

**2010 Census Alternative Questionnaire Experiment
Individual Request for Clearance
April 17, 2009**

The U.S. Census Bureau plans to conduct the 2010 Census Alternative Questionnaire Experiment (AQE) under the 2010 Census Program for Evaluations and Experiments (CPEX) generic clearance (OMB approval number 0607-XXXX). The overall goal of the study is to continue efforts to improve a user-friendly mailout questionnaire that can be accurately completed by respondents. In general, the Census Bureau plans to test modified race and Hispanic origin examples, a Hispanic origin question that accepts multiple responses, race questions that clarify OMB categories, and various combined race and Hispanic origin question strategies. Specifically, the Census Bureau would like to determine ways to reduce nonresponse to the race and Hispanic Origin questions, as well as increase reporting of the five race categories defined by the OMB. A secondary goal is to improve the reporting of detailed Asian groups, Pacific Islander groups, American Indian and Alaskan Native tribes, and specific Hispanic origins in the race and Hispanic origin questions.

Although race and Hispanic origin item treatments are the main focus of the 2010 AQE, this experiment contains treatment panels on two other topics. One of the panels contains treatment questionnaires with questions on residence status that are in addition to coverage questions on the standard 2010 Census questionnaire. Specifically, respondents are asked to provide address information for “any residence elsewhere” in addition to whether they stay there most of the time. The objective of this panel is to determine which components of the additional data collected, alone or in combination with others, are most beneficial to identifying true residence status. After gauging the amount of additional data provided by respondents, the Census Bureau will determine if the implementation of business rules using these additional data can resolve residence status questions that the Census Bureau would otherwise attempt to resolve by telephone contact in the Coverage Followup operation. The other treatment panel will administer a questionnaire that replicates one from Census 2000. The Census Bureau will conduct a questionnaire content comparison between this treatment panel (Census 2000) and a control panel (2010 Census) to assess combined effects on the data from questionnaire changes made since the last census.

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

The updates for the AQE since the 2010 CPEX generic OMB package was submitted are described below.

Universe and Respondent Selection

The AQE experimental forms will be mailed to a national sample of housing units with a targeted sample of 30,000 housing units per panel for the 15 race/Hispanic origin panels

and two control panels (one of the control panels excludes the overcount item for comparability to race/Hispanic origin treatment panels), and the coverage panel. The Census 2000 comparison panel has a targeted sample of 20,000 housing units. The targeted sample sizes are final but may differ from the actual sample due to the incremental sampling scheme necessitated by the iterative address frame development. This is actually an operational issue related to the sample selection for the mailout experiments. In past censuses, we selected our experiment samples from a national sampling frame following the major address list development operations. Traditionally, we fix our sample sizes. Then later, during sample selection, the programmers adjust the sampling interval based on national stratum universe sizes. For the 2010 processing system development, schedule and time limitations necessitate sampling each Local Census Office (LCO) before moving onto the next, rather than selecting our sample once at the national level. This means that, since we will not have universe totals by stratum during the LCO sample selection, we have to fix our sampling intervals and let sample sizes vary. Thus, for the AQE 2000-style experiments, the actual sample sizes will likely be roughly between 15,000 and 26,000 housing units per panel. For the AQE race and ethnicity and coverage overcount panels, actual sample sizes will likely be between 23,000 and 40,000 (compared to a target of 30,000 housing units).

In order to support the objectives of the AQE, we will use a complex sample design that is intended to reach the appropriate populations of interest for the proposed treatments, while still providing accurate national estimates. The design concentrates on achieving a significant mailout to minority demographic groups such as Hispanic or Latino people, Asian people, and Black people (population group terminology is based on Census 2000 response category names). The universe consists of census tracts likely to contain relatively high proportions of these subgroups. The final sample of housing units will be selected from within these areas.

In order to optimize the sampling process, we use a hierarchical tract selection process. The hierarchical stratification approach is based purely on the relative size of the population subgroup. That is, we give the smallest subpopulation priority to ensure that an adequate number of tracts are included in the corresponding stratum. The hierarchy is detailed as follows:

- 1) Tracts with 15 percent or more Asian, Native Hawaiian, or Other Pacific Islander (NHOPI) people (n=9,000 per panel)
- 2) Tracts with 25 percent or more Black people (n=9,000 per panel)
- 3) Tracts with 40 percent or more Hispanic people (n=9,000 per panel)
- 4) All other tracts (n=3,000 per panel)

The proposed stratification yields significant differences across a number of different characteristics including mail response rates and the race and Hispanic origin distributions. The majority of housing units would be in the “All other” stratum (estimated 89.1 million housing units), with the smallest number in the Asian/NHOPI stratum (estimated 8.3 million).

