



2020 and Beyond: Key Development and New Initiatives at the U.S. Census Bureau

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Outline

2019 Census Test

2020 Census

Disclosure Avoidance

Updates on the American Community Survey

2019 Census Test Background

- **In March 2018, Secretary Ross made the decision to add a citizenship question to the 2020 Census**
- **The Census Bureau decided to conduct a nationally representative self-response test to measure the operational effect of including a citizenship question on self-response rates**
 - Goal: Improve estimates of how many census takers may be needed for Nonresponse Followup (NRFU)
 - Goal: Inform the Integrated Partnership and Communications Campaign to better communicate with households that may not respond to the 2020 Census
- **In order to conduct the test, the Census Bureau used existing American Community Survey (ACS) platforms and processes**
 - The American Community Survey has the infrastructure and resources to conduct this type of test
 - Allowed 2020 Census staff to continue to focus on the execution of the 2020 Census.

2019 Census Test Design

- **Census Day was July 1, 2019**
- **Designed to measure the operational effect of a citizenship question on self-response rates**
 - Control Treatment included the citizenship question (along with all planned 2020 Census questions: the number of people, tenure, sex, age, date of birth, Hispanic origin, race, relationship, and coverage questions)
 - Experiment Treatment included the planned 2020 Census questions (citizenship was not included)
- **Mirrored the design of the 2020 Census, to the extent possible**
- **Responses were accepted via internet, paper questionnaire, or telephone**
- **Telephone Questionnaire Assistance was available in 10 of the 12 non-English languages that are supported by the 2020 Census. Those languages include: Spanish, Chinese (Mandarin and Cantonese), Vietnamese, Korean, Russian, Arabic, Tagalog, French, Haitian Creole, and Portuguese**

2019 Census Test Experimental Design

- National, split-sample self-response test of 480,000 housing unit addresses
- Stratified Sample

Strata	Strata Definition	Experiment (no Citizenship)	Control (with Citizenship)
High	Tracts with >11.1% non-citizens	80,000	80,000
Medium	Tracts with between 4.9-11.1% non-citizens OR a low-response score>24	80,000	80,000
Low	All remaining tracts	80,000	80,000
Total		240,000	240,000

DRB Approval Number: CBDRB-FY19-360

2019 Census Test Contact Strategy

Initial Mailing	Second Mailing	Third Mailing	Fourth Mailing	Fifth Mailing
6/13/2019	6/17/2019	6/27/2019	7/12/2019	7/22/2019

Internet First

- 1 Letter
- 2 Letter
- 3* Postcard
- 4* Paper Questionnaire + Letter
- 5* "It's not too late" Postcard

*Mailed only to nonrespondents

Internet Choice

- 1 Paper Questionnaire + Letter
- 2 Letter
- 3* Postcard
- 4* Paper Questionnaire + Letter
- 5* "It's not too late" Postcard

*Mailed only to nonrespondents

Bilingual Materials (English/Spanish) were sent to all housing units in tracts where at least 20 percent of the occupied housing units had at least one adult who speaks Spanish and does not speak English "very well"

Lessons Learned

The 2019 Census Test Informed 2020 Operations

- Identified and corrected errors and inconsistencies in the 2020 mail materials
- Provided advice on print contracts and National Processing Center (NPC) requirements to the 2020 Census Program for Evaluations and Experiments (CPEX)
- Shared Telephone Questionnaire Assistance (TQA) training materials with 2020 Census Questionnaire Assistance (CQA) staff; CQA staff observed TQA operations
- Shared lessons learned about the Interactive Voice Recognition (IVR) system
- Trained staff in NPC to code race and ethnicity data in a similar way as will be needed for 2020
- Developed FAQs on reCAPTCHA so call center staff can better handle respondent questions and issues
- Provided response rate analysis comparing 2019 Census Test response rates to previous mid-decade tests

Additional Ways the 2019 Census Test was Beneficial

- Proved the viability of using the American Community Survey infrastructure, systems, and staff to support decennial census testing
- Provided lessons learned on reCAPTCHA to the other demographic surveys at the Bureau
- Developed reCAPTCHA FAQs for call center staff to better assist respondents with issues they encounter with reCAPTCHA for ACS and other surveys
- Conducting race and ethnicity coding provided the ACS program an opportunity to learn the impact of the additional write-in lines for White and Black or African American. The ACS will implement these changes to the race question in 2020 production.
- ACS Staff gained valuable knowledge about data collection operations that can be applied to other ACS testing, such as the 2022 ACS Content Test

Results of the 2019 Census Test



2020 Census Update

2020 Census

Constitutional Mandate

Purpose

- To conduct a census of population and housing and disseminate the results to the President, the States, and the American People.



