOCIAL COST OF DIGITAL TRANSITION: A NEW DECENNIAL CENSUS FOR 2020

*Greta Byrum**

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* Founder and co-lead of Community Tech NY; Co-Director, Digital Equity Laboratory, an initiative at The New School, building applied research and policy strategy, and convening power around technology inclusion, equity, and justice issues. Many thanks to Meghan McDermott, Maya Wiley, Lauren Moore, and Jeff Wice for sharing ideas, news, analysis, and debates as the picture of the 2020 Census pulled into focus. Thanks also to the members of the NY Counts 2020 Steering Committee and its Tech and Tools Committee, the New York Library Association, the New York Community Trust, and the NYC Mayor’s Office of the Chief Technology Officer for their partnership and support.

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INTRODUCTION

The stakes could hardly be higher for the 2020 decennial census.¹ This constitutionally mandated count of U.S. residents will be used to

1. This Essay was written between December 2019 and February 2020, as plans for the newly online-first decennial census were finalized and released, with the goal of informing different communities of practice about the changes taking place as the census evolved to a mostly-digital platform and the resulting digital inequities that could emerge. Because conditions, context, and knowledge were evolving rapidly, this Essay was written from the contemporaneous perspective of an applied researcher with what information was publicly available at the time. A version of this work was presented at the October 2019 *Fordham Urban Law Journal* Cooper-Walsh Colloquium and refined over time as new information became available, and included original analysis conducted by the author and associates. However, the coronavirus pandemic has had material impact on the dynamics presented in this Essay, and any further analysis must take the current crisis into account. In effect, the pandemic has only served to underscore and deepen the main digital equity concern presented here: i.e., that uneven access to the internet might impact response rates for particular communities, and create a higher bar for them to be counted toward the population totals that shape funding and electoral processes. Since the Decennial count began in March 2020 — just as the pandemic reached crisis level in New York State — there are reports of a few critical developments: First, due to social distancing concerns, the Census Bureau delayed the rollout of field enumeration (household canvassing) activities by almost three months, to late May 2020, and also postponed the deadline for finalizing the count to October 31, 2020. It is unclear how the requirement for social distancing will impact the nature and extent of field enumeration. See Hansi Lo Wang, *In 13 States, Census Bureau to Resume Hand-Delivering Forms, Hiring Workers*, NAT'L PUB. RADIO (May 4, 2020, 8:28 PM), <https://www.npr.org/sections/coronavirus-live-updates/2020/05/04/850371670/in-13-states-census-bureau-to-resume-hand-delivering-forms-hiring-workers> [<https://perma.cc/DKV2-EYCN>]. In addition, the new reporting deadline may be too late for some states to reapportion political representation and electoral districts in time for the 2022 elections. This could force legislatures to draw political lines using data other than the census, which could create legal and constitutional challenges. See Max Greenwood, *Census Delay Threatens to Roil Redistricting*, HILL (May 15, 2020, 6:00 AM), <https://thehill.com/homenews/campaign/497681-census-delay-threatens-to-roil-redistricting> [<https://perma.cc/HNL2-G4LG>]. Second, journalistic reports quote county officials saying that they have not received funds promised by the states for local field operations to get out the count, possibly because money has been diverted to pandemic response. See Lana Bellamy, *Mid-Hudson Residents Urged to Respond to 2020 Census*, TIMES HERALD-REC. (Apr. 17, 2020, 4:52 PM), <https://www.recordonline.com/news/20200417/mid-hudson-residents-urged-to-respond-to-2020-census> [<https://perma.cc/2MK6-F2R8>]. And third, due to the closure of libraries, schools, and government offices, the majority of public internet access sites for online census survey response have not been available to underconnected populations. See Jon Campbell et al., *Health Crisis Hurts New York Census Response Efforts*, GOV'T TECH. (May 1, 2020),

decide the allocation of up to \$1 trillion in federal funding for infrastructure, social programs, and loans, to redraw electoral districts, and to reapportion political representation at the federal, state, and local levels.² Moreover, the decennial census provides a picture of who we are as a country — our stories, our identities, and how our society is evolving. It is the most basic civic infrastructure, the core data that informs decision-making by and for the people.

Article 1, Section 2 of the U.S. Constitution mandates that the government must conduct a complete count every ten years, and also specifies that the count must be an “actual enumeration”³ — in other words, the Census Bureau may not use statistical sampling methods to generate population estimates but must count each and every resident of the country. As the U.S. population has grown, the count has become more expensive and complicated. Since 1970, the cost of conducting the census has approximately doubled each decade.⁴ The

<https://www.govtech.com/civic/Health-Crisis-Hurts-New-York-Census-Response-Efforts.html> [<https://perma.cc/89HF-JKCF>] (noting that one of the reasons for a poor early response rate in the cities is a “smaller percentage of homes with high-speed Internet access”). Contemporaneous tracking of self-response conducted by the City University of New York’s Graduate Center has found that there is a large and growing gap (as of May 7, 2020, 14 percentage points) between more robust response from better-connected “Internet First” neighborhoods over lower response from “Internet Choice” neighborhoods, which have been identified by the Census Bureau has more likely to lack internet connections at home. *CUR Research Initiatives*, GRADUATE CTR.: CUNY, <https://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/Centers-and-Institutes/Center-for-Urban-Research/CUR-research-initiatives> [<https://perma.cc/9PN4-MCXX>] (last visited May 26, 2020); *Census 2020 Response Rate Analysis: Week 7*, GRADUATE CTR.: CUNY, <https://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/Centers-and-Institutes/Center-for-Urban-Research/CUR-research-initiatives/Census-2020-Response-Rate-Analysis-Week-7> [<https://perma.cc/X7HR-Z4GX>] (last visited May 26, 2020) (“The gap between the average response rate for Internet First and Internet Choice tracts also had grown to almost 14 points. A week earlier, the gap was 13 points, and the week prior it was 10 points.”).

2. *About the Decennial Census*, U.S. CENSUS BUREAU (Mar. 30, 2020), <https://www.census.gov/programs-surveys/decennial-census/about.html> [<https://perma.cc/CF7G-V7RC>]; Tracy Gordon, *TaxVox: State and Local Issues: The Census Is about Nearly \$1 Trillion in Federal Spending, Not Just Elections*, TAX POL’Y CTR. (June 27, 2019), <https://www.taxpolicycenter.org/taxvox/census-about-nearly-1-trillion-federal-spending-not-just-elections> [<https://perma.cc/PT7A-H67T>].

3. U.S. CONST. art. I, § 2.

4. U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-11-193, 2010 CENSUS: DATA COLLECTION OPERATIONS WERE GENERALLY COMPLETED AS PLANNED, BUT LONG-STANDING CHALLENGES SUGGEST NEED FOR FUNDAMENTAL REFORMS (2010).

