Effects of Using a Grid versus a Sequential Form on the ACS Basic Demographic Data

FINAL REPORT

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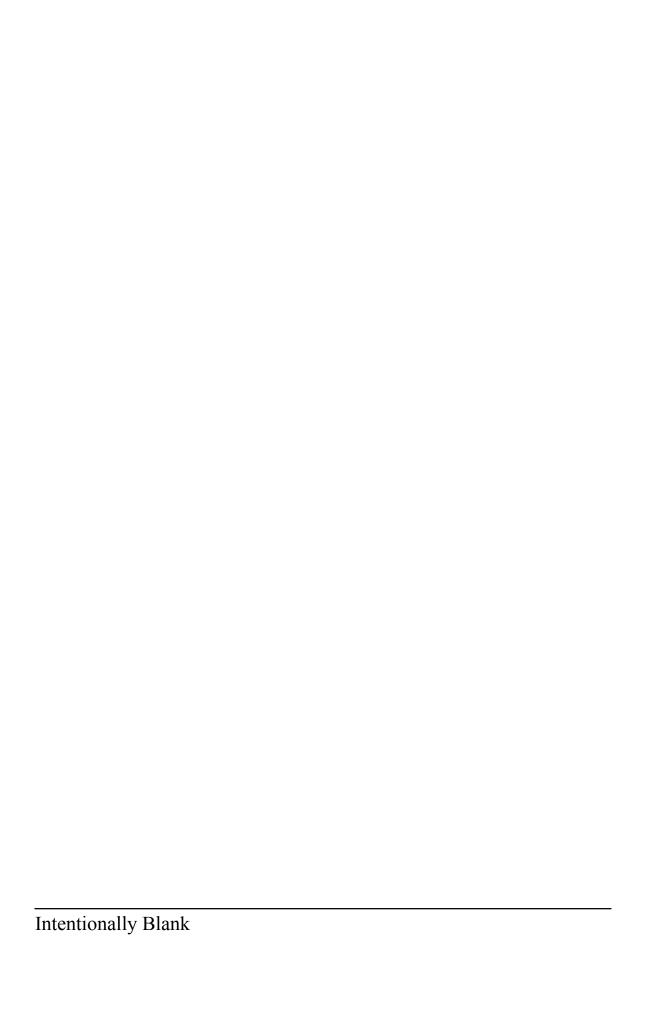


TABLE OF CONTENTS

Εž	KECUTIVE SUMMARY	V
1.	BACKGROUND	1
2.	SELECTION CRITERIA	1
3.	METHODOLOGY	
	3.2 Sample Design	
4.	LIMITATIONS	3
5.	RESEARCH QUESTIONS AND RESULTS 5.1 Do changes in the layout of the basic demographic section of the mail form impact mail response. 5.2 Do changes in the layout of the basic demographic section of the mail form impact item nonresponse.	l 4 1
	5.3 Do changes in the layout of the basic demographic section of the mail form impact the "person incompleteness" rate? 5.4 Do changes in the layout of the basic demographic section of the mail form impact the proportion of respondents who inconsistently report the number of persons? 5.5 Do changes in the layout of the basic demographic section of the mail form impact the proportion of large households who inconsistently report the number of persons? 5.6 Does moving the rostering instructions from the basic demographic section to the front	7
	cover of the mail form impact the proportion of respondents who inconsistently report the number of persons	8 9 id .10
6.	cover of the mail form affect household size? SUMMARY	
Re	eferences	15

Appendix A: Tables	. A-
Appendix B: Grid-Sequential Questionnaire Images	B-1
Appendix C: 2007 ACS Questionnaire Images	C-

LIST OF TABLES

Table 1. Decision Table	2
Table 2. Mail Response Rates, Grid versus Sequential	4
Table 3. Item Nonresponse Rates, Grid versus Sequential	6
Table 4. Person Incompleteness Rate, Grid versus Sequential	7
Table 5. Person Count Discrepancy Rate, Grid versus Sequential	7
Table 6. Person Count Discrepancy Rate (Large Households Only), Grid versus Sequential	8
Table 7. Person Count Discrepancy Rate, Production versus Grid-Sequential	9
Table 8. Rate of Discontinuation to the Detailed Person Section, Grid versus Sequential	9
Table 9. Rate of Discontinuation to the Housing Section, Grid versus Sequential	10
Table 10. Average Household Size, Grid versus Sequential	12
Table 11. Median Household Size, Grid versus Sequential	13
Table 12. Average Household Size, Production versus Grid-Sequential	13
Table 13. Median Household Size, Production versus Grid-Sequential	13



EXECUTIVE SUMMARY

Test Objective

The 2007 American Community Survey (ACS) Grid-Sequential test provided data to help us decide the format of the basic demographic section of the 2008 ACS mail form. Specifically, the test helped determine whether the traditional ACS matrix/grid format for the basic demographic section of the mail form collects data that are different from data collected using the "person box"/sequential format used in the decennial census.

