Chapter 15

Getting Ready for the 2020 Census

Abstract As this book is being written, the 2020 Census is getting closer and the Census Bureau's plans are becoming more concrete. However, there are several factors which raise concerns about whether differential undercounts will be reduced in the 2020 Census. Lack of adequate funding for the Census Bureau and high reliance on the internet are two areas which may lead to higher differential undercounts in 2020.

15.1 Introduction

Up to this point in the book, we have been looking backwards at experiences in previous Censuses. In this Chapter, we will be looking forward to the upcoming 2020 Census. There are several reasons why the 2020 Census will be very different than those that came before it.

Counting every person in the nation—once, just once, and in the right location—is a huge and complex task under any circumstances. The Census Bureau (2017d, p. 6) has documented many of the challenges facing the 2020 Census including:

- Constrained fiscal environment
- Rapidly changing use of technology
- Information explosion
- Distrust in government
- Declining response rates
- Increasingly diverse population
- Informal, complex living arrangements
- A mobile population.

Some of these challenges are on-going, some are new, and some have increased recently. For a number of reasons, the 2020 Census may be the most difficult in our country's history (O'Hare and Lowenthal 2015).

Concerns about the 2020 Census are reflected in the fact that the U.S. General Accountability Office (2017a) put the 2020 Census on its "High-Risk list" in February of 2017. According to U.S. General Accountability Office (2017a, p. 220),

These cost risks, new innovations, and the acquisition and development of IT systems for the 2020 Census, along with other challenges we have identified in recent years, raise serious concerns about the Bureau's ability to conduct a cost-effective enumeration. Based on these concerns, we have concluded that the 2020 Census is a high-risk area and have added it to the High-Risk List in 2017.

In July 2018, the U.S. General Accountability Office (2018) also raised questions about whether the Census Bureau was adequately addressing issues related to hard-to-count populations.

For the 2020 Census, research, planning, and testing are particularly important because the Census Bureau is going to be using several new methods in 2020. According to the 2020 Census operation plan issued in the fall of 2017 (U.S. Census Bureau, 2017d, p. 8) there are four major methodological changes incorporated in the 2020 Census plans:

- (1) Reengineering address canvassing—much of the address canvassing will be done in house rather than sending canvassers to walk every street.
- (2) Optimizing self-response—respondents will be encouraged to respond through the internet.
- (3) Utilizing administrative records and third-party data—administrative records can be used to help determine which housing units are vacant and what people live in housing units that are unresponsive.
- (4) Reengineering field operations—enhanced use of technology in communication and administrative tasks can make field operations more efficient.

Together these changes were put in place to save \$5 billion compared to what it would cost to repeat the 2010 methodology in 2020. The reduced cost of the 2020 Census was mandated by Congress several years ago. In 2011, Congress told the Census Bureau that the 2020 Census must be conducted for the same cost as the 2010 Census. Language in the 2011 Senate Commerce, Justice, Science Appropriation Bill (U.S. Census Bureau 2012a, p. 2) states, "Therefore, the Committee directs the Bureau to consider budgeting for the 2020 Decennial Census at a level less than the 2010 Census, and to further consider spending less than the 2010 Census, not adjusted for inflation".

In response to this language, the Census Bureau devised a plan for the 2020 Census that would make the cost of the 2020 Census the same as the 2010 Census on a per household basis. Cost containment has always been a concern for Census planning, but more than any recent Census, the 2020 Census operations have been driven by the budget rather than on the methods that would produce the most accurate results. This makes the 2020 Census like no other in recent history.

Despite the effort on the part of the Census Bureau to design a Census that would reduce costs relative to the 2010 Census, congressional funding has still been an issue. For several years prior to Fiscal Year (FY) 2018, the Census Bureau did not receive as much from Congress as it asked for (The Census Project 2018).

