

American Community Survey

2020 ACS 1-Year Experimental Data Release Webinar

November 30, 2021

Slides Will be in Press Kit

Audio Conference Access Information

To ask a question, you must dial in:

Toll free number: 1-888-324-0283

Participant passcode: 9479768

The American Community Survey

Speakers

Host

Michael Cook Sr.

Chief

Public Information Office

Presenters

Donna Daily

Chief

American Community Survey Office

Jonathan Eggleston

Senior Economist

Center for Economic Studies

The American Community Survey

Overview

- Introduction to the ACS
- Impact of COVID-19 on 2020 ACS Data Collection Operations and Data Quality
- 2020 ACS 1-Year Experimental Data Release
- Accessing the Experimental Data
- Discussion of Experimental Methodology
- Q & A

The American Community Survey

The Foundation

The American Community Survey is on the leading edge of survey design, continuous improvement, and data quality

- The nation's most current, reliable, and accessible data source for local statistics on critical planning topics such as age, children, veterans, commuting, education, income, and employment
- Surveys **3.5 million** addresses and informs over **\$675 billion** of Federal government spending each year
- Covers **40+ topics**, supports over **300** evidence-based Federal government uses
- Typically provides three key annual data releases:
 - 1-year Estimates (for large populations)
 - 1-year Supplemental Estimates (for small populations)
 - 5-year Estimates (for very small populations)

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United States Census Bureau **The American Community Survey**

This booklet shows the content of the American Community Survey questionnaire.

Start Here

You have two ways to respond:

Respond online today at: <https://respond.census.gov/acs>

OR

Complete this form and mail it back as soon as possible.

Your response is required by law.

The American Community Survey is conducted by the U.S. Census Bureau. This survey is one of the few surveys for which all responses are required by law to respond. The U.S. Census Bureau is required by law to protect your information.

If you need help or have questions about completing this form, please call: 1-800-354-7271.

Text Telephone (TTY): Call 1-800-562-8300.

¿NECESITA AYUDA? Llame sin cargo alguno al 1-877-833-5625.

For more information about the American Community Survey, visit our website at: <https://www.census.gov/acs>

Please print the name and telephone number of the person who is filling out this form. We will only contact you if needed for official Census Bureau business.

Last Name

First Name

Area Code - Number -

How many people are living or staying at this address?

- INCLUDE everyone who is living or staying here for more than 2 months.
- INCLUDE yourself if you are living here for more than 2 months.
- INCLUDE anyone else staying here who does not have another place to stay, even if they are here for 2 months or less.
- DO NOT INCLUDE anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment.

Number of people

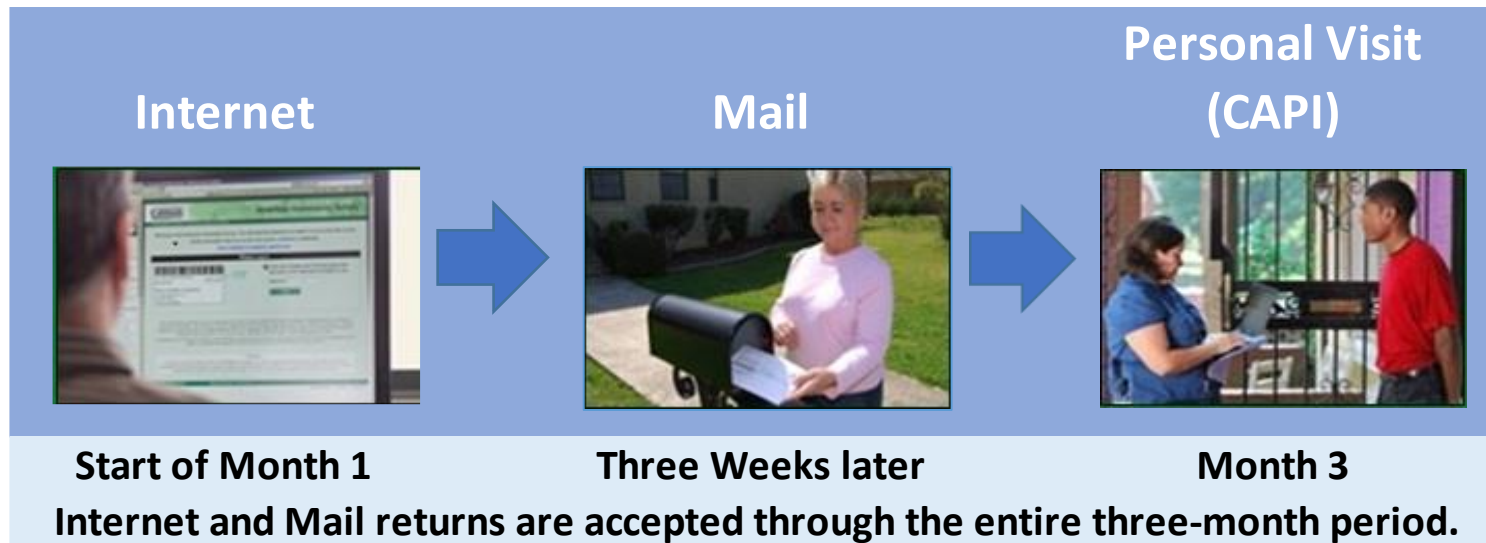
Fill out pages 2 - 7 for everyone, including yourself, who is living or staying at this address for more than 2 months. Then complete the rest of the form.

