2025 Census Household Survey Submitted Under Generic Clearance for Census Bureau Field Tests and Evaluations

**Request**: 1The Census Bureau plans to conduct additional research under the generic clearance for Field Tests (OMB #0607-0971). We will be administering an online survey called the 2025 Census Household Survey in four panels (three treatment groups and one control group). The survey purpose is to start answering some research questions about the use of login authentication processes (i.e., process of verifying the identities of external respondents logging in to Census systems to complete surveys) posed during the transition to enterprise systems and to the Data Ingest and Collection for the Enterprise (DICE) Program to modernize data collection systems at the Census Bureau.

**Purpose**: The 2025 Census Household Survey will use a nationally representative sample to assess the impact of the legacy authentication process (via Centurion 1.0 used to respond to the American Community Survey) alongside potential alternative authentication processes, including the solution recently implemented by the DICE Authentication system, to ascertain differences in respondent burden, perception of security, and response rate.

The information collected in this survey will be used within the Census Bureau and incorporated for the American Community Survey and other demographic surveys. The authentication methods tested here would be used to protect respondent provided data, either on longitudinal surveys or in situations where the respondent may need to save their progress and re-enter a long survey. The results may be reported at conferences, in Census Bureau working papers, or in peer-reviewed journal articles.

Data from this project will also be used by the Continuous Count Study (CCS). The CCS is one of the Census Bureau's Transformation and Modernization priorities identified in the fall of 2022. The CCS is researching how national and lower-level geographic population and demographic characteristic estimates using administrative data can be generated throughout the decade. The project is developing multiple sets of estimates at lower levels of geography than are available in the Census Bureau's official annual population estimates. These multiple sets of estimates allow the availability of administrative data to be quantified based on different assumptions. This ongoing study will also help quantify the utility, availability, and quality of administrative data for the 2030 Census. In the context of this experiment, the data collection instrument will include a combined race and ethnicity question that includes a Hispanic/Latino and a Middle Eastern and North African (MENA) response option. The Continuous Count Study is researching how to produce these racial and ethnicity estimates under the updated OMB Statistical Policy Directive Number 15: Standards for Maintaining, Collecting and Presenting Federal Data on Race and Ethnicity. This data can be used to start building statistical models that can relate these new minimum reporting categories to race and Hispanic origin responses from the 2020 Census, American Community Survey, and administrative data sources from other statistical agencies. The Continuous Count Study and characteristic imputation research for the

2030 Census can benefit from this collection.

**Population of Interest**: Results will inform enterprise planning for authentication methods for long and complex surveys as well as for the continuous count study. We are interested in data representing all mailable housing units in the United States. We are also interested in data for specific subpopulations, such as housing units containing historically undercounted populations, including Hispanic/Latino and Middle Eastern or North African people, as measured by the newly revised OMB race and ethnicity standards that will be implemented across the Census Bureau.

The 2025 Census Household Survey will be available in English and Spanish.

**Timeline**: The internet instrument will be available to collect responses for 4 weeks starting from the day of the first mailing scheduled on February 3, 2025 through the end of the survey period scheduled as March 7, 2025.

**Experimental Panel Design:** The 2025 Census Household Survey is an experimental study of login authentication methods. The study will include three treatment groups and one control group.

Sampled households will receive four mailings from the Census Bureau encouraging them to participate in the study. A unique URL will be provided in the mailing along with an Authentication Code (Auth Code). This code is a 12-digit number uniquely assigned to the sample address. The study explores different methods for authentication.

See Table 1 for a summary of the treatments in the 2025 Census Household Survey. Once logged in, study participants will complete a household census survey based on the 2024 Special Census instrument.