In FY2018, the Census budget became a huge issue for Census advocates. The Administration proposed a budget of \$1.5 billion for the Census in FY2018 which is essentially the same amount as FY2017. Outside experts said that the Census Bureau needed at least \$1.8 billion in FY2018 to prepare for the 2020 Census (Lerner et al 2017, p. 24). In previous decades, year seven to year eight of the Census cycle has seen big budget increases. For example, between 1987 and 1988 it increased by 65%, between 1997 and 1998 it increased by 101%, and between 2007 and 2008 it increased by 61% (Sherman 2017). The increased budget in the few years right before the Census year reflects the need for increased testing and preparation for what has been called the biggest government mobilization outside of war time.

The underfunding of the Census Bureau in FY2018 was a particularly difficult problem. The Bureau had to curtail many tests because of budget shortfalls or budget uncertainty (Vargas 2018). A good example of this is the end-to-end Census tests planned for 2018. For the last several Censuses a thorough, end-to-end test (formerly called dress rehearsal) was vital for finalizing Decennial Census plans. This activity is very important because it is the last chance to test the methods and systems planned for the Census in isolation and collectively. Originally the Census Bureau had planned to do the 2018 end-to-end test in three sites (an area in Washington State, rural West Virginia, and Providence, Rhode Island). Because of budget uncertainty and shortfalls, the end-to-end tests in Washington State and West Virginia were cancelled. In addition, some of the activities originally planned for Providence (such as a media outreach and coverage measurement test) were curtailed. The cuts in 2018 were on top of tests in 2017 on Indian Reservations and in Puerto Rico that had also been cancelled for budgetary reasons.

The lack of rigorous testing that has been the hallmark of past Census planning has put the 2020 Census on a troubling trajectory. The fact that the testing has been reduced at a time when several new methodologies are going to be relied on heavily makes the situation particularly worrisome.

Following an extensive Department of Commerce internal review, in October 2017, Secretary of Commerce Ross (2017) testified in favor of increasing the life cycle budget of the 2020 Census by more than \$3 billion and raising the amount the Census Bureau received in FY2018. In the Spring of 2018 (half way through the fiscal year), Congress passed a budget for the Census Bureau with increased funding relative to the original FY2018 budget allocation.

Both the Senate and the House budgeted more for the Census Bureau than the administration asked for in FY2019, but there are still big differences between the two chambers. As this Chapter is being written, the FY2019 budget situation looks more promising than the census budget situation of a year ago, but there is still a lot of uncertainty. It probably goes without saying that trying to plan for something as large and complex as the U.S. Decennial Census when there are shifting, and uncertain funding scenarios makes a difficult task even more challenging.

15.2 Other Issues Hampering 2020 Census Planning

In addition to the budget problems, the Census Bureau and Census advocates have had to deal with several other “distractions” in 2017 and 2018. In June 2017, the Director of the Census Bureau (John Thompson) resigned. The Director of the Census Bureau is a political appointment. At one point, the administration proposed appointing a person to head the Census Bureau who had no experience running a large bureaucracy and no experience with large scale data collection (Mervis 2018a). In addition, his main connection with the Census was through partisan gerrymandering. Advocates pointed out that appointing someone with this kind of political history would hamper the Census Bureau’s ability to promote itself as an objective scientific data collection organization and would feed distrust. After advocates questioned the nomination, the Administration withdraw the name from consideration. As this was going on, the Associate Director for the 2020 Census was replaced in the fall of 2017 (Jarmin 2017).

As this Chapter is being finalized in November 2018, the Administration has proposed Dr. Steve Dillingham for the Census Director job. The nominee has held positions directing other federal statistical agencies. We are more than a year and a half into the new Administration and there is no permanent Census Bureau Director in place at a critical point in 2020 Census planning (Mervis 2018b).