ACS-11NFO(2021) OMB No. 0607-0810 06-18-2021 OMB No. 0627-0226

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ACS Data Collection Process: Pre COVID-19

- The ACS is a continuous, multimode survey that uses a multiple mailing strategy
- Data collection for each monthly panel takes place over a three-month period



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Data Collection Modifications Due to COVID-19

Mail

- Suspended mail operations starting mid-March through June 2020
- Resumed limited mail operations in July 2020
- Restored our full 5-piece mail strategy in April 2021

Internet

- The internet option was available only to a subset of our full sample due to reduced mailings during April—June 2020

In-Person Interviewing

- In-person interviewing for housing units and group quarters was suspended mid-March—June 2020

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Impact of Data Collection Challenges on ACS Data Quality

- Given the limitations in our data collection for the 2020 ACS and our inability to fully utilize all three modes, we were unable to collect information from certain segments of the population
- As a result, significant nonresponse bias was present in the collected data
- While all surveys have nonresponse bias, our standard methods for mitigating the nonresponse bias are insufficient for this data year
- An analytical report, *An Assessment of the COVID-19 Pandemic's Impact on the 2020 ACS 1-Year Data*, with more information on the 2020 ACS 1-year data and related quality metrics was released on October 27th

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2020 ACS 1-Year Experimental Data Products

2020 ACS 1-Year Experimental products released today:

- **Data tables**
 - 54 tables, similar in format to the ACS 1-year Supplemental Tables, covering social, economic, housing, and demographic characteristics
 - Available for the nation, states, and the District of Columbia
- **Technical working paper**, *Addressing Nonresponse Bias in the American Community Survey During the Pandemic Using Administrative Data*, explaining the experimental weighting methodology with an accompanying blog and appendix tables
- **Public Use Microdata Sample (PUMS) Files** with experimental weights
- All experimental products can be accessed from the Experimental Data web page on the ACS website
 - Not on data.census.gov or the API

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2020 ACS 1-Year Public Use Microdata Sample (PUMS) with Experimental Weights

- ACS Public Use Microdata Sample (PUMS) files enable data users to create custom estimates and tables that are not available through pretabulated ACS data products
- The 2020 ACS 1-year PUMS files include experimental weights
- Available for nation, divisions, states, and Public Use Microdata Areas (PUMAs)
- Available from the Experimental Data web page on the ACS website
 - Not on data.census.gov or the API
- PUMA boundaries have not changed with this release

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Guidance for Data Users

- The Census Bureau encourages data users to determine whether the data are suitable for their particular use.
- The Census Bureau does not recommend comparing:
 - The 2020 ACS 1-year experimental estimates with standard ACS estimates or the decennial census
 - The 2020 ACS 1-year PUMS with experimental weights with standard pre-tabulated products or PUMS-based estimates from previous years
- Experimental data should be used with caution because they may not meet all our quality standards
- Estimates for PUMAs should be used with caution because the experimental weights were not optimized to produce estimates for these areas

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Accessing the Experimental Data

The image shows two screenshots of the United States Census Bureau website. The top screenshot shows the main navigation menu with 'EXPLORE DATA' highlighted. The bottom screenshot shows the 'American Community Survey Data' page with 'Experimental Data' highlighted in the left navigation menu. A green button labeled 'GO TO DATA.CENSUS.GOV' is also visible on the page.

- Go to <https://www.census.gov/acs>
- Click on “Data” from the left navigation
- Click on “Experimental Data” from the left navigation

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Accessing the Experimental Data

Custom Tables

[Back to American Community Survey Data](#)

Respond to the ACS
Learn how

later than November 30th. This will include a limited number of data tables for the nation, states, and District of Columbia. The 2020 ACS 1-year experimental estimates will be posted here; they will not be available on data.census.gov.

Resources for Data Users

ACS Resource Hub

2020 ACS 1-Year Estimates What You Need to Know

Data and Documentation

2020 ACS 1-Year Experimental Data Tables
View the list of tables and supporting documentation for the 2020 ACS 1-year Experimental data release.

2020 ACS 1-Year Experimental Data Tables

Access the tables for the 2020 ACS 1-year experimental data release by clicking on the table titles below. These 54 tables cover social, economic, housing, and demographic characteristics, similar to the format of the ACS 1-year Supplemental Estimates. You can also view the materials under Supporting Documentation for additional information.