A second objective of this test was to determine whether moving the rostering instructions from page two next to the matrix to the cover of the form increased or decreased discrepancies between the count on the front of the form and the count of people provided in the basic demographic section.

Methodology

The grid-sequential test consisted of a split-panel experimental design to test whether the response distributions for the basic demographic items and selected quality measures differed significantly between the grid and sequential formats. The grid-sequential test included a national sample of approximately 30,000 addresses selected from the Master Address File (MAF) with equal allocation of the sample among the two treatment groups. Addresses were selected using a stratified sample design where units were stratified into high and low response strata.

Research Questions and Results

Do changes in the layout of the basic demographic section of the mail form impact mail response?

The mail response rate for the sequential format was significantly higher than the rate for the grid format. We achieved a similar result for the High Response Areas (HRAs), but for the Low Response Areas (LRAs) the mail response rates were not significantly different between treatments.

Do changes in the layout of the basic demographic section of the mail form impact item nonresponse?

For all of the basic demographic items, the sequential format maintained or reduced the incidence of missing data.

Do changes in the layout of the basic demographic section of the mail form impact the "person incompleteness" rate (the proportion of people for whom we do not have an answer to all of the basic demographic questions)?

The sequential format significantly reduced the "person-incompleteness" for the basic demographic section overall and for the HRAs and LRAs.

Do changes in the layout of the basic demographic section of the mail form impact the proportion of respondents who inconsistently report the number of persons (i.e., the count on the cover differs from the number of persons with data in the basic demographic section)?

The sequential format significantly reduced the person count discrepancy rate overall and for both HRAs and LRAs.

Do changes in the layout of the basic demographic section of the mail form impact the proportion of large households who inconsistently report the number of persons?

When we restrict this measure to large households (as indicated on the cover with a population count of six or higher), we found no significant differences between the grid and sequential formats. This was of particular concern for large households, since the placement of the continuation roster is different between the forms.

Does moving the rostering instructions from the basic demographic section to the front cover of the mail form impact the proportion of respondents who inconsistently report the number of persons? (Note: this analysis was not part of the selection criteria)

We found that changing the placement of the rostering instructions produced no significant effect on the count discrepancy rate.

Do changes in the layout of the basic demographic section of the mail form impact the proportion of respondents who did not continue through the detailed person section?

We observed no differences in the proportion of respondents who did not continue through the form to the detailed person section between the grid and sequential treatments overall and for HRAs and LRAs.

Do changes in the layout of the basic demographic section of the mail form impact the proportion of respondents who did not continue through the form to the housing section?

We observed no differences in the proportion of respondents who did not continue through the form to the housing section between the grid and sequential treatments with the exception of a significant difference for the LRAs, showing an increase in the discontinuation rate for the grid.

Do changes in the layout of the basic demographic section of the mail form between grid and sequential impact the distributions of the basic demographic items?

Relationship (un-collapsed categories, related/not related, column1/column2) – The distributions did not differ between the grid-sequential treatments overall and for HRAs and LRAs. Sex – The distributions significantly differed between the grid-sequential treatments overall and for the HRAs (significantly higher proportion of males for the grid format). We observed no differences in the distributions for LRAs.

Age – The distributions did not differ between the grid-sequential treatments overall and for HRAs and LRAs.

Hispanic origin – The distributions differed between the grid-sequential treatments with the exception of a marginally non-significant difference for HRAs. When we collapse to the Hispanic/Non-Hispanic categories, we observed a significantly higher reporting of Hispanics for the sequential treatment overall and for HRAs and LRAs.

Race – The distributions did not differ between the grid-sequential treatments overall and for HRAs and LRAs.

Do changes in layout of the basic demographic section of the mail form between grid and sequential affect household size? (Note: this analysis was not part of the selection criteria)

The distributions of the number of people per household did not differ between the grid and sequential formats overall and for HRAs and LRAs. There were no significant differences between the grid and sequential formats for the individual household sizes (1,2,...,6, 7+ household sizes). Furthermore, the average household size and median household size did not differ significantly between the grid-sequential treatments overall and for HRAs and LRAs.

Does moving the rostering instructions from the basic demographic section to the front cover of the mail form affect household size? (Note: this analysis was not part of the selection criteria)

We found that moving the rostering instructions from the basic demographic section to the front cover produced no effect on average household size and median household size.