Panel Number	Panel Description	Mailing 1 (2/3/25)	Mailing 2 (2/10/25)	Mailing 3 (2/18/25)	Mailing 4 (2/24/25)
1	Centurion 1.0 Method: Auth Code + PIN*+ Security Questions (optional)	Initial letter with URL & Phone #1	Reminder letter 1 with URL & Phone #1	Reminder Postcard 1 with URL & Phone #1	Reminder Letter 2 with URL & Phone #1
2	Email Address or Phone Number + Verification	Initial letter with URL & Phone #2	Reminder letter 1 with URL & Phone #2	Reminder Postcard 1 with URL & Phone #2	Reminder Letter 2 with URL & Phone #2

## Table 1. Panels by Treatments for the 2025 Census Household Survey

	Code** + Auth Code				
3	Social Media Login + Verification Code** + Auth Code	Initial letter with URL & Phone #3	Reminder letter 1 with URL & Phone #3	Reminder Postcard 1 with URL & Phone #3	Reminder Letter 2 with URL & Phone #3
4	Auth Code + Email Address or Phone Number + Verification Code	Initial letter with URL & Phone #4	Reminder letter 1 with URL & Phone #4	Reminder Postcard 1 with URL & Phone #4	Reminder Letter 2 with URL & Phone #4

\* A PIN is a 4-digit numeric code assigned by the Census Bureau to the user. The user would note the PIN and use it, if needed, to re-enter the survey at a later time.

\*\* After a user enters an email address or phone number in login, an 8-digit numeric verification code is sent to them. They enter this verification code as part of the login process. For social media logins, the use of the verification code is dependent on the user's account preferences.

This experimental design allows the Census Bureau to study several things:

- 1. Comparing the effects of login authentication processes on respondent burden, perception of security, and response rates. Comparisons between Panel 1, the previous method of internet self-response authentication originating from Centurion 1.0, to the experimental panels, two- or three-step authentication methods, will be conducted.
- 2. Comparing respondent selection and use of phone number (SMS) and email address for authentication and re-entry.
- 3. Comparing the use of various OpenID Connect (OIDC) providers (Microsoft, Google, Apple and LinkedIn) used for authentication in the social media authentication condition.

**Sample**: We will select a sample of 100,000 stateside mailable housing unit addresses (MAFIDs). The sample size (n = 25,000 per panel) has been determined based on the following elements of experimental design: alpha level ( $\alpha$  = 0.1), beta level ( $\beta$  = 0.2; P = 0.8), design effect, minimal detectable difference, and the metric of interest (self-response). The minimum detectable difference in response rate for our four between-group design with an expected response rate of 40% (based on the current response rate of the Special Census) is 0.77%. At the conclusion of this experiment, we will compare the authentication rates and response rates for the control group versus that of all treatment groups (overall and by demographic groups), identifying the authentication method with the highest relative authentication and response rates. If one of the experimental treatments has a response rate more than 5% higher than the control group, we will conduct a cost-benefit analysis to mitigate impacts on response rate, such as additional mailings, phone strategies, and personal visits.

MAFIDs will be selected for the sample using the January 2024 ACS MAF, which met the criteria for the ACS address filter flag and were not group quarters. The FY2023 IRS frame will then be used to match the resulting addresses for stratification purposes to increase hard-to-count racial and ethnic subpopulations as well as Hispanic/Latino and MENA individuals (as relates to the new OMB race and ethnicity standards). More specifically, MAFIDs can be classified based on the following hierarchal assignment: (1) If at least one reported MENA person, (2) If at least one reported Native Hawaiian and Pacific Islander (NHPI) person, (3) If at least one reported American Indian and Alaska Native (AIAN) person, (4) If at least one reported Asian person, (5) If at least one reported Some Other Race person, (6) If at least one reported Black or African American person, (7) If at least one reported Hispanic or Latino person, (8) If at least one White person, and (9) No 2020 census characteristics could be assigned. Stratum A would consist of categories 1 to 8, implicitly sorting by MAFID category to improve representation of smaller racial groups. This stratum could be oversampled, as the presence of IRS data indicates signs of occupancy based on filings as of February 2024. Stratum B would include category 9 and could use 2022 tract-level planning database information to implicitly sort the remaining MAFIDs. Finally, 9 counties which will be fielded for the Special Census in IA, IL and TN will be excluded by MAFID from the sample for the purposes of this survey.