2010 Census cost a total of \$12.3 billion, roughly \$42 per capita and \$2 billion over the Bureau's \$11 billion estimate.⁵

Due to the 2010 cost overrun, and given the expectation of only increasing cost and complexity, the Government Accountability Office called on the Census Bureau to address cost and design issues in its preparation for 2020.⁶ The Bureau decided to create cost savings by moving to digital platforms for address canvassing operations and census questionnaires.⁷ The move to digital operations has been fraught, as the Government Accountability Office has reported concerns about cybersecurity, digital platform performance, and public readiness just a month before the public launch.⁸

The 2020 decennial census is also rolling out against a backdrop of political turmoil, after a contentious fight over the proposed addition of a citizenship question to the census questionnaire. Government experts and civil rights groups worried that the addition of such a question would chill participation among some populations, especially given the Trump Administration's expansion of policies to curb the flow of migration and to detain and deport undocumented immigrants.⁹ The case went all the way to the Supreme Court,¹⁰ which handed down a decision to block the question — not based on whether the question itself was legitimate, but because opposing counsel provided evidence that Commerce Secretary Wilbur Ross had used pretextual grounds to justify the question's addition.¹¹ Ross had claimed that he was directing the Census Bureau to add the question at the behest of the Justice Department, whereas evidence

5. *Id.*

6. Alexis Farmer, *Digitizing the 2020 Census*, BRENNAN CTR. FOR JUST. (Mar. 27, 2018), <https://www.brennancenter.org/our-work/analysis-opinion/digitizing-2020-census> [https://perma.cc/UL5T-FYZU].

7. *Id.*

8. Lia Russell, *GAO, Congress Warn on Census Staffing, Cyber*, FCW (Feb. 12, 2020), <https://fcw.com/articles/2020/02/12/census-cyber-workforce-hearing-russell.aspx> [https://perma.cc/85DT-CPSE].

9. Michael Wines, *2020 Census Won't Have Citizenship Question as Trump Administration Drops Effort*, N.Y. TIMES (July 2, 2019), <https://www.nytimes.com/2019/07/02/us/trump-census-citizenship-question.html> [https://perma.cc/5PDR-QBUV].

10. *Department of Commerce v. New York*, 139 S. Ct. 2551 (2019).

11. *Id.* at 2575; Katie Rogers et al., *Trump Says He Will Seek Citizenship Information from Existing Federal Records, Not the Census*, N.Y. TIMES (July 11, 2019), <https://www.nytimes.com/2019/07/11/us/politics/census-executive-action.html> [https://perma.cc/H4QX-AHFT]; Wines, *supra* note 9.

showed that Ross had proposed the addition himself.¹² While the Trump Administration dropped its fight for the citizenship question, it subsequently issued an Executive Order instructing federal agencies to provide the Census Bureau with any available data relevant or indicative of citizenship status, in a bid to eliminate non-citizens from the population counts used to draw political boundaries.¹³

In fact, the defeat of the question opened the door instead to the Trump Administration's Executive Order 13880: *Collecting Information About Citizenship Status in Connection with the Decennial Census*, issued July 11, 2019, ordering federal agencies and departments, including the Department of Homeland Security (DHS), to provide the Census Bureau with administrative records to assist in determining the number of citizens, lawfully present non-citizens, and unauthorized immigrants in the United States during the decennial census (2020 Census).¹⁴

On December 20, 2019, DHS released a Privacy Impact Assessment (PIA) on this Executive Order.¹⁵ In its analysis, DHS explained the Census Bureau's plan to create, for each person counted in 2020, a "unique person identifier, called a Protected Identification Key (PIK). The PIKs will be used to link each person's citizenship information to their 2020 Census record."¹⁶ Regarding immigrants and refugees, the PIA specified that DHS-provided data flowing to the Bureau would include alien registration numbers, social security numbers, places of residents, and data. DHS went on to cite risks regarding compliance with the Executive Order, such that the Census Bureau "may use DHS data for unauthorized purposes" and that it "will retain DHS information for longer than necessary."¹⁷ The PIA made it clear that DHS does not know how long the Census Bureau will retain data and analysis derived from the 2020 Census.¹⁸

This reshaping of the decennial census into a digital operation with significant data inputs and outputs constitutes a radical transformation of our core public information infrastructure. The

12. Rogers et al., *supra* note 11.

13. *Id.*

14. Exec. Order No. 13880, 84 Fed. Reg. 33,821 (July 16, 2019).

15. See DEP'T OF HOMELAND SECURITY, PRIVACY IMPACT ASSESSMENT: IMMIGRATION-RELATED INFORMATION SHARING WITH U.S. CENSUS BUREAU 1 (2019),

<https://www.dhs.gov/sites/default/files/publications/privacy-pia-dhs079-sharingwithce nus-december2019.pdf> [<https://perma.cc/NYA2-KAXW>].

16. *Id.* at 3.

17. *Id.* at 9.

18. *Id.*

Census Bureau has redesigned its systems from end to end, outsourcing the creation of advanced statistical and geographic models for address canvassing and a brand-new online data collection tool to contract software developers.¹⁹ With little fanfare and minimal field testing, our largest peacetime mobilization is thus moving irrevocably into the realm of big data, civic intelligence, and networked platforms.²⁰ While the digitization of civic systems like voting technologies is broadly analyzed, relatively little attention has been paid to the possible consequences of the massive transition of the census. It is critical to address this gap by examining the development and proposing risk mitigation strategies. The stakes are so high because digital benefits and risks are distributed unequally among different populations,²¹ and the digitization of critical civic processes and systems produces such mixed results.²²

I. ANTICIPATING AN UNDERCOUNT: *CENTER FOR POPULAR DEMOCRACY ACTION V. BUREAU OF THE CENSUS*

In October 2019, the City of Newburgh, New York joined a federal lawsuit brought by the Center for Popular Democracy Action (CPD Action) against the Census Bureau, Director Steven Dillingham, the U.S. Department of Commerce, and Commerce Secretary Wilbur Ross.²³ The complaint alleges that the Bureau has positioned Newburgh for a “massive and differential” population undercount in 2020 through a series of capricious and arbitrary decisions:

[T]he government’s Final Operational Plan for the 2020 Census drastically and arbitrarily reduces the necessary resources for key

19. Nick Brown, *Special Report: 2020 U.S. Census Plagued by Hacking Threats, Cost Overruns*, REUTERS (Dec. 4, 2019), <https://www.reuters.com/article/us-usa-census-technology-specialreport-idUSKBN1Y81H8> [<https://perma.cc/79NW-MPQG>].

20. Issie Lapowsky, *The Challenge of America’s First Online Census*, WIRED (Feb. 6, 2019, 12:07 PM), <https://www.wired.com/story/us-census-2020-goes-digital/> [<https://perma.cc/2CQW-JZVJ>].

21. See generally VIRGINIA EUBANKS, *AUTOMATING INEQUALITY: HOW HIGH-TECH TOOLS PROFILE, POLICE, AND PUNISH THE POOR* (2018); SAFIYA NOBLE, *ALGORITHMS OF OPPRESSION: HOW SEARCH ENGINES REINFORCE RACISM* 1 (2018).