EXPAND ALL | COLLAPSE ALL

^ Social

<input checked="" type="checkbox"/>	Table XK200501. Citizenship Status in the United States	[<1.0 MB]
<input checked="" type="checkbox"/>	Table XK200503. Place of Birth in the United States	[<1.0 MB]
<input checked="" type="checkbox"/>	Table XK200701. Geographical Mobility in the Past Year in the United States	[<1.0 MB]
<input checked="" type="checkbox"/>	Table XK201001. Marital Status for the Population 15 Years and Over	[<1.0 MB]
<input checked="" type="checkbox"/>	Table XK201101. Own Children Under 18 Years by Family Type	[<1.0 MB]
<input checked="" type="checkbox"/>	Table XK201401. School Enrollment by Level of School for the Population 3 Years and Over	[<1.0 MB]
<input checked="" type="checkbox"/>	Table XK201501. Educational Attainment for the Population 25 Years and Over	[<1.0 MB]
<input checked="" type="checkbox"/>	Table XK201601. Household Language	[<1.0 MB]
<input checked="" type="checkbox"/>	Table XK201801. Disability Status by Age	[<1.0 MB]

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ACS Resources

American Community Survey Resource Hub

This resource hub connects you to American Community Survey (ACS) resources and access to data experts. We can help navigate various options, answer questions, and direct you to more information.

ACS Website

The ACS website contains a wealth of up-to-date information for respondents, data users, and the general public. You can access supporting documentation for each data release, as well as resources to learn more about the survey at www.census.gov/programs-surveys/acs.html.

Data Dissemination Specialists

The Census Bureau's dedicated team of Data Dissemination Specialists (DDS) play a unique role in working directly with individuals, organizations, governments, and others across the country. These experts are available to help you understand what datasets are available and provide free, customized training by phone at 1-844-ASK-DATA or email census.askdata@census.gov.

Data.census.gov

Access ACS data at <https://data.census.gov>, the Census Bureau's primary data dissemination tool. You can use the search bar to search data by state, county or place, and see an overview of that area in a geographic profile with visualizations and infographics. Users have access to tables, maps, webpages, geographical profiles, and visualizations.

Handbooks for Data Users

Available at www.census.gov/programs-surveys/acs/guidance/handbooks.html.

Training Presentations

Available at www.census.gov/programs-surveys/acs/guidance/training-presentations.html.

Guidance for Data Users

Available at www.census.gov/programs-surveys/acs/guidance.html.

ACS Resources Available For You

Stories

Information on how ACS data are used to help communities is available at www.census.gov/programs-surveys/acs/about/acs-data-stories.html.

Census Academy: Data Gems (YouTube Channel)

Available at www.youtube.com/channel/UCkXZ2k3qxt2r4RujjCekG8xh.

Contact Us

General Questions

Call the Census Bureau's Customer Service Center at 301-763-4636 or 1-800-923-8282, Monday-Friday, 9 a.m.-5 p.m. EST.

State Data Centers (SDC)

The SDC program is a partnership between the 50 states, the District of Columbia, Puerto Rico, and the island areas to make data available locally to the public. More information is available at www.census.gov/about/partners/sdc.html.

Ask Census

Select "American Community Survey" on the left-hand menu at <https://ask.census.gov> to view questions and answers about the ACS.

Census Information Centers (CIC)

CIC provide local access, education, and technical assistance on census data for planning and decision making to underserved communities. More information is available at www.census.gov/about/partners/cic.html.

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2020 American Community Survey 1-Year Estimates

What You Need to Know

Question 1. Do you use population or demographic data in your work to allocate funds, conduct program evaluation, make decisions, or for other purposes?

YES You are not impacted by this announcement. For more information on how to make data-driven decisions for your program go to: Federal Data Strategy <https://strategy.data.gov>.

NO

Question 2. Does the data you use for your program come from the U.S. Census Bureau?

YES You are not impacted by this announcement. For more information on how to make data-driven decisions for your program go to: Federal Data Strategy <https://strategy.data.gov>.

NO Explore Census data sources at <https://data.census.gov>. If you still have questions, please contact the Census Bureau's Customer Help Center at 1-800-923-8282 or <https://ask.census.gov>.

Question 3. Does the data you use come from the American Community Survey (ACS)?

YES You are not impacted by this announcement. For more information on how to make data-driven decisions for your program go to: Federal Data Strategy <https://strategy.data.gov>.

NO Learn more about the differences between the ACS and decennial census at www.census.gov/programs-surveys/acs/about/acs-and-census.html, and about the questions on the ACS form at www.census.gov/acs/www/about/why-we-ask-each-question/ to help identify whether the ACS is the source of your data. If you still have questions, please contact the Census Bureau's Customer Help Center at 1-800-923-8282 or <https://ask.census.gov>.

Question 4. Does the data you use come from ACS 1-year estimates or ACS 5-year estimates?