In 2018, the Census Bureau received two more surprises from the Administration in terms of the questions to be asked in the 2020 Census. By law, the Census Bureau must submit to Congress the questions it plans to ask in the Census two years before the Census date, thus the questions planned for the 2020 Census were to be submitted by April 1, 2018. On March 26, 2018, Secretary of Commerce Ross (2018) released a memo requiring the Census Bureau to add a question on citizenship to the 2020 Census questionnaire despite the Census Bureau’s (Abowd 2018) advice that such a question would diminish the quality of the data and increase the costs of the 2020 Census.

After intensive research on citizenship data, a recent paper issued by the Census Bureau (Brown et al. 2018) concludes, “The evidence in this paper also suggests that adding a citizenship question to the 2020 Census would lead to lower self-response rates in households potentially containing noncitizens, resulting in higher field work costs and a lower-quality population count”.

As this book is being written there are six lawsuits challenging the governments’ decision to add a question on citizenship status to the 2020 Census questionnaire. Census advocates have mounted a strong campaign to try and get the citizenship question removed. In response to a Federal Register Notice regarding the 2020 Census plans, more than 250,000 individuals and organizations sent in comments opposing the addition of the citizenship question (The Leadership Conference Education Fund 2018).

The concerns about adding a question on citizenship raised by the Census Bureau staff are echoed by six former directors of the Census Bureau (Barabba 2018) who stated, “In summary, we believe that adding a citizenship question to the 2020 census

will considerably increase the risks to the 2020 enumeration”. The American Statistical Association (2018), the American Sociological Association (2018), the Population Association of America (2018), the American Association of Public Opinion Research (2018), and the Consortium of Social Science Associations (2018) are all on record as opposing the addition of the citizenship question to the 2020 Census. The prestigious National Academy of Sciences, Committee on National Statistics Task Force on the 2020 Census (2018) warns, “According to the Census Bureau’s own analysis, addition of the citizenship question could adversely affect the quality and the cost of the 2020 Census”.

Aside from the disruptive aspect of adding a question on citizenship, there is another issue about the motive for adding such a question. Ostensibly, the question on citizenship was added to the Decennial Census to provide block level data for the Citizenship Voting Age Population which the Justice Department said it needed to better enforce the Voting Rights Act. It is worth noting that the Voting Rights Act has been in place since 1965, and there has never been block-level Citizen Voting Age Population data available during that period. Data on citizenship is already collected in the ACS and made available at the block group level.

Despite the Commerce Secretary’s denial that the addition of a question on citizens was politically motivated, documents that have recently been made available through litigation discovery indicate the addition of the question on citizenship was put on the Census for politically motivated reasons, namely to suppress response to the Census from immigrants (Wines 2018; Bahrampour 2018).

The addition of the citizenship question by itself would probably not be so problematic if it were not for the changing political landscape. The addition of the citizenship question is one step among many that has increased the fear of the federal government in many communities. Over the past year there have been an increasing number of incidents that are likely to discourage the participation in the 2020 Census (Barabba and Flynn 2018). Even before the citizenship question was added, Census Bureau researchers (Meyer and Goerman 2018; U.S. Census Bureau 2017a, b) found respondents less willing to cooperate given the growing climate of fear and mistrust.

For the Census to be successful, respondents must trust the Census Bureau to treat their data confidentially. Trust is likely to be even more important in the 2020 Census. The current political climate and statements from government officials have exacerbated fears in many immigrant communities across the country. Changes in the political climate around immigrants are summarized by the Migration Policy Institute (2018, p. 1) thusly, “the White House has framed immigrants, legal and unauthorized alike, as a threat to American’s economic and national security and embraced the idea of making deep cuts to legal immigrations”.

The impact goes beyond the undocumented community itself and touches many closely associated groups. According to the National Bureau of Economic Research, (2018, p. 1), “Though not at personal risk of deportation, Hispanic citizens may fear their participation could expose non-citizens in their network to immigration authorities”.