The stratification for the race and Hispanic origin panels includes four strata. The sample allocation involves oversampling for areas with a relatively high proportion of Hispanic persons, as well as Black and Asian (including Native Hawaiian and Pacific Islander) persons in order to improve our estimation for key survey measures and produce subgroup estimates.

For the coverage panel, the universe is stratified into areas with a dense active-duty military population; areas with a large number of older people (i.e., possible nursing home residents); urban areas with higher poverty levels (i.e., potentially reaching respondents who were recently incarcerated or respondents who lived with someone recently incarcerated); areas with potentially more college-age students; areas with potentially higher numbers of seasonal residences; and areas more likely to have child custody coverage issues. Tracts not identified by one or more of these conditions are excluded from the sample.

The stratification for the Census 2000 comparison panel involves high, medium, and low mail response strata; this is intended to assess cumulative changes for subgroups.

2010 Alternative Questionnaire Experiment Panel Design

| 2010 Panel | Form Number | Research Question | Treatments ^{1,2} |
|------------|-------------|-------------------|--|
| 1 | D-1 (XA) | CONTROL | <u>Control A</u> : 2010 Census form (with CPEX phone numbers) |
| | D-1 (XB) | | <u>Control B</u> : 2010 Census form, omitting the Overcount question (with CPEX phone numbers) |
| 2 | D-1 (X1) | G1 | <u>Content</u> : 2000-style short form questionnaire replicates 2000 question wording, categories, order, type size, and other essential design features. Incorporates 2010 Census color, logo, envelope and letter. |
| 3 | D-1 (X2) | B2a | <u>Race and Hispanic Origin</u> : Tests a combined race and Hispanic origin question that maintains all original race and Hispanic origin checkboxes and offers examples and write-in lines for every major group. |
| 4 | D-1 (X3) | B2b | <u>Race and Hispanic Origin</u> : Tests a combined race and Hispanic origin question that only offers checkboxes for major groups. This version also offers examples and write-in lines for every major group. |
| 5 | D-1 (X4) | B2c | <u>Race and Hispanic Origin</u> : Tests a two-part combined race and Hispanic origin question. Part A offers checkboxes for all major groups. Part B is a write-in (with examples) for the respondent to provide detailed ethnic group, race group, enrolled tribe or principal tribe. |
| 6 | D-1 (X5) | B2d | <u>Race and Hispanic Origin</u> : Tests a combined race and Hispanic origin question that is the closest possible to the separate question approach on the 2010 form. It maintains all of the same checkboxes, examples and write-in lines as the separate-question approach. |
| 7 | D-1 (X6) | B1b | <u>Race</u> : Tests modified examples for race write-ins (per advisory committee recommendation) |
| 8 | D-1 (X7) | B1c | <u>Hispanic Origin</u> : Tests modified examples for Other Hispanic write-in (per advisory committee recommendation) |
| 9 | D-1 (X8) | B1d | <u>Hispanic Origin</u> : Tests a version of the Hispanic origin question that accepts multiple responses by allowing respondents to mark multiple Hispanic responses. |
| 10 | D-1 (X9) | B1b, B1c, B1d | <u>Race</u> : Tests modified examples for race write-ins (per advisory committee recommendation) <u>Hispanic Origin</u> : Tests modified examples for Other Hispanic write-in (per advisory committee recommendation) |

¹ The G1 panel omits the undercount and overcount questions. All 'B' panels omit the overcount question.

² All forms map to the D-1, MO/MB form.