22. Rashida Richardson et al., *Dirty Data, Bad Predictions: How Civil Rights Violations Impact Police Data, Predictive Policing Systems, and Justice*, 94 N.Y.U. L. REV. 192, 201 (2019); Mike Schneider, *Shift to Digital Census Raises Fear of Iowa-Like Breakdown*, ASSOCIATED PRESS (Feb. 15, 2020), <https://apnews.com/a62a81eaac97c58fb0c2f689f014076e> [<https://perma.cc/7H3N-MP39>].

23. Complaint, *Ctr. for Popular Democracy Action v. Bureau of the Census* (No. 1:19-10917) (S.D.N.Y. Nov. 26, 2019).

activities. The Bureau has made especially irrational changes to its programs for counting African-American, Latino, and other members of what Defendants label “hard-to-count” communities. Among the irrational decisions in the Final Operational Plan are sharp reductions in nearly every aspect of Defendants’ field operations.²⁴

An undercount could be disastrous for cities like Newburgh, which has a particularly high percentage of historically hard-to-count (HtC) populations — communities that have historically responded at lower than average rates to the decennial census.²⁵ According to the Census Bureau’s analysis, prevalent HtC demographics include: children under the age of five; highly mobile people; racial and ethnic minorities; non-English speakers; low-income people; people experiencing homelessness; undocumented immigrants; people who distrust the government; LGBTQ persons; people with mental or physical disabilities; and people who do not live in traditional housing.²⁶ Current Census Bureau statistics show that 30% of Newburgh’s residents are living under the poverty line, 50% are Latinx, 25% are Black, and only 30% own their homes.²⁷ With such a high share of HtC populations, an undercount in Newburgh could lead to a devastating loss of social services, school funding, and government representation. Yet, based on the rationale of technology-enabled efficiencies, the Census Bureau’s Operational Plan specifies a sharp decrease in field operations.²⁸ Even in communities with a high percentage of HtC populations, with the rationale of increased technological efficiencies, the Census Bureau will reduce the number of enumerators (field canvassers employed by the Bureau to go door-to-door to gather census information) by

24. *Id.* at 1.

25. *Id.* at 10.

26. Ron Jarmin, *Counting Everyone Once, Only Once and in the Right Place*, U.S. CENSUS BUREAU (Nov. 5, 2018), https://census.gov/newsroom/blogs/director/2018/11/counting_everyoneon.html [<https://perma.cc/2CQW-JZVJ>].

27. *Newburgh City, New York*, U.S. CENSUS BUREAU, <https://data.census.gov/cedsci/profile?q=Newburgh%20city,%20New%20York&g=1600000US3650034&tid=ACSDP5Y2018.DP05> [<https://perma.cc/5V7F-WZKP>] (last visited June 2, 2020); *QuickFacts: Newburgh City, New York*, U.S. Census Bureau, <https://www.census.gov/quickfacts/fact/table/newburghcitynewyork/PST045219> [<https://perma.cc/ZNK7-XP8V>] (last visited June 11, 2020).

28. U.S. DEP’T OF COMMERCE, U.S. CENSUS BUREAU, 2020 CENSUS OPERATIONAL PLAN 25 (2018), <https://www2.census.gov/programs-surveys/decennial/2020/program-management/planning-docs/2020-oper-plan4.pdf> [<https://perma.cc/JZ4R-R3RS>].

two-thirds, open only half as many field offices as in 2010, eliminate Questionnaire Assistance Centers, and drastically reduce funding for community partnership programs and outreach relative to the 2010 census.²⁹

But can new digital efficiencies truly compensate for the reduction of in-person data collection in the field? The answer is unclear since there has been only one field test of new census technologies (instead of the three tests that were planned initially) due to funding shortfalls alongside implementation delays.³⁰ Additionally, due to performance issues with its internet self-response portal, in February 2020 (just a month before the first public mailing of invitations to participate), the Census Bureau had to switch to a backup system for the internet self-response plan that has not been field-tested.³¹

To prepare and mitigate possible problems that could impact the integrity of the count due to transition, it is necessary to analyze the components of the new digital census and understand how these might interact with the dynamics of digital access and participation, especially for HtC populations.

II. THE MECHANICS OF DIGITAL TRANSITION

In the past, much of the cost of the census derived from printing, postage, and the human labor cost of sending enumerators out into the field. The Operational Plan for 2020 was intended to save the Bureau \$5.2 billion by curtailing these costs through the integration of new technologies, keeping the census within the \$12.3 billion cost range of the 2010 decennial census and Congressional budget allocations.³²

The two significant technologies transforming census systems for 2020 include a new “Internet Self-Response” (ISR) portal replacing the majority of paper census forms, and a “Non-Response Follow Up” (NRFU) database platform to support the address canvassing

29. *Id.* at 8.

30. See Lapowsky, *supra* note 20.

31. Andrea Noble, *One Month Out, Watchdog Warns about Census IT and Cybersecurity Challenges*, ROUTE FIFTY (Feb. 18, 2020), <https://www.routefifty.com/health-human-services/2020/02/one-month-out-watchdog-warns-census-it-change-could-create-untested-risk/163183/> [<https://perma.cc/88JS-826W>].

32. See D’Vera Cohn, *For 2020, Census Bureau Plans to Trade Paper Responses for Digital Ones*, PEW RES. CTR. (Feb. 24, 2016), <https://www.pewresearch.org/fact-tank/2016/02/24/for-2020-census-bureau-plans-to-trade-paper-responses-for-digital-ones/> [<https://perma.cc/UK2Y-5D27>].

process.³³ Additional new technology systems for 2020 include one that will predict response rates by census tract based on historical response rates (ROAM), a machine-learning tool that allows analysts to observe and predict change over time using satellite imagery (BARCA), and an iPhone app (ECaSE) that integrates with both the survey portal and the NRFU database.³⁴ To understand how the transformation of the decennial will work in practice, the following Sections explore how the Census Bureau's Operational Plan describes these systems.

A. Internet Self-Response (ISR) Portal

In 2010, the Census Bureau delivered approximately 360 million paper questionnaires to 133 million housing units.³⁵ In 2020, about 20% of households will receive paper surveys first, targeted to communities with low internet access and high percentages of elder populations (Internet Choice).³⁶ Eighty percent of households will receive a mailer containing a unique identification code to use with the ISR portal and information about an Interactive Voice Response (IVR) phone option, for those who prefer that to online (Internet First).³⁷

33. U.S. DEP'T OF COMMERCE, *supra* note 28, at 15, 103.

34. *See* Lapowsky, *supra* note 20.

35. *See* Complaint, *supra* note 23.

36. *See* U.S. DEP'T OF COMMERCE, *supra* note 28, at 9. The Census Bureau has created formulae to determine which areas will receive paper forms versus invitations to participate online based on historical response rates among different demographics, as well as analysis of internet availability and uptake, detailed in its publicly released plan. *Census Bureau Announces Areas to Receive 2020 Census Paper Questionnaires First, and Areas to Receive Bilingual Invitations*, U.S. CENSUS BUREAU (Nov. 19, 2019), <https://www.census.gov/newsroom/press-releases/2019/contact-strategies-viewer.html> [<https://perma.cc/A7G3-3K5Y>]; *see also* *Mapping Hard to Count (HTC) Communities for a Fair and Accurate 2020 Census*, N.Y.C. GRADUATE CTR. (Mar. 9, 2020), <https://www.censushardtocountmaps2020.us/> [<https://perma.cc/J4CU-7FB8>] (showing how each census tract in the United States has been categorized).