Recent decisions by the Trump Administration to expand the “denaturalization” process has expanded the pool of Census respondents who are likely to be leery of

giving the federal government information about themselves (Mazzei 2018). Denaturalization is a process where the government can take citizenship away from those who have been naturalized. So, at least a segment of the 21.2 million of foreign-born naturalized citizens (U.S. Census Bureau, American Factfinder, Table S0501) now have reasons to be fearful of giving personal information to the federal government.

A second surprise related to questions in the 2020 Census is linked to how the Census Bureau collects data on race and Hispanic Origin. For many years, the Census Bureau worked on ways to collect better data on race and Hispanic Origin in their data collection activities including the Decennial Census (U.S. Census Bureau 2012b). While the official government categories for race and ethnicity are determined by the U.S. Office of Management and Budget (OMB), the Census Bureau is probably the major user of the categories.

In the government statistical system, race and Hispanic Origin status are two different concepts. Individuals are first asked if they are of Hispanic Origin, then they are asked about their race. One of the biggest problems with the race and Hispanic Origin question used in the 2010 Census is that about half of Hispanics selected the “some other race” racial category because they did not see themselves as belonging to any of the other race categories offered.

In late 2017, the Census Bureau proposed a new set of questions on race and ethnicity to be included in the 2020 Census based on many years of research (U.S. Census Bureau 2017c). However, the U.S. Office of Management and Budget never acted on this recommendation, so as the Census Bureau was getting ready to conduct the end-to-end test Census in April of 2018 they had to fall back on the old race and ethnicity standards in the 2010 Census (U.S. Census Bureau 2018a).

There have been several other distractions with respect to Census planning over the past couple of years. For example, in July 2018, it was announced that the company that had been awarded the contract to print all the material for the 2020 Census (CONVEO) including millions of questionnaires had gone into bankruptcy and the Justice Department had terminated the contract (Wang 2018). It should be mentioned that this printer was selected by the Government Printing Office, not the Census Bureau. It is unclear exactly what impact this will have on the 2020 Census, but it is one more distraction.

These (and other) issues have made it difficult for the Census Bureau and Census advocates to devote full attention to planning the 2020 Census in recent years. The underfunding and distractions related to 2020 Census planning will make it challenging to conduct a high-quality enumeration of everyone in the country.

15.3 The 2020 Census and Differential Undercounts

Given all the methodological changes and new barriers likely to affect the 2020 Census described in this Chapter, one must ask what this all means for undercounts and differential undercounts in the 2020 Census. There are several aspects of the 2020 Census that raise concerns about differential undercounts.

Table 15.1 Mail return rates and omission rates in the 2010 Census

	Mail return rates ^a	Omission rates ^b
Race alone		
White	82.5	4.3
Black	70.0	9.3
American Indian and Alaskan Native	69.8	7.6
Asian	75.4	5.3
Native Hawaiian and Other Pacific Islanders	59.7	7.9
Hispanic	69.7	7.7
Owner-occupied housing units	85.8	3.7
Renter-occupied housing units	66.9	8.5

^aSource Mail Return Rate, U.S. Census Bureau (2012) 2010 Census Mail Response/Return Rates Assessment Report. 2010 Census Planning Memorandum Series, No. 198

^bSource U.S. Census Bureau (2012) 2010 Components of Census Coverage for Race Groups and Hispanic Origin by Age, Sex and Tenure in the United States, DSSD 2010 CENSUS COVERAGE MEASUREMENT MEMORANDUM SERIES #2010-E-51

One of the obvious implications of the new methodologies being planned for the 2020 Census is related to the heavy reliance on the internet. There will be five mailings to each housing unit (i.e. each address in the Master Address File) in the 2020 Census but what is sent to households will vary by location (Fontenot 2018). In the 2020 Census, about 80% of households will receive a letter with a unique identifying number and be asked to complete their Census on the internet. The other 20% (mostly people living in areas without good internet service) will be mailed a paper questionnaire along with information allowing them to respond by internet if they want to. After two reminders, people in the first group who have not completed their Census on the internet, will be sent a paper questionnaire in the 4th mailing.