Recommendation

Reviewing the results from the previous research questions, we observed little difference between the grid and sequential response distributions and estimates. In addition, we observed that the sequential format maintained or improved the quality of our data for the given quality measures. Therefore, based on these results and the decision process outlined in Section 2 of this paper, we recommended the sequential format for the 2008 production ACS questionnaire.

1. BACKGROUND

1.1 Motivation for the 2007 ACS Grid-Sequential Test

The ACS has traditionally used a horizontal grid to collect basic demographic data. In other words, the household member names are listed down the left side of the page and the questions are listed across the top. The 2010 Census plans to use a sequential format where each person's data are in a distinct column, and within each column, the names are at the top and the questions are listed down the page. Ideally, the Census Bureau would like to be consistent in the wording and presentation of these questions between the ACS and the 2010 Census. Therefore, the ACS survey methods research area tested whether changing the layout for these questions affects response. More specifically, does changing from the grid to the sequential format affect data quality indicators and the response distributions for the basic demographic questions?

1.2 Previous Testing or Analysis

The 2006 ACS Content Test included a grid-sequential test. The grid format used in the 2006 ACS Content Test was derived from the current production grid. The current production grid was altered to allow for the changes introduced to the basic demographic items by the decennial consistency mandate. This mandate states that the Census Bureau must use the same basic demographic questions in the ACS, beginning with its 2008 data collection year, as will be used in the 2010 Census (Miller, 2007). The grid in 2006 was transposed from the current production ACS grid to accommodate a three-part race/ethnicity question and the ancestry question that was being tested for use in the 2010 census. However, the 2010 census planning committee chose other race/ethnicity questions and dropped the ancestry question. Thus, the grid used in the 2006 content test was no longer relevant. This created the need to conduct another grid-sequential test using the 2010 census short form content.

2. SELECTION CRITERIA

The following decision table (Table 1) outlined our decision process for selecting the grid or sequential format. These criteria stemmed from discussions suggesting that the inconsistency between the ACS and Census layout for the 100 percent data items was acceptable as long as it did not cause substantial differences in response.

Table 1. Decision Table

Scenario	Grid versus Sequential Response Distributions and Estimates	Grid versus Sequential Quality Measures	Selected Layout for '08 Form
1	equivalent ¹	grid equivalent or better	grid
2	equivalent	sequential substantially better	sequential
3	substantial differences ²	sequential equivalent or better	sequential
4	substantial differences	grid substantially better	grid

Equivalent" means there are only a few or less scattered statistically significant differences at the 10 percent level.

3. METHODOLOGY

3.1 Data Collection Methods

To determine the feasibility of changing to a sequential format for the ACS, a split-panel experimental design was used to test whether the grid and sequential formats differed for select quality measures or for any of the response distributions for the basic demographic items. Figures B-1 through B-7 in Appendix B show images of the cover pages and basic demographic sections illustrating the grid and sequential formats used in the questionnaires for the two treatments. The grid-sequential test included a national sample of approximately 30,000 addresses selected from the MAF with equal allocation of the sample among the two treatment groups. The Census Bureau mailed out the grid-sequential test questionnaires to the selected addresses in March 2007, which corresponded to the production ACS data collection schedule for the March 2007 panel.

The data processing for the grid-sequential test did not exactly replicate the processing currently used for production ACS cases. The Key-from-Paper (KFP) capture system was modified through the use of improved keyer instructions. Additionally, reviewing the scanned images of returned forms aided in data processing. Together these measures helped achieve improved results more similar to those that will be produced by the new ACS Key-from-Image (KFI) system. In addition, the data processing did not include any editing or imputation. The ACS Failed Edit Followup (FEFU) operation was not conducted. Questionnaires returned were designated as "valid" returns and persons were designated as "data-defined" persons under the same rules used in production with the exception of those cases where persons may have been designated as data-defined through FEFU. So for the grid-sequential test, a "valid" return required at least one data-defined person or a phone number. A data-defined person required a name and a response to two of the five basic demographic items in the roster section of the form.

² More than a few statistically significant differences are observed that affect the estimates or there is a pattern to the differences that raises quality concerns.

3.2 Sample Design

The 2007 Grid-Sequential Test consisted of a national sample of 30,000 residential addresses in the contiguous United States (the sample universe did not include Puerto Rico, Alaska, and Hawaii). The sample design for the grid-sequential test was largely based on the ACS production sample design (multi-stage sample) modified to meet the test objectives. The modifications included adding an additional level of stratification by stratifying units into high and low mail response areas; selecting units with equal probabilities of selection within the high/low response strata; and sampling units as pairs. The high and low response strata were defined using Census 2000 long form mail response rates at the tract-level. Note that units within the low response strata were sampled at a higher rate to ensure an approximately equal number of mail responses from both strata. The paired sample selection formed a pair by first systematically sampling an address within the defined sampling strata and then pairing that address with the address listed next in the geographically sorted list. Note that the pair may not be neighboring addresses. One member of the pair was randomly assigned to the grid treatment and the other member was assigned the sequential treatment.