Primary Uses of Decennial Census Data:

- Apportion representation among states as mandated by Article 1, Section 2 of the U.S. Constitution
- Draw congressional and state legislative districts, school districts, and voting precincts
- Distribute more than \$675 billion federal dollars annually to states
- Inform federal, tribal, state, and local government planning decisions
- Inform business and nonprofit organization decisions (e.g., where to locate, size of the market)
- Serve as the base of the annual population estimates

2020 Census

Approach to the 2020 Census



At a Glance

- **Complete and accurate count**—The goal of the 2020 Census is to count everyone once, only once, and in the right place.
- **Safe and secure**—Incorporated industry best practices and follow federal IT security standards for encrypting data in transmission and at rest.
- **Easy**—Respondents can respond anytime, from anywhere—online, by mail, or over the phone.

2020 Census

A Complete and Accurate Count of the Population and Housing



2020 Census

In-Office Address Canvassing

- Through geospatial aerial imagery reviewed, validated, and updated address list in-office.
- Targeted field operation allowed resources to be focused on areas in which fieldwork was necessary to assure a complete and accurate address list.
- Confirmed accuracy of 96 million (65%) of addresses in the MAF.
- Remaining 49 million (35%) of addresses validated during In-Field Address Canvassing.
- Enabled in-field address canvassing to be conducted closer to Census Day.



2020 Census

Address Canvassing Operations

What You Need to Know

- Temporary Census Bureau employees, known as Listers, walk the streets of designated census blocks.
- Listers knock on doors and, using laptops, verify addresses in the Census' MAF in preparation for the 2020 count.
- Listers attempt to contact every structure to ask about living quarters.



2020 Census

In-Field Address Canvassing Accomplishments

- Completed first major field operation on time – October 11, 2019.
- Hired and deployed 32,000 Listers nationwide equipped with laptops to canvass over 50 million addresses.
 - Productivity exceed plan.
 - Production: 31% more efficient than plan.
 - Quality Control: 69% more efficient than plan.
- Successfully managed nationwide operations from only 39 Area Census Offices (ACOs) compared to 151 in 2010.
- Operation was completed under budget.
 - \$48.8 million in operational savings and an additional \$17 million in training saving.
- All 27 IT systems were fully integrated with one another, performance tested, and deployed on schedule and within budget.



2020 Census

Census Barriers, Attitudes, and Motivators Study (CBAMS)

CBAMS

- National quantitative survey and series of qualitative focus groups designed to inform and inspire our creative strategy.
- Nationally representative sample of 50,000 households and 42 focus groups across 14 cities.
- The research told us what people know about the census, what motivates them to respond, and what prevents them from responding.
- CBAMS was the foundation for building the Integrated Partnership and Communications campaign.



2020 Census

How the 2020 Census Will Invite Everyone to Respond

Every household will have the option of responding online, by phone, by paper form, or in person.

Nearly every household will receive an invitation to participate in the 2020 Census from either a postal worker or a census worker.