1-Year Estimates	5-Year Estimates	I Don't Know
<p>You are likely impacted by this announcement. Work with legal and technical staff in your program to determine if one of the following options is feasible:</p> <ul style="list-style-type: none"> 2019 ACS 1-year estimates in place of 2020 ACS 1-year estimates. 2015-2019 ACS 5-year estimates in place of 2020 ACS 1-year estimates. An alternative data source (i.e., Current Population Survey, Survey of Income and Program Participation, 2020 ACS 1-year experimental estimates) in place of 2020 ACS 1-year estimates. 	<p>You are not impacted by this announcement. The Census Bureau is currently analyzing the impact of COVID data collection issues on ACS 5-year estimates. At present, no action is necessary. However, we encourage you to retain the information you have collected in this review in case the Census Bureau determines that there are impacts on ACS 5-year estimates from the data collection issues that occurred as a result of the COVID-19 pandemic.</p>	<p>Learn more about the differences between ACS 1-year estimates and ACS 5-year estimates at www.census.gov/programs-surveys/acs/guidance/estimates.html to help identify the source of your data. If you still have questions, please contact the Census Bureau's Customer Help Center at 1-800-923-8282 or https://ask.census.gov. Our Customer Help Center representatives can connect you with the ACS Data Users team if additional assistance is needed.</p>

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2020 ACS 5-Year Data Products

2016-2020 ACS 5-Year

- The Census Bureau must delay the 2016-2020 ACS 5-year data release originally targeted for December 2021
- Additional time is needed to continue refining our methodology so that we can minimize the impact of nonresponse bias due to the COVID-19 pandemic
- Our current plan targets a March 2022 release date
- We expect to provide an update in December



AMERICAN COMMUNITY SURVEY DATA USERS GROUP

- Purpose:
 - Improve understanding of the value and utility of ACS data.
 - Promote information sharing among data users about key ACS data issues and applications.
- Includes users group website and online community
- Membership is free and open to all interested ACS data users

acsdatacommunity.prb.org

Overview of Experimental Methodology

Jonathan Eggleston

The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release. CBDRB-FY2021-CES005-022, CBDRB-FY2022-CES005-002, and CBDRB-FY22-025.

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What Do Survey Weights Do?

- Simple Overview: Increase or decrease the “importance” of individual respondents to make the responding sample look more like the target population
- For example, older individuals are more likely to respond to household surveys than younger individuals. The weighting process gives younger individuals a higher weight value to make the responding sample more representative of the target population
- Weighting process decides how many people out of the total U.S. population each ACS respondent represents
 - E.g., For a male ACS respondent, age 35 with \$80,000 in income, is he roughly representative of 20, 40, or 80 people in the country?
 - Note: The sum of ACS weights total to the population in each state and local area
- Weighting does not change a person’s answers to the survey, only how many times their answer is repeated for calculating a statistic

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Simplified Overview of Standard ACS Weights

- Household Noninterview Adjustment
 - Adjust for differing response rates by tract and building type (e.g., single-family home vs. apartment)
- Housing Unit and Population Controls Adjustment
 - Adjust ACS weighted counts of age, race, Hispanic origin, sex, number of housing units, and number of people to independent Census population estimates at substate level (counties/group of counties)

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Overview of Experimental ACS Weights

- Add the following administrative data to ACS's weighting algorithm
 - Internal Revenue Service (IRS) forms 1040 and 1099: *Income, list of household residents*
 - Social Security Administration (SSA) program benefit data: *Retirement and Disability Information*
 - Demographic data from 2010 Census and SSA: *Age, Race, Hispanic Origin, Citizenship*
 - Industry data for the Census Business Register: *e.g., proxy for whether someone worked for a restaurant during 2020*
 - Third-party home value data: *Additional proxy for income*
- Intuition: Adding these new data gave us more detailed information on how ACS respondents and nonrespondents differ, which allowed us to better correct for nonresponse bias during 2020

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Overview of Experimental ACS Weights

- Use a weighting technique called *Entropy Balancing* to incorporate these additional inputs
- Suited to handling numerous inputs to the weighting model
- Allowed for a simultaneous adjustment to the weights by the administrative data and population controls
- Used in prior weighting research on the Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS)