For all households that do not respond on the internet or by returning a completed paper questionnaire, or by telephone, enumerators will be sent out to complete Non-Response Follow Up (NRFU). Households that require NRFU are less likely to be included in the Census and less likely to provide complete or accurate information (Brown et al. 2018).

Table 15.1 shows mail return rates and omissions rates for eight demographic groups in the 2010 Census. In general, groups that have higher mail return rates have lower omissions rates. For example, the population in owner-occupied housing units have a mail return rates (85.8%) almost twenty percent points higher than the population in renter-occupied housing units (66.9%) and the omissions rate for the population in renter-occupied housing units (8.5%) Is more than twice as high as the population in owner-occupied housing units (3.7%). Similarly, the mail return rate for Non-Hispanic Whites Alone (82.5%) is much higher than those of racial and Hispanic minority groups and the omissions rate of Non-Hispanic Whites alone is much lower than those of minority groups.

Table 15.2 Percent responding to the 2016 ACS by internet by race and Hispanic Origin

	Percent responding by internet
White Alone	42.9
Black alone	23.2
American Indian or Alaska Native Alone	23.5
Asian and Pacific Islander Alone	52.2
Hispanic	25.0

Source Authors Analysis of the Census Bureau’s 2016 ACS PUMS file on the IPUMS system at the University of Minnesota

Given the heavy reliance on the internet in the 2020 Census, it is important to note that several recent publications (Pew Research Center 2015; Georgetown Center on Poverty and Inequality 2017; Tomer et al. 2017) show disadvantaged groups in the country typically do not have the same level of access to the internet as more advantaged groups. For example, a report by the U.S. Census Bureau (2018b) shows that 84% of Non-Hispanic Whites households had an internet subscription compared to 73% of Non-Hispanic Black Alone households and 77% of Hispanic households. The same report shows 97% of households with income of \$150,000 or more had an internet subscription compared to 59% of households with incomes of \$25,000 or less. Given the push to get people to respond by internet, the differential access may exacerbate differential Census participation and differential census undercounts.

Table 15.2 shows the share of major race groups and Hispanics who responded to the 2016 ACS by internet. Note the much lower rates of internet response for Blacks, American Indians, and Hispanics relative to Whites and Asians.

Another concern about the heavy reliance on the internet relates to potential problems in rural areas of the country. O’Hare (2017) shows that the percent of rural residents who do not have internet service at home (21%) is much higher than the percent of urban residents without internet access at home (13%). Even when they have internet available it is often slower in rural areas. A recent study by the Brookings Institution (Tomer et al. 2017, p. 15) shows that a lot of rural areas do not have high-speed internet available. O’Hare (2017) shows many African-Americans in the rural South, Hispanics in the rural Southwest, and Indians and Alaskan Natives living in homeland areas do not have internet access at home and internet availability for poor households in these groups is even lower at around 50%. Impoverished minorities living in rural areas were already a hard-to-count population. In addition, during the Census Bureau’s Tribal Consultation with the National Advisory Committee it was reported (Alexander 2017, slide 18) that “Some tribes reported that internet response is currently not a viable option for members...” The Institute for Rural Journalism and Community Issues (2017, p. 1) summarized this issue by stating “the problem with pushing online self-response is that many rural areas lack broadband or any internet service, and those people may be undercounted”.

The concern about the lack of good internet access in many parts of rural America increased when the Census Bureau cancelled the end-to-end test in rural West Virginia (the only test in a rural area) scheduled for April 2018. It was cancelled for budgetary reasons. The cancelled end-to-end test planned for rural West Virginia could have revealed any problems with the new data collection plans for the 2020 Census that might be more prevalent in rural areas. Now there will be no end-to-end test in any rural sites which might reveal such problems before the 2020 Census.