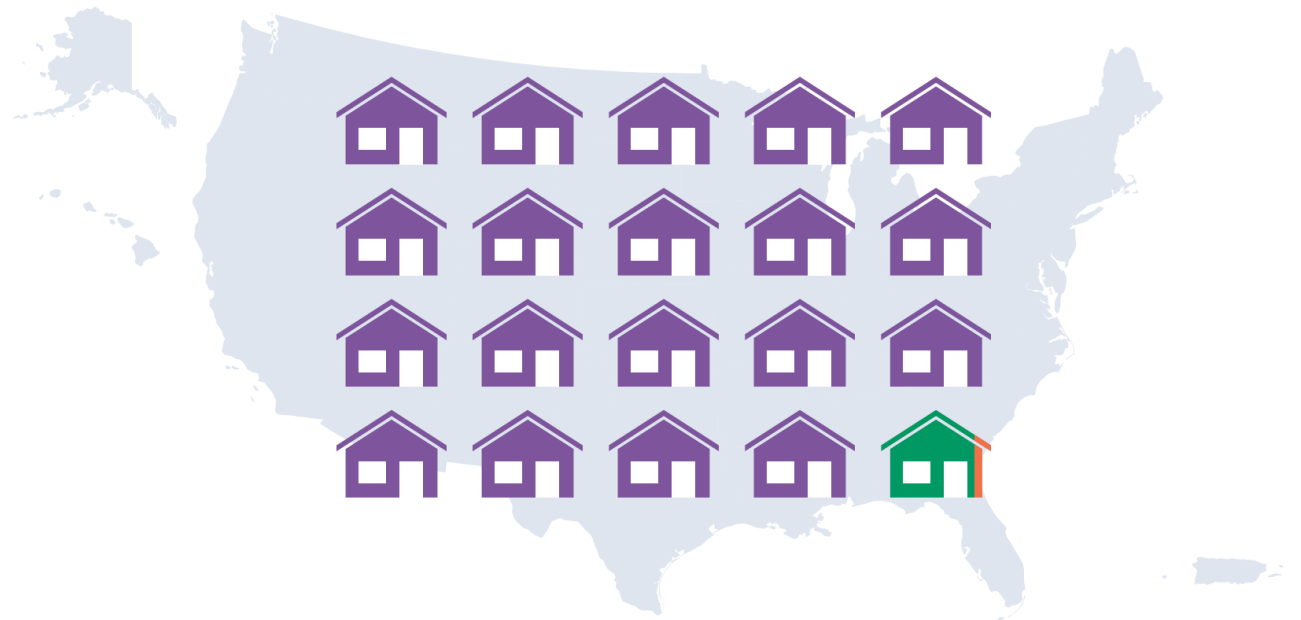
95% of households will receive their census invitation in the mail.



Almost 5% of households will receive their census invitation when a census taker drops it off. In these areas, the majority of households may not receive mail at their home's physical location (like households that use post office boxes or areas recently affected by natural disasters).



Less than 1% of households will be counted in person by a census taker instead of being invited to respond on their own. We do this in very remote areas like parts of northern Maine, remote Alaska, and in select American Indian areas that ask to be counted in person.



2020 Census

When We Start Mailing

What You Need to Know

- Initial invitations to respond to the 2020 Census will start arriving by U.S. mail on March 12.
- These will be followed by up to four additional mailings if a household has not self-responded.
- Every household that has not responded by the fourth mailing will receive a paper questionnaire arriving by U.S. mail starting on April 8.
- People who live in areas with low Internet connectivity will receive a paper questionnaire in their first mailing.
- Regardless of how households are invited to respond, respondents will be able to respond by any of the three modes—online, by phone, or by paper.



2020 Census

Language Assistance



Non-English Language Support.

- Self-respond in English or one of 12 non-English languages.
- Print and video language guides are in 59 non-English languages provided to field partnership specialists and available online.
- Video language guide available in American Sign Language, print guides available in braille and large print.
- Partnership specialists will be hired from within local communities, emphasizing the importance of communicating in local languages.

2020 Census

Nonresponse Follow-up

What You Need to Know

- Temporary Census Bureau employees, known as census takers, determine the housing unit status for addresses that do not self-respond to the 2020 Census.
- Census takers will personally visit housing units to count or enumerate the households.
- If no one is at home, the census taker will leave a Notice of Visit to encourage self-response.
- In most situations, census takers will make at least six attempts to resolve a case.
- In-field operation begins in May 2020 and concludes in July 2020.



2020 Census Update

Where Are We Now

Milestone	Date	
Begin 2020 Census Program	November 18, 2011	✓
Begin Local Update of Census Addresses (LUCA) Program	January 2017	✓
Deliver 2020 Census Topics to Congress	March 28, 2017	✓
Deliver 2020 Census Questions to Congress	By March 31, 2018	✓
Open Regional Census Centers	April 2018	✓
Conduct 2018 End-to-End Census Test	August 28, 2017 – August 31, 2018*	✓
Begin Opening Area Census Offices	January 7, 2019	✓
Begin In-Field Address Canvassing	August 18, 2019 – October 11, 2019	✓
Launch Advertising Campaign	January 2020	
Begin Remote Alaska	January 21, 2020	
Begin Group Quarters – Advance Contact	February 3, 2020	
Begin Self-Response	March 12, 2020	
Begin Update Leave	March 16, 2020	
Begin Update Enumerate	March 16, 2020	
Begin Group Quarters – Service Based Enumeration	March 30, 2020	
2020 Census Day	April 1, 2020	
Begin Group Quarters Enumeration	April 2, 2020	
Begin Coverage Improvement	April 7, 2020	
Begin Early Nonresponse Followup	April 9, 2020	
Begin Enumeration at Transitory Locations	April 9, 2020	
Begin Nonresponse Followup	May 13, 2020	
Deliver Apportionment Counts to the President	By December 31, 2020	
Complete Delivery of Redistricting Counts to the States	By March 31, 2021	
Complete 2020 Census Program	September 29, 2023	