37. *See* U.S. DEP'T OF COMMERCE, *supra* note 28, at 33, 202; Farmer, *supra*, note 6.

Fig. 1: How the U.S. Census Will Invite Everyone to Respond³⁸

WHAT WE WILL SEND IN THE MAIL	
On or between	You'll receive:
March 12-20	An invitation to respond online to the 2020 Census. (Some households will also receive paper questionnaires.)
March 16-24	A reminder letter.
	If you haven't responded yet:
March 26-April 3	A reminder postcard.
April 8-16	A reminder letter and paper questionnaire.
April 20-27	A final reminder postcard before we follow up in person.

The simplest way to respond, for those with internet access and literacy, is to use the online ISR portal. To do so, respondents will need to log onto the Bureau's self-response portal and enter a unique access code from the mailer to access up their household's survey. After about four to six weeks of non-response among known households designated as "Internet First" (80% of known U.S. households), the Bureau will follow up by sending enumerators (canvassers employed by the Census Bureau to gather data in the field), or non-responding households may receive a paper questionnaire in the mail.³⁹ For the first time in 2020, enumerators will use an iPhone instead of paper forms to collect household data.⁴⁰

The Bureau anticipates that the online ISR will be the primary mode of data collection, with a goal of 45% online completion rate.⁴¹ However, in the End-to-End Census Test in 2018 — the only conducted field test of the new digital system — only 32.6% of households self-responded through ISR, according to the *CPD Action* complaint.⁴²

38. *How the 2020 Census Will Invite Everyone to Respond*, U.S. CENSUS BUREAU, <https://www.census.gov/content/dam/Census/library/visualizations/2019/how-census-invites-everyone.pdf> [<https://perma.cc/E57S-WGMF>] (last visited June 2, 2020).

39. See U.S. DEP'T OF COMMERCE, *supra* note 28, at 107. The rollout of field enumeration activities was delayed by nearly three months, to late May 2020, as a result of the pandemic and social distancing concerns. See *supra* note 1.

40. See Lapowsky, *supra* note 20.

41. See U.S. DEP'T OF COMMERCE, *supra* note 28, at 177. In fact, online self-response has been much lower, especially in Internet Choice communities. See *supra* note 1.

42. See Complaint, *supra* note 23, at 14.

B. Non-Response Follow Up (NRFU) Platform

The Non-Response Follow Up (NRFU) platform has been in the works since 2016, when the Bureau started gathering administrative data including land, buildings, and housing records from municipalities around the country, done by integrating the BARCA (aerial imagery) and ROAM (historical response rate and projection) systems with its address database.⁴³ The Census Bureau has used these combined systems to build a geographically detailed system — the NRFU platform — showing every household on record, with the predictive capacity to fill in gaps. For example, if the Bureau has detailed historical and administrative records of the composition of a particular block in terms of buildings, housing units, and households, then, in theory, the NRFU platform should enable analysts to predict the composition of similar geography where records may be incomplete. In the 2020 Census, the NRFU system will also be used in tandem with an iPhone app called ECaSE, to generate canvassing routes and to remotely track and manage enumerators' time utilizing the same devices they will use for data collection in the field.⁴⁴

C. Imputation, Not Sampling

According to the Operational Plan, successful integration of the new ISR portal and the NRFU platform into the 2020 Census should mean that enumerators will need to walk only 25–30% of the 11 million blocks they canvassed in 2010 to generate an accurate count,⁴⁵ due to increased efficiencies through internet self-response and predictive modeling — in other words, *data imputation* techniques.

Data imputation differs from statistical sampling in a few key ways, bearing on the use of imputation as a constitutionally valid method of generating an “actual enumeration” of U.S. residents. The American Community Survey (ACS) — another Census Bureau process — uses sampling by drawing data from statistically representative groups of the population over time, making inferences about population trends from a limited group of survey responses collected over one-, three-, or five-year periods.⁴⁶ By contrast, imputation infers missing data by using patterns in existing data, with the assumption that “data are

43. See Lapowsky, *supra* note 20.

44. See *id.*; see also U.S. DEP'T OF COMMERCE, *supra* note 28

45. See Cohn, *supra* note 32.

46. See U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY: METHODOLOGY (2020), <https://www.census.gov/programs-surveys/acs/methodology.html> [<https://perma.cc/5NKW-6GEB>].

missing at random after controlling for other variables in the model.”⁴⁷ Whereas a sampling technique draws inferences based on selected representative datasets, imputation fills in missing information based on an analysis of all available data.

Before the 2000 decennial census, the Supreme Court in *Department of Commerce v. U.S. House of Representatives* disallowed the use of statistical sampling techniques to produce the data outputs used to apportion congressional seats,⁴⁸ requiring instead a traditional headcount based on a literal interpretation of the constitutional mandate.⁴⁹ While there was no dispute that certain populations had previously been disproportionately undercounted using traditional counting techniques — mostly HtC urban residents, people of color, and ethnic minorities — the Court held that a literal headcount was necessary for congressional apportionment (though not necessarily for redistricting and federal funding purposes).⁵⁰

However, the Supreme Court subsequently upheld the use of imputation in the 2000 Census in its 2002 *Utah v. Evans* decision.⁵¹ The Court held that imputation does not violate the Constitution’s requirement for an “actual enumeration.”⁵² The state of Utah sued following reapportionment after the 2000 count, arguing that it lost a congressional seat due to the use of imputation — in particular, faulty inferences regarding the number of people in housing units for which household size was not known (HtC renters, people in poverty, and housing-insecure people).⁵³ Unlike sampling techniques, imputation methods did not involve the potentially biased selection of datasets,

47. U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY: DATA EDITING AND IMPUTATION (2020), <https://www.census.gov/programs-surveys/sipp/methodology/data-editing-and-imputation.html> [https://perma.cc/EE69-6EYL].

48. *See Dep’t of Commerce v. U.S. House of Representatives*, 525 U.S. 316, 343 (1999).

49. *Id.* at 332–44; *see also* Linda Greenhouse, *Jarring Democrats, Court Rules Census Must Be by Actual Count*, N.Y. TIMES (Jan. 26, 1999), <https://www.nytimes.com/1999/01/26/us/jarring-democrats-court-rules-census-must-be-by-actual-count.html> [https://perma.cc/KJ2L-4ZMT].

50. *See Dep’t of Commerce*, 525 U.S. at 338.

51. 536 U.S. 452 (2002).

52. *See* D’Vera Cohn, *Imputation: Adding People to the Census*, PEW RES. CTR. (May 4, 2011), <https://www.pewsocialtrends.org/2011/05/04/imputation-adding-people-to-the-census/> [https://perma.cc/UK2Y-5D27].