Addresses will be sorted by geographic identifiers and other demographic and operational data flags. A systematic random sample will be taken, and each housing unit selected will be assigned a random number. The sampling procedure will first select populations that are rarer than others to ensure sufficient representation of the populations of interest. Housing units will be sorted by random number and sequentially assigned to one of the treatment groups.

**Recruitment**: We plan to conduct this test from February 3, 2025 until March 7, 2025 with a maximum of four planned mailings to each housing unit. Each treatment group will have a unique survey URL and a unique survey assistance telephone phone number provided, but otherwise, will have identical mailings. All units will receive all four mailings. The initial mailing will inform respondents of the importance of the survey and will provide login information. The second and fourth mailing will be letters and the third mailing will be a postcard, providing respondents with a survey due date (February 24, 2025). All mailing materials and the response instrument will be bilingual in English and Spanish. Letters and postcards that are undeliverable as addressed (UAA) will be tracked as a means to ascertain causes of nonresponse. See Appendix 2 through 5 for all contact materials. Those in sample will also be able to call telephone questionnaire assistance phone lines specific to the experimental panel to reach Census Bureau representatives who may answer questions using FAQs. The Census Bureau representatives will record call reasons which will be used to track levels of response burden for all the authentication methods.

**Survey Administration:** All sampled housing units will be mailed invitations to respond online. The online questionnaire will be administered using the enterprise system Centurion 2.0, which has Census Authority to operate to collect Title 13 data. Respondents will receive the link to the

online survey on all mailing materials along with a unique authentication code to securely login to the survey. No paper questionnaire will be provided to respondents through mailings or through paper fulfillment. A phone number will be provided in the mailed invitations to respondents if they have questions via Telephone Questionnaire Assistance (TQA). TQA will be supported Monday thru Friday from 9am to 9pm EST.

**Questionnaire**: The online instrument specification is attached (see Attachment 1 with branching identified in the comments for the online questionnaire). This questionnaire is a modified version of the 2024 Special Census questionnaire where the race question has been updated to meet the revised OMB race and ethnicity standards (SPD 15). Additionally, questions about income and educational attainment have been added to increase the complexity of the data collection instrument and for use in the analysis to assess subpopulation response. The online instrument also contains two additional questions to assess respondent perceptions about the authentication process in terms of their comfort with sharing personal information during login (e.g., email address and phone number) and ease of use.

**Informed Consent**: The Census Bureau will conduct the 2025 Census Household Survey under the authority of Title 13 United States Code Section 193. All respondents who participate in the 2025 Census Household Survey will be informed that the information they provide is confidential under Section 9 of that law. All identifiable information collected will be held in strict confidence according to the provisions of Title 13 United States Code, Section 9.

Incentive: There is no incentive in this survey.

**Respondent Burden:** We plan on contacting a sample of 100,000 addresses with up to 4 mail contacts each (three letters and one postcard). We estimate users will spend 10 minutes on average completing the survey and an average 2 minutes reading each mail invitation and postcard. The burden estimates in the table below are an upper bound and based on an estimated 40 percent response rate. The total estimated respondent burden for this study is approximately 20,000 hours, assuming everyone reads the contact materials and answers the survey.

	Expected Number of Respondents	Max Number of Occurrence	Average Time for each Occurrence	Estimated Burden
Reading mail invitations	100,000	4	2 minutes	13,333 hours
Completing survey	40,000	1	10 minutes	6,667 hours
Total Estimate				20,000 hours

#### **Table 2. Total Estimated Burden**

#### The following documents are included as attachments:

Attachment 1: 2025 Census Household Survey Online Questionnaire Attachment 2: Invitation letter with URLs (English and Spanish) Attachment 3: First Reminder Letter with URLs (English and Spanish) Attachment 4: First Reminder Postcard with URLs (Bilingual: English and Spanish) Attachment 5: Second Reminder Letter with URLs (English and Spanish)

The contact person for questions regarding data collection and the design of this research is listed below:

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