

**Census 2010 Nonresponse Followup (NRFU) Experiment
Individual Request for Clearance
April 6, 2009**

The Census Bureau plans to conduct the Census 2010 Nonresponse Followup (NRFU) Contact Strategy Experiment under the 2010 Census Program for Evaluations and Experiments (CPEX) generic clearance (OMB approval number 0607-XXXX). The primary objective of this experiment is to understand the effects of changing the number of NRFU contacts in a census environment. This study has the potential to provide large cost savings in future censuses through a possible reduction in NRFU contacts. The goal is to determine whether the Census Bureau can maintain data quality and coverage while reducing the number of NRFU contacts.

For several decades, the decennial census enumerator form has provided space for up to six contact attempts with households in the record of contact section of the census questionnaire. After Census 2000, the Office of Management and Budget (OMB) was interested in testing whether the Census Bureau could feasibly use fewer than six contact attempts to collect data during NRFU. It is important to conduct this long-awaited study in 2010 to understand the effects of reducing the number of NRFU contacts in a census environment.

Updates/Clarifications to NRFU Description appearing in 2010 Census Program for Evaluations and Experiments (CPEX) generic clearance (OMB approval number 0607-XXXX)

Since the 2010 CPEX generic OMB clearance, there have been a few updates to the design of the Census 2010 NRFU Contact Strategy Experiment. These updates are provided in the following sections.

- **Updates to the experimental treatments**

There have been no changes to the experimental treatments since OMB generic clearance. The following table provides a summary of the treatments. The control treatment is the production 2010 Census enumerator form (which consists of all standard 2010 NRFU questionnaires), in which the record of contact section provides for a maximum of 6 contact attempts to each housing unit. The experimental forms reduce this to allow up to 5 or 4 contact attempts, respectively.

Panel	Treatments	Form Type
1	<u>Control</u> : 2010 Census enumerator form (which allows 6 contacts)	D-1(E)
2	<u>Number of Contacts 1</u> : 2010 Census enumerator form revised to allow only 5 contacts	D-1(E) X1
3	<u>Number of Contacts 2</u> : 2010 Census enumerator form revised to allow only 4 contacts	D-1(E) X2

- **Updates to sample size**

Previously, the Census Bureau was considering several different designs for this experiment because of numerous and complex logistical challenges associated with implementing this experiment in a decennial environment. An optimal design has been chosen. The estimated sample size is 1.2 million experimental forms, split evenly between the two experimental treatments (600,000 forms with a maximum of 5 contact attempts, and 600,000 forms with a maximum of 6 contact attempts).

- **Updates to universe/respondent selection**

The 2010 NRFU Contact Strategy Experiment will use a case-level sample design in which a random sample of the NRFU experimental forms will be randomly inserted in with the standard NRFU production forms. In order to implement the experiment, a sample of the experimental enumerator forms will be randomly inserted into the boxes of blank questionnaires in all 494 Local Census Offices (LCOs), prior to assignment preparation activities. The insertion will be random, with no oversampling to any specific geographic areas or other known characteristics.

- **Updates to overall study design/methodology**

We estimate that this design would result in a sample size of approximately 1.2 million cases, which will be split evenly between the two experimental treatments (600,000 4-contact cases and 600,000 5-contact cases). This sample size will be large enough to ensure that enumerators, on average, will receive approximately one experimental questionnaire in each assignment area assigned to them.

The enumerator training will include reference to the experimental forms and will instruct the enumerators to use the questionnaire to determine the correct maximum number of visits for each particular housing unit. That is, if the questionnaire for a case contains six contact fields, they should make six attempts before taking a proxy response; if the questionnaire contains five contact fields, they should make five attempts; if the questionnaire contains four contact fields, they should make four attempts.

In order to analyze the results to determine the effectiveness of fewer enumerator contact attempts, we will produce a variety of statistical analyses. These include cross-tabulations of the following measures by the panel type (i.e., 4, 5, or 6 maximum number of contact attempts).

- actual number of contact attempts
- contact outcome (i.e., conducted interview, refusal, etc.)
- contact mode
- respondent type (i.e., household member or proxy) at last contact
- item nonresponse rates / form completeness at last contact
- cumulative total of conducted interviews at each contact number

- distribution of outcomes at each contact

The analysis may also include regression modeling to evaluate the effects of use fewer maximum contact attempts, while controlling for a variety of factors.

This experiment will also include a cost-benefit component to judge the tradeoffs between the likelihood of more proxy responses and lower quality data with the decrease in costs.

No updates for any of the following:

- Procedures for collecting information
- Methods to Maximize Response
- Tests of Procedures or Measures
- Contact for statistical aspects of data collection

Estimate of Burden Hours

Because experimental forms are official census responses and substitute for the standard census form that would otherwise be sent to the households involved in the experiments, most respondent burden hour estimates are already accounted for in the 2010 Census. The burden hour estimate for the Census 2010 NRFU Experiment is zero because its burden has already been accounted for by the 2010 Census (OMB number 0607-0919).

Experiment/Evaluation	Total # of Respondents	Estimated Response Time	Estimated Burden Hours
NRFU	1,200,000	10 minutes	0 (200,000 already accounted for)

Project Schedule

Same as production 2010 Census schedule.

Costs To Federal Government

The preliminary estimated cost to the Federal Government for NRFU is \$1,000,000. The Census Bureau is the only agency bearing this cost.

Contact(s) for Statistical Aspects and Data Collection

For questions on statistical methods or the data collection described above, please contact Jason Machowski of the Decennial Management Division at the Census Bureau (Phone: 301-763-4173 or email jason.d.machowski@census.gov, or Erin Love of the Decennial

Management Division at the Census Bureau (Phone: 301-763-2034 or email erin.s.love@census.gov).

List of Attachments

Attachment Number	Form Number	Description
Attachment A	D-1(E)	Standard 2010 Census enumerator form (which allows 6 contacts)
Attachment B	D-1(E) X1	2010 Census enumerator form revised to allow only 5 contacts
Attachment C	D-1(E) X2	2010 Census enumerator form revised to allow only 4 contacts