53. *See id.*; *Evans*, 536 U.S. at 459.

and could not be intentionally used in the same way for partisan purposes.⁵⁴

The *Evans* decision thus characterized imputation as “inference” instead of sampling, arguing that the objectives, methodologies, and nature of the processes differ significantly.⁵⁵ However, an external analysis by the National Research Council noted that while the number of imputed people was low compared to the total size of the 2000 Census count, the share of imputed people was far higher among HtC groups, raising questions about the accuracy of inferences regarding those groups, since it has historically been more difficult to collect data with these groups.⁵⁶ Moreover, the share of imputed persons in 2000 was only one-half of 1% of the total population (1,172,144 people), far smaller than the percentages slated to be imputed — particularly from HtC groups — in 2020, based on the plan to reduce field data collection by 65–75%.⁵⁷

Because the 2020 Census will rely heavily on imputation systems to count a much larger share of the population, with a smaller share of field-collected data flowing into the models, the quality and performance of these systems is key to the integrity of the count. In effect, this means we must trust the quality and performance of the imputation models if we are to believe the eventual count in 2020 and the redistricting, apportionment, and funding decisions that depend on it. Yet as with many other new algorithmic and predictive systems integrated into government and civic processes, we do not have complete information about which datasets and parameters private-sector partners have used in the development of the models themselves.⁵⁸

Additionally, as mentioned, both ISR and NRFU systems have been minimally tested. While three tests, including one rural pilot, were initially planned for 2018–2019, the Bureau only had funding to conduct one test (in Providence, Rhode Island) before the systems were complete.⁵⁹ Because of the lack of testing, the public has limited information on the stability, security, and quality of these systems —

54. Cohn, *supra* note 52.

55. *Id.*

56. *Id.*

57. *Id.* This reduction, in practice, will be much less than the anticipated 65–75% due to the pandemic and ensuing delays. See *supra* note 1.

58. See Emily Badger, *Who's to Blame When Algorithms Discriminate?*, N.Y. TIMES (Aug. 20, 2019), <https://www.nytimes.com/2019/08/20/upshot/housing-discrimination-algorithms-hud.html> [https://perma.cc/8PU2-8LSR]. See generally Brown, *supra* note 19.

59. See Lapowsky, *supra* note 20.

in other words, how they will work at scale and in different conditions. In fact, in February 2020, the Census Bureau revealed that its contractor-built ISR portal was unable to handle 600,000 responses at a time without experiencing performance issues, so it is switching to a backup system with the count right around the corner.⁶⁰

Meanwhile, scholarship in the last half-decade has consistently questioned the reliance on algorithmic modeling to predict complex social dynamics. For example, Rashida Richardson, Jason M. Schultz, and Kate Crawford's research demonstrates that when predictive modeling systems are built with flawed or biased data, they will consequently produce flawed results that serve to deepen and expand the original bias.⁶¹ While the Census Bureau possesses the most complete historical data on households and geographies across the United States, data quality varies widely among different municipalities, with wealthier communities better prepared to create and digitize municipal datasets. Specifically, the historically unreliable quality of census data collected on HtC communities presents particular challenges. As discussed above, a higher share of the population in these communities will be imputed, even as the Operational Plan cuts outreach efforts to them. In other words, based on the Operational Plan, more assumptions will be made about the very communities for whom we have the least empirical data upon which to base projections.

Adding to the challenges of imputing data about the communities we historically know the least about, HtC populations are also the least likely to have access to the primary means of data collection and participation in 2020: the internet. This challenge creates a fundamental digital inequity: a disproportionately high bar for participation for the least connected communities.⁶²

III. DIGITAL EQUITY RISKS

Understanding the dynamics of digital equity is thus critical to create strategies to get HtC communities fairly counted in 2020. Digital inequities include access and resource challenges disproportionately felt by poorer communities, people of color, and

60. See Noble, *supra* note 31.

61. See, e.g., Richardson et al., *supra* note 22, at 197–98.

62. Dana Floberg, *The Digital Divide Promises to Skew Census Results*, FREE PRESS (Feb. 10, 2019), <https://www.freepress.net/our-response/expert-analysis/explainers/digital-divide-promises-skew-census-results> [<https://perma.cc/6EFV-B7C9>].

highly mobile or housing insecure people (the “digital divide”),⁶³ as well as harms or marginalization disproportionately felt by these same communities as a result of technologically-enabled predation and surveillance.⁶⁴ The 2019 *CPD Action* complaint alleges that both dynamics may depress response rates among already HtC communities.⁶⁵

HtC demographics align closely with the characteristics of digitally marginalized populations — those on the wrong side of the “digital divide,” who cannot afford home broadband access, are smartphone-dependent and data-limited concerning internet access, or who do not use the internet due to digital literacy challenges or mistrust of technology or government.⁶⁶ According to the Pew Research Center, in 2018, 25–30% of adults in the United States did not have the internet at home, among them 53% of Latinx; 43% of Black adults (with more than half of those earning under the median income); 42% of rural residents; and 50% of them were age 65 and older.⁶⁷ While the Census Bureau has factored data on broadband availability into its designation of which communities will receive invitations to participate online versus paper forms,⁶⁸ data on home internet adoption and use maybe be flawed or incomplete in urban areas especially.⁶⁹ Furthermore, available data does not provide a

63. See generally JOHN HARRIGAN, NAT’L DIG. INCLUSION ALL., MEASURING THE GAP: WHAT’S THE RIGHT APPROACH TO EXPLORING WHY SOME AMERICANS DO NOT SUBSCRIBE TO BROADBAND? (2020), https://www.digitalinclusion.org/wp-content/uploads/2020/02/Horrigan_Measuring-the-Gap-v1.1.pdf [<https://perma.cc/RL3X-CQYU>].

64. See generally SEETA PEÑA GANGADHARAN, LONDON SCH. OF ECON. & POLITICAL SCI., THE DOWNSIDE OF DIGITAL INCLUSION: EXPECTATIONS AND EXPERIENCES OF PRIVACY AND SURVEILLANCE AMONG MARGINAL INTERNET USERS (2015), http://eprints.lse.ac.uk/64156/1/Downside_digital_inclusion.pdf [<https://perma.cc/8YEK-Y8VA>].

65. See Complaint, *supra* note 23.

66. See generally GANGADHARAN, *supra* note 64; HARRIGAN, *supra* note 63.

67. See *Internet/Broadband Fact Sheet*, PEW RES. CTR. (June 12, 2019), <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/> [<https://perma.cc/PGW4-N4PQ>].

68. *Census Bureau Announces Areas to Receive 2020 Census Paper Questionnaires First, and Areas to Receive Bilingual Invitations*, U.S. CENSUS BUREAU (Nov. 18, 2019), <https://www.census.gov/newsroom/press-releases/2019/contact-strategies-viewer.html> [<https://perma.cc/JC5Q-P3AP>].