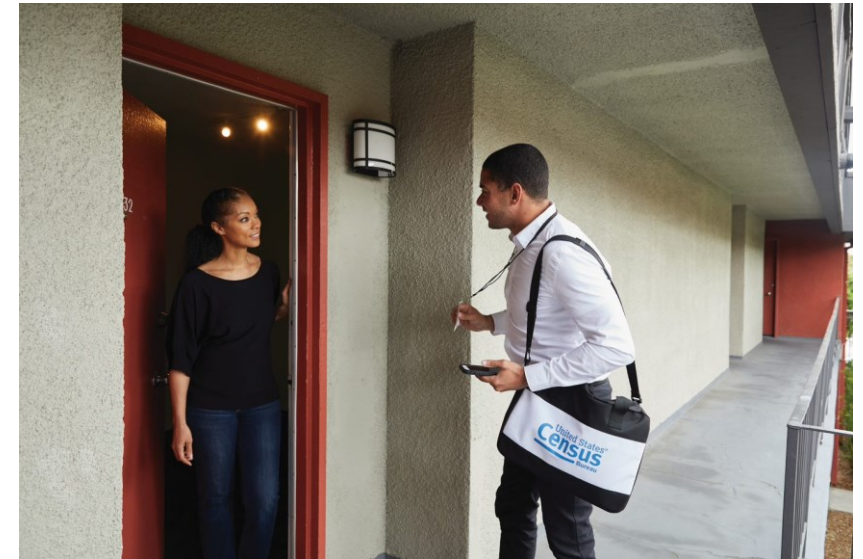
Disclosure Avoidance

Our Commitment to Data Stewardship

We have a dual mandate to produce accurate data while keeping the data safe.

Data stewardship is central to the Census Bureau's mission to produce high-quality statistics about the people and economy of the United States.

Our commitment to protect the privacy of our respondents and the confidentiality of their data is both a legal obligation and a core component of our institutional culture.



The Census Bureau's Privacy Protections Over Time

Throughout its history, the Census Bureau has been at the forefront of the design and implementation of statistical methods to safeguard respondent data.

Over the decades, as we have increased the number and detail of the data products we release, we have also improved the statistical techniques we use to protect those data.



Reconstructing the 2010 Census

- The 2010 Census collected information on the age, sex, race, ethnicity, and relationship (to householder) status for ~309 million individuals. (1.9 Billion confidential data points).
- The 2010 Census data products released over 150 billion statistics.
- Internal Census Bureau research confirmed that the confidential 2010 Census microdata can be accurately reconstructed from the publicly released tabulations.

The Census Bureau's Decision to Move to Formal Privacy

- Advances in computing power and the availability of external data sources make database reconstruction and re-identification increasingly likely.
- The Census Bureau recognized that our traditional disclosure avoidance methods are increasingly insufficient to counter these risks.
- To meet our continuing obligations to safeguard respondent information, the Census Bureau has committed to modernizing our approach to privacy protections.

2010 Census Demonstration Products

- Based on the national 2010 Census Edited File (CEF)
- Using differentially private methods (e.g., the Census TDA (TopDown Algorithm))
- The data product will have approximately 70% of tables in DHC-P and DHC-H
- Releasing next week (tentative)
- Asking data users to use these data products and provide us with feedback
- CNSTAT workshop to discuss the demonstration products December 11-12, 2019
- New code base release later this fall
- [Video](https://www.census.gov/library/video/2019/protecting-privacy.html) explaining differential privacy
(<https://www.census.gov/library/video/2019/protecting-privacy.html>)

Formal Privacy for the American Community Survey

Formal privacy methods for the American Community Survey **will not be implemented before 2025** (Deputy Director's blog: <https://www.census.gov/newsroom/blogs/random-samplings/2019/07/boost-safeguards.html>)