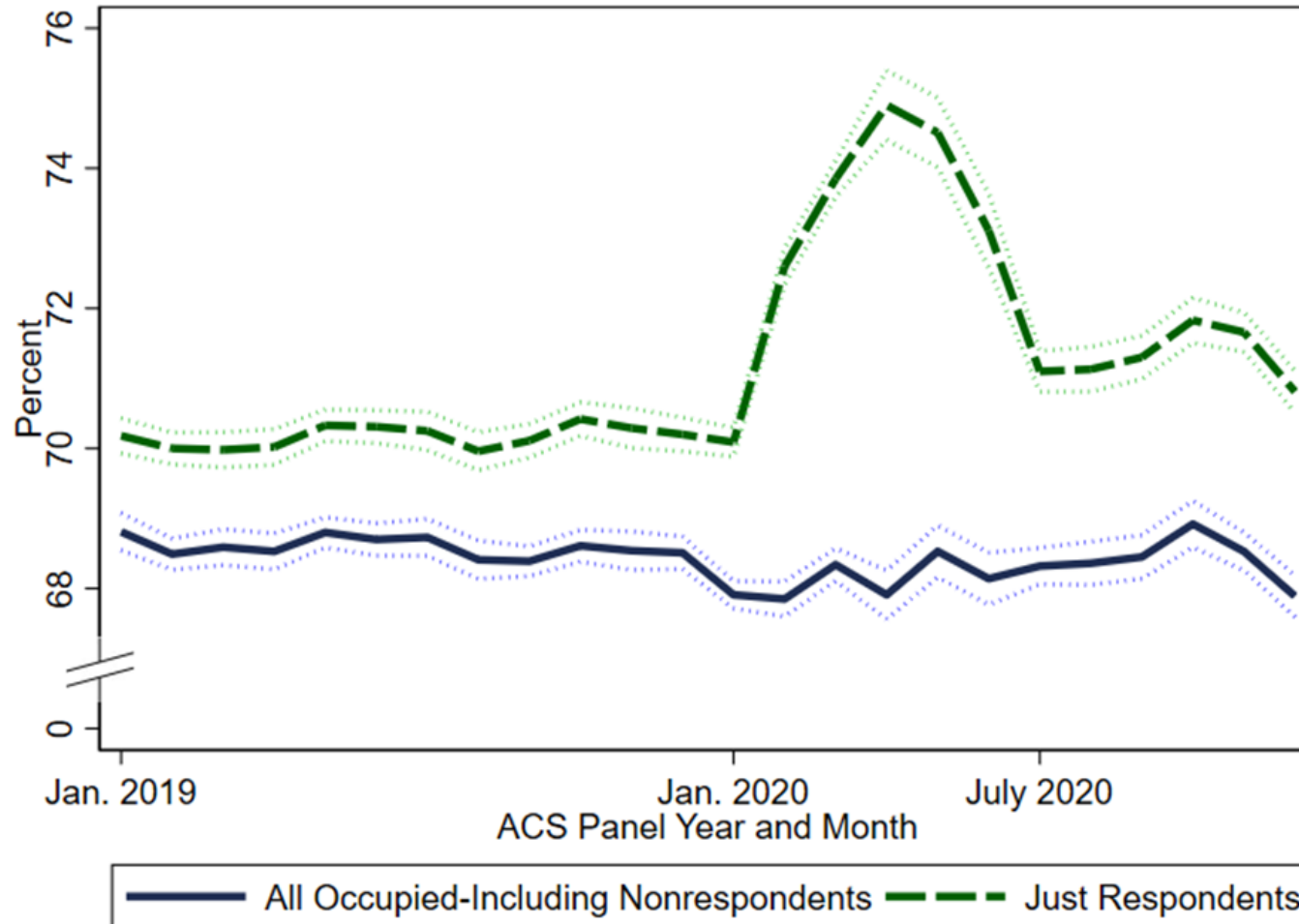
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Overview of Results: Change in Respondent Sample

- To show how the respondent sample became less representative, we used our administrative and sample frame data to compare statistics between:
 1. All Occupied Housing Units-Including Nonrespondents. This is our measure of the benchmark
 2. Just Respondents
- Bigger gap between #1 and #2 (above)→ Bigger nonresponse bias, before any weighting adjustments

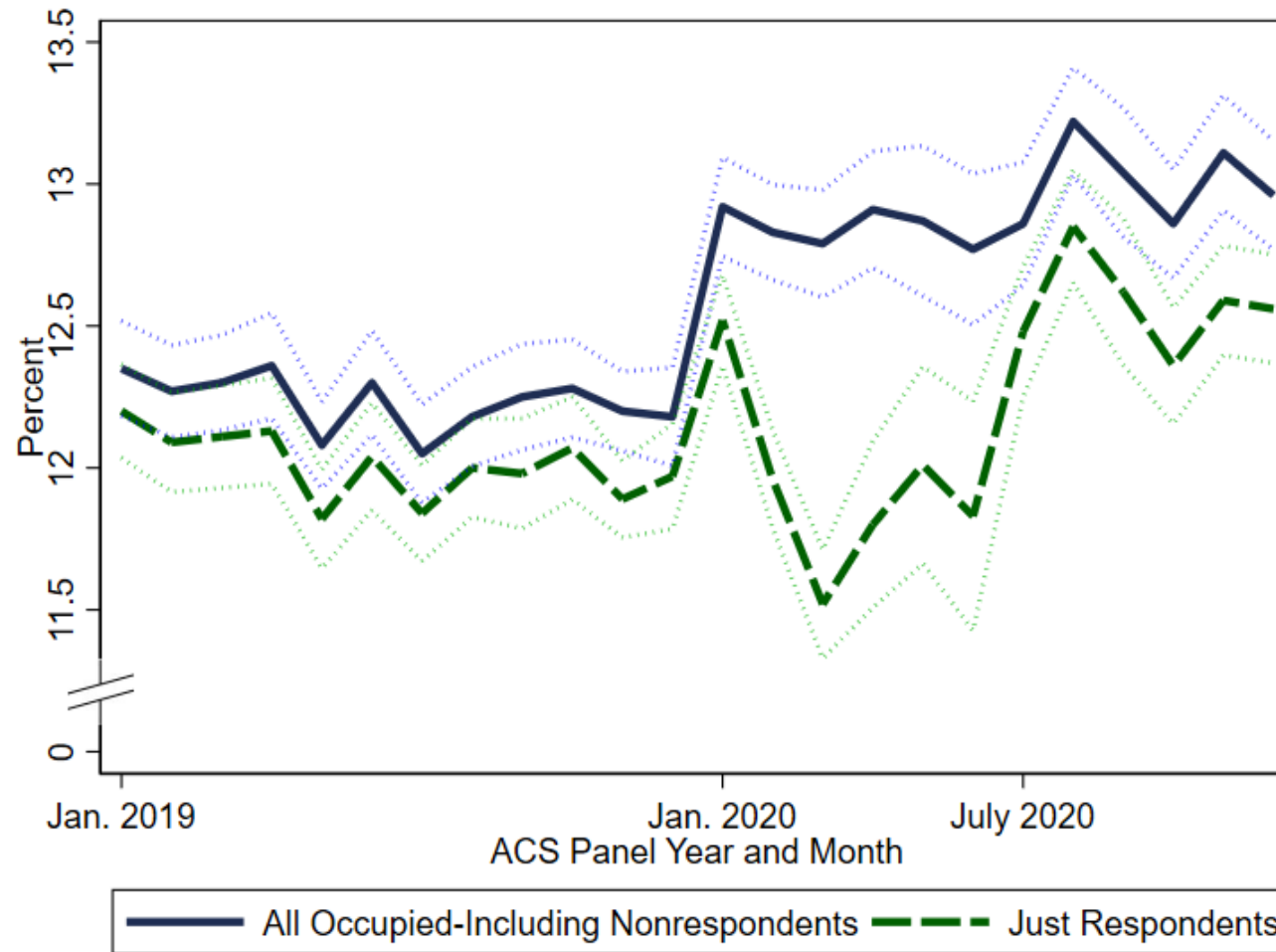
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Percent of Households in Single-Family Homes