When the Census Bureau sent canvassers to the test area in West Virginia in the summer of 2017 to get a complete list of addresses the U.S. General Accountability Office (2017b, p. 9) reported the “Internet connectivity was problematic. There were many deadspots where internet and cellphone service were not available”.

Adding an internet response option to the 2020 Census is likely to have different impacts on different groups. A study by the U.S. Census Bureau (2015, Table 2) shows how the addition of an internet option in the American Community Survey in 2013 changed the level of self-response for different groups. Self-response in this context includes either a response by mail or a response using the internet option. Two hard-to-count groups (households with a child under age 5 and Hispanics) experienced a statistically significant increase in self-response rates when the internet option was offered, and three groups (Blacks, respondents over age 65, and respondents without a high school diploma) experienced a statistically significant decrease in self-response rates when the internet option was offered.

To be clear, the Census methods proposed for 2020 call for sending out paper questionnaires in areas where there is little or no high-speed internet available and those who do not self-respond on the internet will also be sent a paper questionnaire. But the paper questionnaire mode of data collection will not be emphasized as much as the internet response will be. Households that do not respond by internet or mail will be visited by a Census enumerator. It is difficult to assess what the emphasis on internet response will mean in terms of differential response and net undercount rates, but there is concern that focusing on internet response may increase the difficulty of getting a complete and accurate Census count for vulnerable groups.

15.4 Use of Administrative Records

Another methodology to be used more extensively in the 2020 Census is the use of administrative or third-party records to supplement the Census. While some administrative records have been used sparingly in past Censuses, the 2020 Census envisions more extensive use compared to the past. Administrative records include information from such sources as income tax filings, social security files, and Medicare files (Rostogi and O’Hara 2012).

Administrative records will be used to help identify vacant housing units and may be used to provide data for individuals when they don’t respond or don’t provide complete information. At this writing, the exact use of administrative records in the

2020 Census is not clear. The recent addition of the citizenship question has also led to discussion about use of administrative records with respect to that topic (Brown et al. 2018).

Some researchers worry that portions of the population are not adequately reflected in the administrative data. For example, O'Hare (2016) shows that young children are under-represented in administrative records and the use of administrative records in the 2020 Census may exacerbate the high net undercount of this group has experienced in the Census. Other studies show other undercounted groups such as Blacks and Hispanics, are not fully represented in administrative records. Rastogi and O'Hara (2012) found match rates between administrative data and Census records in the 2010 Census higher for White Alone than for Hispanics or Blacks.

Some analysts wonder if administrative records are adequate for covering the hard-to-count population groups like squatters, the homeless, and unauthorized immigrants (Cohn 2016). A statement from a convening of civil rights groups (Urban Institute 2017, p. 11) captures one major concern about the use of administrative records in the Census, "The central civil rights concern about using AdRecs in the Decennial Census is that vulnerable and hard-to-reach subpopulations may be systematically underrepresented by the new procedure".

Given the unevenness in which groups are represented in Administrative Records, depending on how Administrative Records are used, they could increase some of the undercount differentials in the 2020 Census. There is no doubt that using administrative records instead of repeated visits to non-responding households will save money, but it is not clear yet that it will not compromise quality.

15.5 Summary

There are many reasons why the 2020 Census will be different than other recent Censuses. The Census Bureau plans to use several new methods in the 2020 Census largely to meet budget limitations for the 2020 Census placed on the Census by Congress in 2011. The new methodologies that will be used in the 2020 Census have gone through minimal testing, in large part because of funding shortfalls and funding uncertainties at the Census Bureau. In addition to funding problems, many other distractions have made it difficult for the Census Bureau to fully focus on the 2020 Census and these interruptions and disruptions threaten to compromise the quality of the 2020 Census. Some of the new methodologies being introduced in the 2020 Census, designed primarily to save money, could also exacerbate differential undercounts.

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