69. See Floberg, *supra* note 62; see also Karl Bode, *The FCC’s New Broadband Map Paints an Irresponsibly Inaccurate Picture of American Broadband*, VICE MOTHERBOARD (Feb. 23, 2018), https://www.vice.com/en_us/article/8xdk8x/new-fcc-broadband-map [<https://perma.cc/M3D9-Z4B2>].

picture of digital or internet literacy, comfort, or ease of access and use.⁷⁰

The ubiquity of mobile internet may offset, but not solve, the issue of the digital divide in online census participation, as smartphone-based access brings its own set of challenges. The process of typing a URL into a phone browser requires a level of digital literacy that may be a high bar for some. Moreover, users of the ISR portal will need to tab through multiple screens per person to designate age, race, and ethnicity characteristics separately.⁷¹ For a household with numerous children, or with renters who do not have separate addresses recognized by the NRFU platform, the household's respondent (whoever receives the invitation to participate) will have to tab through and fill out all screens for each person to produce an accurate count. User experience design that adds time and complexity to the response process could be a challenge, especially in communities where residents are already wary of participation in the census due to mistrust — part of the lasting impact of the politicized battle over the citizenship question.

Indeed, in addition to the potential impact of the digital divide and digital literacy challenges on the 2020 count, online participation could raise concerns around data protection for some, which in turn could depress response, especially among vulnerable and new internet users. Many in digitally marginalized communities already express discomfort and suspicion of online interaction due to experiences of digital predation or surveillance, combined with a mistrust of government.⁷² They may be wary of submitting personal information online, as they interact daily and intensively with technologies of control, surveillance, and data extraction.⁷³

Yet the perception of digital risk and mistrust may not be grounded in a full analysis of the new systems of the census. The Bureau did not make detailed information about these systems widely available prior to the commencement of the count to prevent bad actors from misusing the data and creating vulnerabilities — but by the same token, public interest advocates struggled to analyze how safe these systems were. To better understand and prepare communities for possible risks and glitches in the new digital systems, the New

70. See generally HERRIGAN, *supra* note 63.

71. U.S. CENSUS 2020, <https://2020census.gov/> [<https://perma.cc/HG64-228T>] (last visited May 26, 2020).

72. GANGADHARAN, *supra* note 64, at 13.

73. See generally BENJAMIN RUHA, RACE AFTER TECHNOLOGY: ABOLITIONIST TOOLS FOR THE NEW JIM CODE (Polity 2019); EUBANKS, *supra* note 21.

School's Digital Equity Laboratory conducted a holistic socio-technical risk assessment from February to April 2019.⁷⁴ A summary of our findings follows.

A. Digital Equity Risk Analysis

i. Fraud and Imitations

Bad actors could circulate fake self-response portals, predatory apps pretending to be issued by the Census Bureau, or false network credentials which new or marginal internet users and mobile-only users especially may not recognize. Experiences of digital predation, in turn, may also suppress participation among these populations, as they may mistrust pop-up boxes or surveys due to bad experiences with predatory malware in the past.⁷⁵ The risk of fake or misleading Census Bureau information or materials is not limited to digital media. There have already been examples of fake mailers claiming to be for the census, which were circulated for predatory or political purposes.⁷⁶ However, the addition of digital portals and systems adds many potential vectors for false or misleading information.

ii. Cybersecurity

The Census Bureau will use HTTPS⁷⁷ for data collection via the ISR portal, encrypting survey data in transit to Bureau servers. However, metadata (such as data about the time, duration, and nature of digital activity) is collected at several points in every digital process separate from the survey response data itself. For example, internet usage typically creates activity logs — at a minimum on the device, the browser, the network, and servers. These logs hold important data that may be cross-referenced with other datasets to create a data trail that could be used to identify individuals or communities. Data theft or misuse at the point of access is not

74. See GRETA BYRUM ET AL., THE NEW SCH. DIG. EQUITY LAB., PREPARING FOR THE DIGITAL DECENNIAL CENSUS: BUILDING CONSENT, EQUITY, AND SAFETY INTO DIGITAL TRANSITION 7–8, 12 (2019), <https://drive.google.com/file/d/1EAA62txlBP20PKQCbR7lw-gLbALLrJMe/> [https://perma.cc/HR63-NN9R].

75. See GANGADHARAN, *supra* note 64, at 14–15.

76. Vinny Vella, *Republicans are Spreading Fake Census Forms Throughout the Philly Suburbs*, PHILA. INQUIRER (Feb. 26, 2020), <https://www.inquirer.com/politics/pennsylvania/repUBLICAN-national-committee-fake-census-forms-20200226.html> [https://perma.cc/5STF-RDHF].

77. A secure, end-to-end encrypted protocol for internet browsing.

protected by the Bureau's cybersecurity and privacy measures, which pertain to its own systems and servers and not to public-facing devices and networks.⁷⁸ HtC populations who do not have internet access at home are more likely to use public-facing internet access points.

iii. Hacking and Phishing

Many public WiFi systems provided in partnership with private-sector companies hold third-party data-sharing agreements to generate revenue through targeted marketing. A public WiFi network has the capacity to collect information about users' devices (for example, a unique MAC address) that could, in the census context, be compared with these WiFi providers' logs of registered users or other datasets to create a record of physical location.⁷⁹ For anyone sensitive to concerns about state or corporate surveillance, public-private WiFi hotspots may hold more personal risk than is comfortable for participation in a mandated civic process.

iv. Abuse and Harassment

Organizations serving communities that are targets of harassment, intimidation, or threats may also experience cyber threats when offering public digital access support.⁸⁰ Politically motivated individuals or organizations could do a variety of things to suppress the count or target vulnerable communities, from network infiltration, disruption, or deception to data theft, to surveillance using physical or software devices (for example, keylogging software and hardware, other USB-delivered malware, and physical sensors or trackers).⁸¹ Attacks aimed at organizations serving vulnerable or targeted populations, such as network infiltration and subsequent data theft, could impact not only data provided through census participation but also the internal systems and files of the organization itself.⁸² Simply providing public-facing internet access

78. BYRUM ET AL., *supra* note 74, at 14.

79. See Ava Kofman, *Are New York's Free LinkNYC Internet Kiosks Tracking Your Movements?*, INTERCEPT (Sept. 8, 2018), <https://theintercept.com/2018/09/08/linknyc-free-wifi-kiosks/> [<https://perma.cc/P4WG-9K79>].

80. See Rebecca Koenig, *How Social-Justice Nonprofits Can Defend Against Public-Relations Attacks and More*, CHRON. PHILANTHROPY (Jan. 12, 2016), <https://www.philanthropy.com/resources/backgroundpaper/how-social-justice-nonprofits/5857/> [<https://perma.cc/DX6Y-WELW>].