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Percent of Households with W-2 Earnings Between \$1 and \$25,000



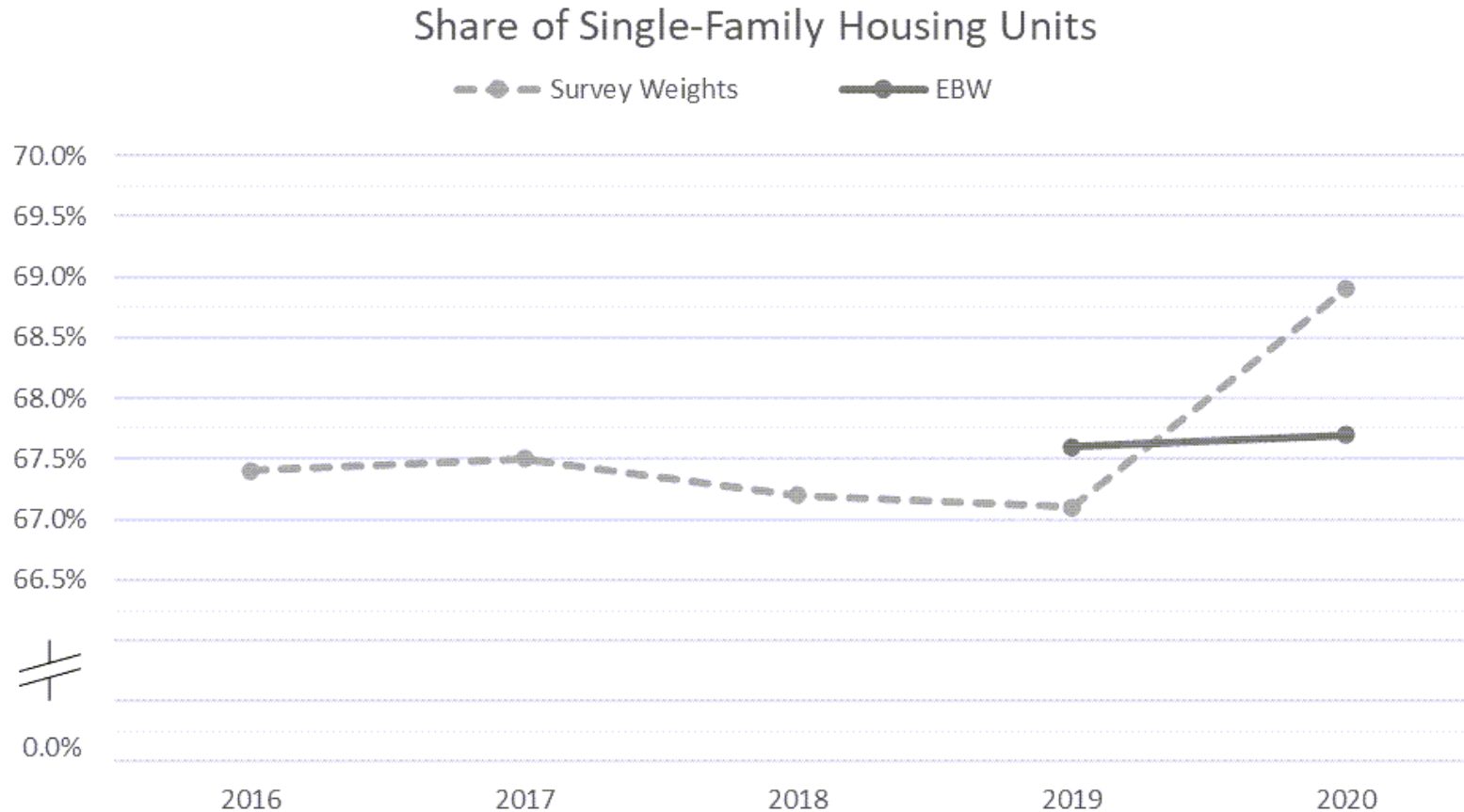
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Overview of Results: Weighting Corrections