The scientific and user communities will be fully engaged as part of that process
All current efforts are focused on formal privacy methods for the 2020 Census

Updates on the American Community Survey

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ACS Data Releases

Data Products	Original Release Date	Revised Release Date	
2018 1-Year Data Releases			
Detailed Tables	September 12, 2019	September 26, 2019	✓
Data Profiles			
1-Year Summary File			
All 1-Year Products (Comparison Profiles; Selected Population Profiles; Ranking Tables; Subject Tables)		October 17, 2019	✓
1-Year Public Use Microdata Sample (PUMS) File	October 17, 2019	November 14, 2019	
1-Year Supplemental Estimates Release		February 6, 2020	
2014-2018 5-Year Data Releases			
Detailed Tables	December 5, 2019	December 19, 2019	
Data Profile			
5-Year Summary File			
All 5-Year Products (Comparison Profiles; Narrative Profiles; Ranking Tables; Subject Tables)		January 16, 2020	
5-Year Public Use Microdata Sample (PUMS)	January 16, 2020	January 30, 2020	
5-Year Variance Replicate Estimates			

Changes for the 2020 ACS

- **Introducing the new race and Hispanic Origin questions which include write-ins for Whites and Blacks**
- **Moving to a flat questionnaire (not folded)**
- **Implementing changes to the mandatory messaging and improving the ACS mail materials**
 - **Emphasizing the Census Bureau brand**
 - **Using visual design principles to draw attention to key messages**
 - **Employing plain language principles to make the letters easier to read**
 - **Streamlining the mail materials**
 - **Revising the questionnaire cover**
 - **Including the text “Open Immediately” on the envelope**

Plan for 2020 ACS Materials

- **Implement a new set of modified mail materials for March-September 2020 that add language about the ACS and the 2020 Census**
- **Add FAQs to address respondent questions**
- **Provide a flyer for our field representatives to use with respondents that explains the difference between the ACS and the 2020 Census**

Upcoming Tests for the ACS

- **Due Dates Test (October 2019)**
 - Include due date and messaging about benefit/consequences to 5th mailing
- **Starting Over with a Strategic Approach to the Mail Materials**
 - Cognitive Testing (Fall 2019)
 - Field Testing (2021)
- **Content Testing**
 - Cognitive Testing (2019-2020)
 - Field Testing (2022)

Upcoming CNSTAT Expert Meetings

Objective: Convene three expert group meetings to solicit input from external experts to inform the ACS research agenda in the coming years.

Meeting 1: Administrative Records

- Discuss the Census Bureau's framework for researching the use of administrative data in the ACS and obtain input from experts on the current research and potential future research.

Meeting 2: Technology

- Identify existing and emerging technologies that can be leveraged to enhance the respondent experience, improve data collection, and make the ACS program more able to employ new technologies.

Meeting 3: Communications with Respondents

- Discuss the Census Bureau's recent communications research and current plans. Obtain input from experts on the communications materials.

Thank You!

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2020 Census

Areas Recovering From Natural Disasters

Update Leave

- Deliver questionnaires in geographic areas where the majority of housing units do not have mail delivered to the physical location of the address.
- Areas that have experienced recent and significant changes to the housing stock—for example, natural disasters such as a hurricane or flooding.
- Leave a 2020 Census Internet Choice Questionnaire Package at every housing unit. Able to respond online, by mail, or over the phone.
- Occurs simultaneously with Internet Self-Response.
- People temporarily displaced by natural disasters can be counted at their usual residence.



The American Community Survey

Resuming ACS Activities After a Five-Week Lapse in Appropriations: Data Collection

Impact to the data collection process for the ACS

ACS Sample Panel	Month of Data Collection						
	November	December	January	February	March	April	May
November	Internet / Mail Response (HUs Receive Mailings 1 – 5)		Canceled: Personal Visit				
December			Internet / Mail Response (HUs Receive Mailings 1 – 3 only, Canceled Mailings 4 and 5)	Delayed Start: Personal Visit			
January			Internet / Mail Response (No mailings in January. Delayed Start: HUs Receive Mailings 1 – 4 in February, Canceled Mailing 5)		Personal Visit		
February					Internet / Mail Response (Delayed Start: HUs Receive Mailings 1 – 5)	Personal Visit	
March					Internet / Mail Response (HUs Receive Mailings 1 – 5)		Personal Visit
April							Internet / Mail Response (HUs Receive Mailings 1 – 5)