81. BYRUM ET AL., *supra* note 74, at 14.

82. *Id.* at 14–15.

for census participation could open organizations up to cyberattacks, particularly if accounts, networks, and devices are not set up with privacy and safety protections. Additionally, organizations and institutions providing access may also be targeted for physical infiltration or harassment.

v. Data Breaches

Data theft, misuse, or non-consentful⁸³ sharing could also take place in many ways in other census-related processes. In the process of canvassing, well-meaning community-based organizations (CBOs) or advocacy organizations could collect more identifiable information on vulnerable constituents than necessary. If they are using proprietary applications, platforms, devices, or systems in the process, organizations could also unwittingly give up their constituents' data to third parties without consent.⁸⁴ In the absence of secure data management protocols and clear data-sharing limitations, data sitting on organizations' and private-sector partners' servers and networks could invite infiltration and data theft. Finally, companies or partners offering devices for internet access or volunteer get-out-the-count canvassing may not have good data management practices, putting any data left on these devices at risk after devices are returned. Third-party vendors could also have a business model that depends on revenue from sales of data collected through, for example, canvassing to collect personally identifiable information (PII) such as names, birthdates, or phone numbers.⁸⁵

B. Catch-22: Anticipating Digital Risk — And Risking an Undercount

Enumerating privacy and security concerns surrounding the 2020 Census leads to a quandary: publicly discussing these risks could have an adverse impact on the count, while *not* discussing them could leave the public unprepared to address and prepare for possible harms emerging from hacking, surveillance, and data theft or misuse. While community advocates, the civil rights community, and the Bureau

83. That is, data that is taken from people without their explicit consent. See *What Is Consentful Tech?*, CONSENTFUL TECH PROJECT, <https://www.consentfultech.io/> [<https://perma.cc/W72E-T8HL>] (last visited Mar. 13, 2020).

84. This risk depends on the service and contract. For example, using a product with an enterprise level contract should protect against non-consentful sharing outside of that vendor's systems.

85. BYRUM ET AL., *supra* note 73, at 15.

itself are wary of publicly discussing digital risks, the legal community may be in a position to develop strategies to mitigate potential harms to individuals and communities.

It is critical to note here that Title 13 of the U.S. Code explicitly provides assurances that census data will be protected and cannot be used for law enforcement purposes:

(a) 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 . . .

(1) use the information furnished under the provisions of this title for any purpose other than the statistical purposes for which it is supplied; or

(2) make any publication whereby the data furnished by any particular establishment or individual under this title can be identified; or

(3) permit anyone other than the sworn officers and employees of the Department or bureau or agency thereof to examine the individual reports.

No department, bureau, agency, officer, or employee of the Government, except the Secretary in carrying out the purposes of this title, shall require, for any reason, copies of census reports which have been retained by any such establishment or individual. Copies of census reports which have been so retained shall be immune from legal process, and shall not, without the consent of the individual or establishment concerned, be admitted as evidence or used for any purpose in any action, suit, or other judicial or administrative proceeding.⁸⁶

However, Title 13 was written before the advent of public-facing web-based data collection tools and algorithmic modeling, and could not have anticipated how new digital processes may leave traces and create the possibility of data re-identification — as detailed in journalistic reports⁸⁷ — or reinforce bias in the original datasets used

86. 13 U.S.C. § 9 (1954); David Emery, *Did the Census Bureau Play a Role in the Internment of Japanese Americans During World War II?*, SNOPE (Apr. 13, 2018), <https://www.snopes.com/fact-check/census-bureau-japanese-americans/> [<https://perma.cc/68MF-LS9F>] (“Only sworn census employees will see your statements. Data collected will be used solely for preparing statistical information concerning the Nation’s population, resources, and business activities. Your Census Reports Cannot Be Used for Purposes of Taxation, Regulation, or Investigation.” (quoting 1940 Census form)).

87. See Joseph Cox, *Leaked Document Shows How Big Companies Buy Credit Card Data on Millions of Americans*, VICE: MOTHERBOARD (Feb. 19, 2020), https://www.vice.com/en_us/article/jged4x/envestnet-yodlee-credit-card-bank-data-no

to build statistical models — as in the case of predictive policing models.⁸⁸ Furthermore, the new digital system raises concerns like those cited above in DHS’s December 2019 Privacy Impact Assessment of the Trump Administration’s Executive Order, *Collecting Information About Citizenship Status in Connection with the Decennial Census* — for example, that the Census Bureau “may use DHS data for unauthorized purposes” and that it may “retain DHS information for longer than necessary.”⁸⁹

Aside from any intentional misuse of data, asking the public to provide internet access at scale — and basing analysis and imputation of the count on a data collection mechanism that relies on the public to respond online — puts the count at risk simply through an underestimation or ignorance of the challenges of digital equity.

Digital access and literacy challenges, as well as digital risk and trust challenges, are laid out in the *CPD Action* complaint. These are critical parts of the argument regarding the Census Bureau’s allegedly capricious and arbitrary decision-making around census preparations. In sum, *CPD Action* argues that conditions likely created by digital transition, such as issues of accessibility and trust of the process, should have signaled the need to increase, not decrease, the number of enumerators and volume of outreach and fieldwork in HtC communities.⁹⁰ Instead, *CPD Action* alleges that the Bureau has made decisions based on an irrational contention that technological transition will create universal efficiencies, against its own evidence:

In formulating its final decision to hire a significantly reduced staff of enumerators for the 2020 Census, the Bureau failed to account for and draw rational conclusions from evidence that ISR will deter self-response and fail to elicit responses from hard-to-count populations, and data showing that ISR rates in tests have fallen far short of the Bureau’s aspirational ISR rate.⁹¹

Thus, *CPD Action* complaint does not allege that there was any intention to undercount particular populations embedded in the Census Bureau’s Operational Plan. Rather, it argues the Plan does

t-anonymous [https://perma.cc/KXR7-SLR5]; Charlie Warzel, *All This Dystopia, and for What?*, N.Y. TIMES (Feb. 18, 2020), https://www.nytimes.com/2020/02/18/opinion/facial-recognition-surveillance-privacy.html [https://perma.cc/58JL-QF7F].

88. Richardson et al., *supra* note 22, at 195.

89. DEP’T OF HOMELAND SEC. (DHS), PRIVACY IMPACT ASSESSMENT: IMMIGRATION-RELATED INFORMATION SHARING WITH U.S. CENSUS BUREAU 9, 10 (2019).

90. Complaint, *supra* note 23, at 9.

91. Complaint, *supra* note 23, at 15.

not respond reasonably to the facts on the ground, and so fails to protect the rights of those populations adequately. Yet *intention* may be a key factor in the outcome.

In a related transitional event, a rulemaking last year by the Department of Housing and Urban Development (HUD) raised the bar for proving housing discrimination claims⁹² — in particular, when intent to discriminate cannot be proven in the design of the predictive algorithm used by housing providers.⁹³ Meanwhile, the same rulemaking also creates proprietary protections for developers who create these algorithms, preventing claimants from examining either the code or the data used to develop the predictive models.⁹⁴ Whereas in the past, validated claims of the *disproportionate impact* on particular populations or groups were sufficient to create standing in Fair Housing Act lawsuits, under HUD's new rule, claimants must prove an *intention to discriminate*.⁹⁵ The claim is virtually impossible to prove without the ability to examine the model or its underlying data.