- Following graphs show how the experimental weights changed ACS estimates compared to prior production method
- Apply experimental weights methods to 2019 ACS to separate out:
 1. The effect of apply a new weighting method from
 2. Changes in economic and demographic characteristics of individuals between 2019 and 2020

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Share of Single-Family (Attached or Detached) Units (2016-2020)

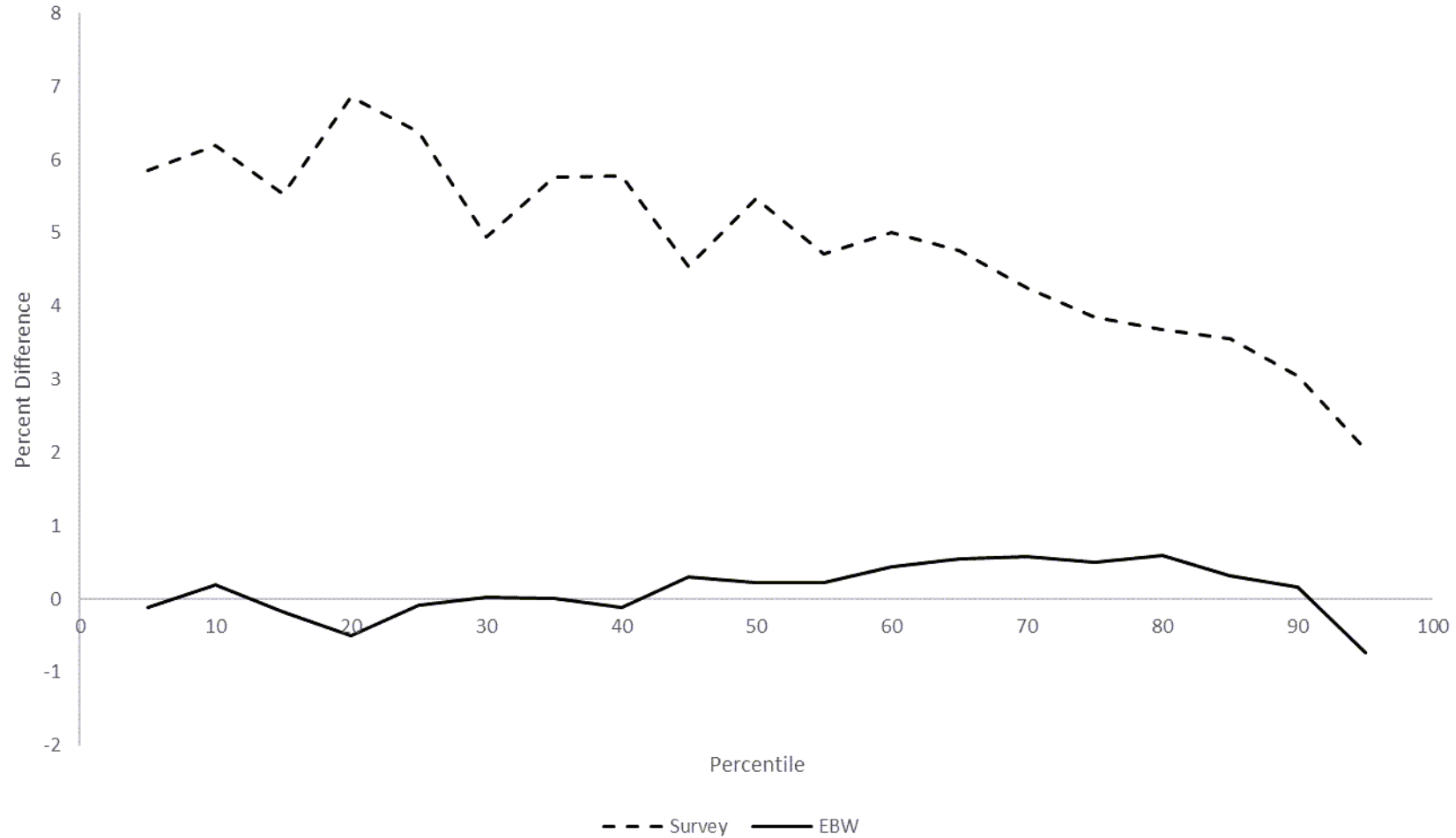


Source: U.S. Census Bureau, 2016 through 2020 American Community Survey 1-year data.

