

SUPPORTING STATEMENT B
U.S. Department of Commerce
U.S. Census Bureau
Census Household Panel
OMB Control No. 0607-1025

B. Collections of Information Employing Statistical Methods

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.**

The topical sample size will be 12,205 housing units. In Topical 1, the Census Bureau observed a response rate of approximately 60%. Subsequent topicals are expected to have a similar response rate, resulting in approximately 7,300 households responding to the fourth, fifth, and sixth topical surveys.

- 2. Describe the procedures for the collection of information including:**

- **Statistical methodology for stratification and sample selection,**
- **Estimation procedure,**
- **Degree of accuracy needed for the purpose described in the justification,**
- **Unusual problems requiring specialized sampling procedures, and**
- **Any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

The sample design is a stratified systematic sample of all eligible HUs from the Census Bureau's Master Address File (MAF), which covers all 50 states and the District of Columbia. Auxiliary data from the Demographic Frame (DF) and Planning Data Base (PDB) will be linked to the MAF to stratify the housing units into stratum based on demographic variables within the four Census Bureau regions. MAF records not stratified into a stratum based on the DF or PDB will be defined as their own strata. The sample will be distributed proportionately within regions of the country to each stratum based on the number housing units within the stratum. We will conduct a subsampling operation in stratum that, based on results of other demographic surveys, have higher response rates. Thus, the stratum where no subsampling occurs will be oversampled.

Future refreshment samples will be drawn from a frame that uses updated MAF, DF and PDB

information, and those samples may be targeted at the geographic or domain level, to maintain representativeness of the Household Panel Survey, adjust sample sizes based on observed nonresponse, and account for sample units that are rotating out of the panel.

The final Household Panel Survey weights are designed to produce estimates for the total persons aged 18 and older living within HUs (based on the person weight); and occupied household level estimates (based on the household weight). We will create these weights by adjusting the household-level sampling base weights by various factors to account for nonresponse, adults per household, and coverage. The final Household Panel Survey weights are created by applying a Housing Unit adjustment, which converts the person level weight back into a housing unit (HU) weight by dividing the person level weight by the number of persons age 18 and older that were reported to live within the household, and the Occupied HU ratio adjustment, which ensures that the final Household Panel Survey weights will sum to the American Community Survey (ACS) one-year, state-level estimates of occupied HUs.

- 3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.**

Enrolled panelists will be invited to respond to monthly topical surveys. Invitations will be sent by email, text message (opt-in), and for those panelists with no email or mobile phone contact information, outbound telephone calling. Using a unique login or QR code, panelists can access a topical questionnaire by computer, tablet, or smartphone to complete a topical survey. Phone-only panelists will complete topical surveys via inbound or outbound CATI.

Data collection for each topical survey will take place in a 2-week window. Each topical survey will be approximately 15 minutes long and panelists will receive up to two reminders to complete a topical survey. Panelists who complete a topical survey will be mailed a thank you letter with a \$10 cash incentive about 6 weeks after the topical survey field period closes.

The first topical survey fielded was the Census Household Panel is the Census Barriers, Attitudes and Motivators survey that will inform the decennial advertising and communications program for the 2030 Census. The second and third topical surveys use an abridged version of the Household Pulse Survey. Topical surveys 4 and 5 include content from Pew's National Public Opinion Reference Survey and the National Center for Health Statistics' Research and Development Survey. Additionally, in Topical 4, we ask some questions about improving the CHP respondent experience. In Topical survey 6, we are incorporating the Survey of Income and Program Participation (SIPP) roster and demographic questions into the Census Household Panel to test their usability in the field. Future topical surveys can be sponsored by other Census Bureau survey programs or by other Federal statistical agencies. Each topical survey will offer panelists an opportunity to update contact information and verify their address for incentive mailing. Content governance will initially follow policies developed for the Household Pulse Survey and be amended as necessary.

Keeping panelists engaged will prevent attrition and maintain the representativeness of the panel. We will continue sending panelists one topical survey per month to keep them engaged. Panelists will not be eligible for more than one survey per month to keep burden low and reduce panel conditioning. Topical surveys may target specific groups of panelists depending on the topical survey sponsor. If panelists are not sampled for a particular month's topical survey, they will be asked to respond to a pre-designed panel maintenance questionnaire that will also serve to verify demographic information and record any changes.

In the future, we plan to use the Audience Management functionality in Qualtrics to create a web page where panelists can view their upcoming surveys, check for mailing of incentives for past questionnaires, update their contact information, access technical assistance, and opt-out of panel participation. At least once a year, panelists will be asked to verify or update information from their original Baseline Questionnaire to ensure information about the panelist and their household is current.

Panel Replacement and Replenishment

Census Household Panel members will be asked to complete approximately one questionnaire per month and will receive an incentive for each questionnaire. Panelists will be enrolled for three years and drop off after that period. In addition to this three-year limit, we expect attrition due to inactivity and requests to disenroll. Attrition can bias the panel estimates, making the development of a panel member replenishment plan of vital importance (Herzing & Blom, 2019; Lugtig et al., 2014; Schifeling et al., 2015; Toepoela & Schonlau, 2017).