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|----|-----------|----------|---|
| | | | recommendation) <u>Hispanic Origin</u> : Tests a version of the Hispanic origin question that accepts multiple responses by allowing respondents to mark multiple Hispanic responses. |
| 11 | D-1 (X10) | B1b, B1c | <u>Race</u> : Tests modified examples for race write-ins (per advisory committee recommendation) <u>Hispanic Origin</u> : Tests modified examples for Other Hispanic write-in (per advisory committee recommendation) |
| 12 | D-1 (X11) | B1b, B1d | <u>Race</u> : Tests modified examples for race write-ins (per advisory committee recommendation) <u>Hispanic Origin</u> : Tests a version of the Hispanic origin question that accepts multiple responses by allowing respondents to mark multiple Hispanic responses. |
| 13 | D-1 (X12) | B1c, B1d | <u>Hispanic Origin</u> : Tests modified examples for Other Hispanic write-in (per advisory committee recommendation) <u>Hispanic Origin</u> : Tests a version of the Hispanic origin question that accepts multiple responses by allowing respondents to mark multiple Hispanic responses. |
| 14 | D-1 (X13) | C10 | <u>Overcount</u> : Tests collecting another address for where a person sometimes lives or stays. The additional address is captured for each person if the respondent selects one of the answer categories for the overcount question. (Requires a booklet) |
| 15 | D-1 (X14) | B4a | <u>Race</u> : Tests removing “race” from Other Asian and Other Pacific Islander, alphabetizing Other Asian examples, and including “banners” for Asian and Native Hawaiian and Other Pacific Islander. |
| 16 | D-1 (X15) | B4b | <u>Race</u> : Cleanly tests including ‘banners’ for Asian and Native Hawaiian and Other Pacific Islander. |
| 17 | D-1 (X16) | B4c | <u>Race</u> : Cleanly tests the overall strategy of removing the ‘race’ term in the question by changing the question stem to exclude the term ‘race,’ and removing ‘race’ from Other Asian and Other Pacific Islander instructions. |
| 18 | D-1 (X17) | B4d | <u>Race</u> : Tests removing “race” from the question stem, removing “race” from Other Asian and Other Pacific Islander, alphabetizing Other Asian examples, and including ‘banners’ for Asian and Native Hawaiian and Other Pacific Islander, and deleting Negro from the Black category. |

Procedures for Collecting Information

Note that the detailed motivation, objectives, cognitive/expert testing results, and screen shots for each of the race and Hispanic origin panels were contained within the paper entitled, “2010 Census Alternative Questionnaire Experiment: Race and Hispanic Origin Treatments” sent to OMB on February 19, 2009. The most recent versions of the test questionnaires are included as attachments to this request-for-clearance package.

No updates for the following:

- Methods to Maximize Response
- Tests of Procedures and Measures
- Contact for Statistical Aspects and 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 AQE 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 |
|-----------------------|------------------------|-------------------------|----------------------------------|
| AQE | 560,000 | 10 minutes | 0 (93,333 already accounted for) |

Project Schedule

Data collection for this project is the same as the 2010 Census production schedule.

Costs To Federal Government

The preliminary estimated cost to the Federal Government for the AQE is \$2,500,000. 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 | Type of Form | Form Number | Form Description |
|--------------------------|--|--------------------|---|
| Attachment A | Advance Letter | D-5L | Standard 2010 Advance Letter |
| Attachment B | Advance Letter Envelope | D-5 | Standard 2010 Advance Letter Envelope |
| Attachment C | Initial Questionnaire Outgoing Envelope | D-6A (IN) | Standard 2010 IQ Outgoing Envelope |
| Attachment D | | D-6B (AZ) | Standard 2010 IQ Outgoing Flat Envelope (open window/accommodates booklet) – Coverage |
| Attachment E | Initial Questionnaires | D-1 XA | Control A: Standard 2010 Questionnaire (including help line telephone number only for experimental cases) |
| Attachment F | | D-1 XB | Control B: Standard 2010 Questionnaire without the overcount detection question (including help line telephone number only for experimental cases) |
| Attachment G | | D-1 X1 | 2010 Experimental Questionnaire Version 1 (Census 2000 form) |
| Attachment H | | D-1 X2 | 2010 Experimental Questionnaire Version 2 (Combined Race/Hispanic Origin) |
| Attachment I | | D-1 X3 | 2010 Experimental Questionnaire Version 3 (Combined Race/Hispanic Origin) |
| Attachment J | | D-1 X4 | 2010 Experimental Questionnaire Version 4 (Combined Race/Hispanic Origin) |
| Attachment K | | D-1 X5 | 2010 Experimental Questionnaire Version 5 (Combined Race/Hispanic Origin) |
| Attachment L | | D-1 X6 | 2010 Experimental Questionnaire Version 6 (Race) |
| Attachment M | | D-1 X7 | 2010 Experimental Questionnaire Version 7 (Hispanic Origin) |
| Attachment N | | D-1 X8 | 2010 Experimental Questionnaire Version 8 (Hispanic Origin) |
| Attachment O | | D-1 X9 | 2010 Experimental Questionnaire Version 9 (Race and Hispanic Origin) |
| Attachment P | | D-1 X10 | 2010 Experimental Questionnaire Version 10 (Race and Hispanic Origin) |
| Attachment Q | | D-1 X11 | 2010 Experimental Questionnaire Version 11 (Race and Hispanic Origin) |
| Attachment R | | D-1 X12 | 2010 Experimental Questionnaire Version 12 (Hispanic Origin) |
| Attachment S | | D-1 X13 | 2010 Experimental Questionnaire Version 13 (Coverage) |
| Attachment T | | D-1 X14 | 2010 Experimental Questionnaire Version 14 (Race) |
| Attachment U | | D-1 X15 | 2010 Experimental Questionnaire Version 15 (Race) |