Note: Entropy balance weights (EBW) were only produced for 2019 and 2020.

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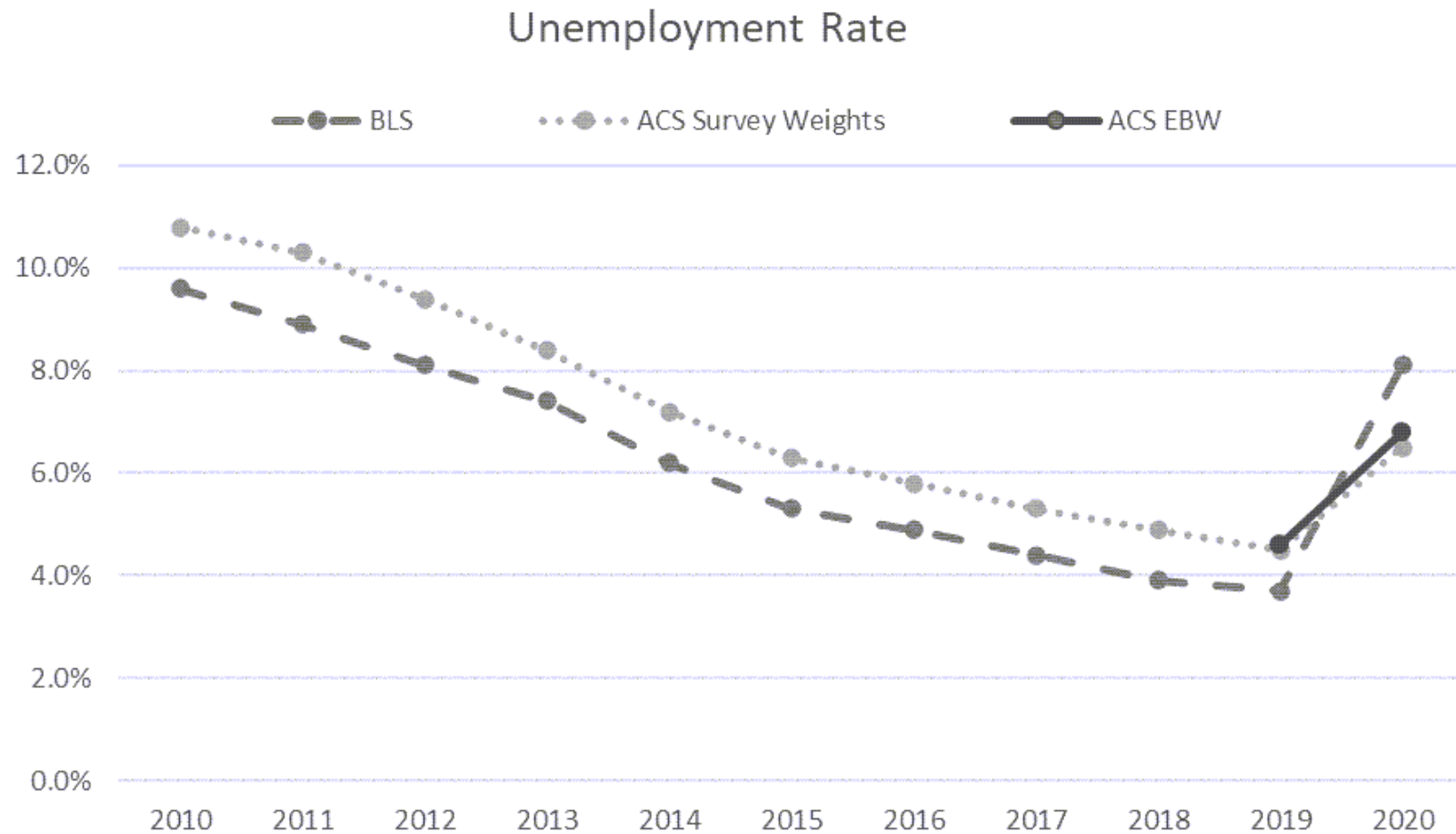
Year-to-Year Change in Real Household Income Across the Distribution: 2019-2020



Source: U.S. Census Bureau, 2019 and 2020 American Community Survey 1-Year data.

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Unemployment Rate from 2010 to 2020





Questions?

Audio Conference Access Information

You must call by phone to ask questions

Toll-free number: 1-888-324-0283

Participant passcode: 9479768

Dial *1 for the operator

- Recording of today's webinar will be available in **press kit** and posted on Census Academy at: [census.gov/data/academy/webinars.html](https://www.census.gov/data/academy/webinars.html)
- Press kit available at: [census.gov/newsroom/press-kits/2021/impact-pandemic-2020-ac-1-year.html](https://www.census.gov/newsroom/press-kits/2021/impact-pandemic-2020-ac-1-year.html)

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Subject Matter Experts

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[2020 American Community Survey 1-Year Experimental Data Release](#)

Additional questions?

Contact PIO

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