Similarly, even if there is no intention to discriminate against HtC populations via an undercount, untested and unproven census systems could fail, or could create biased outcomes, simply because software development contractors and census statisticians are not aware of — or able to fully address — the dynamics of the digital divide and their potential impact on the count. In the case of the citizenship question, the CPD Action and City of Newburgh claimants eventually proved that advocates for the question demonstrated an intention to skew the data towards redistricting to favor Republican candidates by suppressing the number of immigrants in the count.⁹⁶ Even if discrimination is not intentional, choosing efficiency and cost savings over ensuring that HtC populations are fully counted could have the same impact. And, in that case, populations protected by civil rights legislation could risk losing fair representation in government.

The projected undercount could thus violate the rights of protected classes to political representation in government, as well as necessary

92. HUD's Implementation of the Fair Housing Act's Disparate Impact Standard, 84 Fed. Reg. 42854 (proposed Aug. 8, 2019) (to be codified at 24 C.F.R pt. 100); Lola Fadula, *Trump Proposal Would Raise Bar for Proving Housing Discrimination*, N.Y. TIMES (Aug. 2, 2019), <https://www.nytimes.com/2019/08/02/us/politics/trump-housing-discrimination.html> [https://perma.cc/2W6Q-3SCF].

93. Badger, *supra* note 58.

94. *Id.*

95. *Id.*

96. Rogers et al., *supra*, note 11.

social support to fulfill basic needs. Moreover, as the *CPD Action* complaint contends, “the Bureau’s preparations for the 2020 Census are so deficient as to violate Defendants’ constitutional duty to conduct an ‘actual Enumeration.’”⁹⁷

IV. RISK MITIGATION TO OFFSET POSSIBLE DISCRIMINATORY IMPACT OF DIGITAL TRANSITION

Both the institutions of civil society and the legal community have potential roles to play to address the challenges emerging with the digital transition of the census. Ideally, their activities would intersect and reinforce each other.

A. Civil Society

In October 2019, The New School’s Digital Equity Laboratory (DEL) released a manual for census preparedness⁹⁸ advocating for public libraries in New York State to take a lead role in providing internet access and outreach services for under-connected populations. Long the preeminent site of public digital access and support, public libraries have information technology systems designed with safe public use in mind. New York’s libraries have been leaders in setting policy and providing digital privacy training for patrons and librarians, especially as civic processes move online, and demand for libraries to offer digital services and support continues to expand. DEL’s manual builds on that role, providing curriculum for library staff and partners in their communities — for example, immigrants’ rights groups, civil rights advocates, faith-based organizations, and local governments, many of whom play roles in get-out-the-count campaigns like New York Counts 2020,⁹⁹ or local complete count committees — to learn about and prepare for providing safe and secure public access points for public census participation. The manual is also intended to support libraries and community advocates by providing digital resources and reliable

97. Complaint, *supra* note 23, at 2.

98. GRETA BYRUM ET AL., THE NEW SCH. DIG. EQUITY LAB., PREPARING FOR THE FIRST DIGITAL CENSUS: A MANUAL FOR LIBRARIES, CBOs, AND COMMUNITY ADVOCATES (2019), https://drive.google.com/file/d/11W1UAdJof_EIY2xVQ1atK93btz0omR-/view [https://perma.cc/46PJ-M6K4].

99. NEW YORK COUNTS 2020, <https://newyorkcounts2020.org/> [https://perma.cc/HE88-NA55] (last visited May 4, 2020).

information to members of the public grappling with the new form of the census.¹⁰⁰

Libraries and their partners could play another important role, however: collecting information on the dynamics and success of the digital census. As the public seeks support, information, and internet access to participate in the census, libraries are in a pivotal position to collect information on how many people come to their sites, what kinds of questions people are asking, whether people experience challenges with the ISR system, whether the system experiences glitches or outages, and whether there are hacking or interference attempts, or other unanticipated events. Yet, without a mandate or funding — neither of which is forthcoming from the federal government — libraries cannot perform this critical role. Public libraries are already burdened by the expectation that they will provide access and support services for census takers along with all the other digital civic processes they support, like public benefits applications and tax returns.

An evidence base is critical to evaluating the success of the digital transition and applying corrections to future decennial censuses. Further, if the Census Bureau is a defendant in cases aiming to demonstrate the disproportionate impact of inadequate preparation, their claims regarding the validity of the data may not be proof enough. So, what evidence base will parties to lawsuits, like *CPD Action*, need to prove or disprove the allegations? Without a census monitoring system, it will be challenging to evaluate how the 2020 Operational Plan has affected HtC communities, or whether the count offers an “actual enumeration.”¹⁰¹ There is a need for the legal community to weigh in here, and to understand the consequences of digital transition and algorithmic decision-making, for the benefit of democracy itself, and every resident of the United States.

B. The Legal Community

Following, we point to a few actions that the legal community could take now to prepare for challenges to the count, to redistricting, reapportionment, or funding decisions, if it appears that a biased undercount will have a harmful impact, especially on protected classes.

100. See BYRUM ET AL., *supra* note 98, at 6.

101. U.S. CONST. art. I, § 2.

i. Fight for Transparency

Legal experts should work with digital equity and data experts to create public records requests. These could include requests to uncover the terms of government contracts with private sector developers, especially terms of data use; requests to release the code and underlying data used to build imputation models; and requests to release data management protocols from government contractors and agencies, especially those governing data shared in compliance with the Executive Order. Public evidence regarding the nature of these tools and terms of their compliance with the data protection principles set out in Title 13 will be critical to any challenges to the count that emerge in 2021 onward, as the data is used in funding, redistricting, and reapportionment decisions.

ii. Build an Evidence Base

Libraries and community advocates are struggling merely to meet the needs of the count and may not be able to develop census monitoring systems. Legal experts who have familiarity with vote monitoring protocols and mechanics could help find ways to monitor and document the count in collaboration with other civil society actors, for example, tracking glitches, system performance, malicious attacks, and digital literacy or user experience challenges arising during the count, from March to June 2020.

iii. Develop Collaborative Capacity

The decennial census is critical to support a functional democracy, with the most significant governance decisions resting on the quality of the count. The process is so massive and consequential that no one set of actors will be able to fully anticipate and address all aspects of the process and its outcomes. Cross-sector, cross-disciplinary alliances are needed to develop a shared, holistic capacity (for example, a common understanding of data-driven systems and their potential impact).

In preparation and throughout the count, civil society and public focus have understandably been on calming fears created by the fight over the citizenship question to get out the count, especially among HtC groups. Public-facing civil rights organizations have underscored the power of Title 13 to protect the data, privacy, and wellbeing of populations who may face disproportionate risks in the current political environment — because it is so critical to encouraging participation, especially among the most vulnerable communities. This focus, while unavoidable given the stakes, has created a gap in

preparedness. Legal experts, scholars, and advocates, however, may be able to help fill this gap. Trust in the decisions of government may depend on it.

CONCLUSION

This Essay lays out an understanding of the challenges of digital transition from a digital equity perspective. As we move into the count, digital equity advocates are consumed with ensuring that digital access and support needs are met,¹⁰² and preparations to litigate an undercount due to possible flaws or challenges introduced by the transition are outside of our core expertise. Only by building functional alliances with other institutions of civil society can we begin to address the many questions and possible consequences of the 2020 Census.

102. Floberg, *supra* note 62.