| Attachment Number | Type of Form | Form Number | Form Description |
|--------------------------|---|--------------------|---|
| Attachment V | | D-1 X16 | 2010 Experimental Questionnaire Version 16 (Race) |
| Attachment W | | D-1 X17 | 2010 Experimental Questionnaire Version 17 (Race) |
| Attachment X | Initial Questionnaire Return Envelope | D-8A X1 | 2010 CPEX IQ Return Envelope (no postal tracking) |
| Attachment Y | | D-8B | 2010 Experimental IQ Return Envelope (Coverage – Must accommodate booklet form) |
| Attachment Z | Initial Questionnaire Cover Letter | D-16L | Standard 2010 IQ Cover Letter |
| Attachment AA | | D-16L X1 | 2010 Experimental IQ Cover Letter Version 1 (Coverage – Potential size increase to match booklet) |
| Attachment BB | Reminder Postcard | D-9 | Standard 2010 Reminder Postcard |
| Attachment CC | Replacement Questionnaire Outgoing Envelope | D-6C (IN) | Standard 2010 RQ Outgoing Envelope |
| Attachment DD | | D-6B X13 | RQ Outgoing Flat Envelope (open window/accommodates booklet) – Coverage |
| Attachment E | Replacement Questionnaires | D-1 XA | Control A: Standard 2010 Questionnaire (with CPEX phone numbers) |
| Attachment F | | D-1 XB | Control B: Standard 2010 Questionnaire without the overcount detection question (with CPEX phone numbers) |
| Attachment G | | D-1 X1 | 2010 Experimental Questionnaire Version 1 (Census 2000 form) |
| Attachment H | | D-1 X2 | 2010 Experimental Questionnaire Version 2 (Combined Race/Hispanic Origin) |
| Attachment I | | D-1 X3 | 2010 Experimental Questionnaire Version 3 (Combined Race/Hispanic Origin) |
| Attachment J | | D-1 X4 | 2010 Experimental Questionnaire Version 4 (Combined Race/Hispanic Origin) |
| Attachment K | | D-1 X5 | 2010 Experimental Questionnaire Version 5 (Combined Race/Hispanic Origin) |
| Attachment L | | D-1 X6 | 2010 Experimental Questionnaire Version 6 (Race) |
| Attachment M | | D-1 X7 | 2010 Experimental Questionnaire Version 7 (Hispanic Origin) |
| Attachment N | | D-1 X8 | 2010 Experimental Questionnaire Version 8 (Hispanic Origin) |
| Attachment O | | D-1 X9 | 2010 Experimental Questionnaire Version 9 (Race and Hispanic Origin) |

| Attachment Number | Type of Form | Form Number | Form Description |
|--------------------------|---|--------------------|--|
| Attachment P | | D-1 X10 | 2010 Experimental Questionnaire Version 10 (Race and Hispanic Origin) |
| Attachment Q | | D-1 X11 | 2010 Experimental Questionnaire Version 11 (Race and Hispanic Origin) |
| Attachment R | | D-1 X12 | 2010 Experimental Questionnaire Version 12 (Hispanic Origin) |
| Attachment S | | D-1 X13 | 2010 Experimental Questionnaire Version 13 (Coverage) |
| Attachment T | | D-1 X14 | 2010 Experimental Questionnaire Version 14 (Race) |
| Attachment U | | D-1 X15 | 2010 Experimental Questionnaire Version 15 (Race) |
| Attachment V | | D-1 X16 | 2010 Experimental Questionnaire Version 16 (Race) |
| Attachment W | | D-1 X17 | 2010 Experimental Questionnaire Version 17 (Race) |
| Attachment EE | Replacement Questionnaire Return Envelope | D-8C (IN) | 2010 CPEX RQ Return Envelope (no postal tracking) |
| Attachment Y | | D-8B | 2010 Experimental RQ Return Envelope (Coverage – Must accommodate booklet form) |
| Attachment FF | Replacement Questionnaire Cover Letter | D-17L | Standard 2010 RQ Cover Letter |
| Attachment GG | | D-17L X1 | 2010 Experimental RQ Cover Letter Version 1 (Coverage – Potential size increase to match booklet size) |