Panelist requests to disenroll from the panel will be identified and processed according to forthcoming protocols. Periodic nonresponse or refusal to the monthly requests for otherwise active panelists is expected. The definition of an inactive panelist is as follows:

No response or active refusal to:

- a survey request for two consecutive months; or
- more than 50% of survey requests within a 12-month period.

A particular questionnaire may be classified as “no response” due to unit nonresponse (i.e., no questionnaire initiation), item nonresponse resulting in an interview that is not usable for analyses (e.g., item nonresponse to questions deemed critical for analysis, high item nonresponse alone or after data review), and poor-quality data resulting in an unusable interview. Inactive panelists will remain members of the Census Household Panel if reengagement is desired by Census staff, especially for rare or historically undercounted populations. Definition of poor-quality responses is forthcoming.

We will assess on an ongoing basis (and no less than quarterly) the generalizability of the panel estimates to represent the target population. Evaluative methods will include precision within important demographic and geographic characteristics, R-indicators, propensity scores, and

nonresponse bias analyses (Bianchi & Biffignandi, 2017; Eckman et al., 2021; Groves & Peytcheva, 2008; Peytcheva & Groves, 2009; Rosen et al., 2014).

Based on results from multiple analyses, we will identify any subgroups requiring replenishment. New members will be sampled and recruited using the same protocol as for initial enrollment.

Because incentives remain one of the most effective ways to encourage survey participation. The current incentive design includes the following:

- Initial Invitation: \$5 visible prepaid incentive with the initial invitation to complete the screener.
- Baseline Questionnaire: \$20 baseline contingent incentive after initial recruitment field period.
- Topical Surveys: \$10 for each topical survey (~15-minute average; once per month).

Respondents will be mailed cash incentives for survey completion. NPC will coordinate incentive distribution. The incentive structure could be amended to facilitate ongoing engagement of panelists, particularly for groups of panelists that are rare or historically undercounted.

4. **Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.**

The CHP is a probability-based online longitudinal panel survey. Once initial (or refreshment) recruitment and the baseline interviews are completed, the sample that responded to the baseline recruitments are contacted approximately monthly with invitations to participate in Census Bureau, and eventually sponsored, topical interviews.

The initial contacts for baseline recruitment are made via USPS mailed invitations, with support for inbound and limited outbound telephone assistance. The mailed invitations include log-in information and QR code quick links for respondents to access the online Qualtrics-based survey instrument. Once initial recruitment is completed, respondents are contacted via email and SMS text message to re-engage with each month's topical survey instrument. For each topical collection, the default contact strategy is:

Day 1- Invitation - Initial email and text distributed

Day 3- 1st reminder email

Day 7- 1st reminder text

Day 11- 2nd reminder email and 2nd reminder text

Day 15 - Final email and text message

While this strategy's initial results are promising, with over 50% of topical invitees responding to the first month's topical, we believe that a small investment in USPS mailed contacts could be an important boost to response and representativeness. To this end, we are proposing an experiment in the 4th topical data collection as follows:

Day 1- Invitation - Initial email and text distributed

+ Experimental pressure-sealed postcard

Day 3- 1st reminder email

Day 7- 1st reminder text

Day 11- 2nd reminder email and 2nd reminder text

Day 15 - Final email and text message

Sample size	Count	Percent of Sample	Expected Response	Expected Respondents
Total	12,210	100	$\geq 66\%$ ¹	~8,034
Treatment	9,768	80	65%-70% ²	~6,593
Control	2,442	20	59%	1,441

¹ Approximation of expected response based on Topical 1 response rate in the control group and an estimate of response in the treatment group taken at a midpoint of this range (67.5%).

² The treatment group is expected to both boost overall response and differentially improve representation of under-represented groups where electronic contact methods may be less salient, or where the validity of the electronic contact is significantly reinforced by the presence of a mailed invitation.

Future topical mail contact experiments may include mid-period mailings or other targeted messaging combinations. However, for the 4th topical survey, the addition of a pressure-sealed postcard mailing will be experimentally added to only the initial contact period, timed to arrive closely with the initial email invitation.

We plan to continue to experiment with ways to maximize recruitment and retention for the Census Household Panel. Each experiment will be submitted to OMB as it is planned.

- 5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.**

Statistical Design:

Anthony Tersine
Demographic Statistical Methods Division
Demographic Programs Directorate
Anthony.g.tersine@census.gov

Data Collection/Survey Design:

Jason Fields
Social Economic and Housing Statistics Division
Demographic Programs Directorate
jason.m.fields@census.gov

Jennifer Hunter Childs
Associate Director for Demographic Programs
jennifer.hunter.childs@census.gov

Statistical Analysis:

David Waddington
Social Economic and Housing Statistics Division
Demographic Programs Directorate
david.g.waddington@census.gov