Another modification to the production ACS sample design included adding a third sampling stage. At the first stage, the production 2007 ACS first stage or main phase sample was used as the grid-sequential first stage sample. At the second stage, all housing units in the ACS first stage sample not selected in the production 2007 ACS second stage or supplemental sample were selected as the grid-sequential second-stage sample. Note that any units that were selected to be in other operations (e.g., training, other tests, etc.) were not selected in the grid-sequential second stage sample. At the third stage, addresses were selected using a sampling method similar to the production ACS second or supplemental stage sample design with the exception of adding the high and low mail response stratification. In addition, the units were selected in pairs using an equal probability of selection within high and low response strata. For more details on the grid-sequential test sample design, see Joshipura and Hefter (2007).

4. LIMITATIONS

The main objective of the 2007 Grid-Sequential Test was to determine the effects of changing the layout of the basic demographic items on the ACS paper questionnaire. To meet this objective, we used a study design that differed from the production ACS. As a result, the estimates and distributions derived from the 2007 Grid-Sequential Test may differ from the same estimates and distributions derived from the production ACS. These differences are due to the differences in sample design, data collection, and data processing. For example, the grid-sequential test was strictly a mail (respondent-completed) test. The other modes of data collection used in the production ACS for mail nonresponse followup, Computer Assisted Telephone Interview (CATI) and Computer Assisted Personal Interview (CAPI), were not used for this test. Therefore, characteristics of CATI and CAPI respondents that may influence the estimates or distributions are not incorporated. In addition, the grid-sequential test did not employ the editing and imputation methods used in production. This also may contribute to differences in the estimates and distributions between the test and production.

The data collection process for the grid-sequential test and the production cases used in our analysis used a modified KFP system rather than the KFI system being implemented for the 2008 ACS. A difference between the standard KFP system and the new KFI system is that the KFI system contains edits that clean the data. As a result, we modified the KFP system to include imaging of the grid-sequential test questionnaires so that we could achieve similar results to the KFI system by having the ability to verify those household or person records where we were not certain the records were data-defined.

5. RESEARCH QUESTIONS AND RESULTS

5.1 Do changes in the layout of the basic demographic section of the mail form impact mail response?

The unit response rate for each treatment is defined as the percent of "mailable" sample addresses that returned a non-blank questionnaire (either the first mailed questionnaire, the replacement questionnaire, or both). Note that since the grid-sequential test strictly used a mail mode of response, the unit response rate is equivalent to the mail response rate.

The mail response rate calculated for the grid-sequential test does not mirror the "official" mail response rate that we calculate for the production ACS as specified by Williams (2006) since we are not able to exclude vacants and business deletes from the denominator. In the production ACS, deletes and vacant housing units can be identified through Telephone Questionnaire Assistance, CATI followup, or CAPI followup. These data are then used to estimate the total number of vacants and business deletes which is then subtracted from the denominator in the "official" mail response rate. Both the grid-sequential test and the production ACS mail response rates are similar in that addresses identified as "unmailable" and mail packages designated as undeliverable as addressed by the U.S. Postal Service are removed from the denominator.

The table below gives the weighted mail response rates for the grid and sequential treatments. Note that the estimates in Table 2 and all subsequent tables are rounded to the first decimal place. The overall mail response rate for the sequential format was significantly higher than the rate for the grid format. We observe a similar result for the HRAs. However for the LRAs the mail response rates were not significantly different between treatments.

Table 2. Mail Response Rates, Grid versus Sequential

Strata	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
National	37.6	39.1	-1.5	± 1.1	Yes
HRA	41.4	43.1	-1.6	± 1.5	Yes
LRA	25.7	26.8	-1.1	± 1.1	No

5.2 Do changes in the layout of the basic demographic section of the mail form impact item nonresponse?

Table 3 shows the Item Nonresponse Rates (INRs) for all of the basic demographic items overall and by high and low response areas. Across all of the items, we observe that the sequential format maintained or reduced the incidence of missing data.

The INRs were calculated as follows. All rates were calculated using only data from data-defined persons numbered 1 to 5 since the basic demographic data is not collected for data-defined persons 6 through 12 listed in the continuation roster (in production the basic demographic data for persons 6 through 12 is collected through FEFU). The denominator of each rate was the number of all data-defined persons numbered 1 to 5, with the exception of the relationship INR. The denominator used to calculate the INR for the relationship item was the number of data-defined persons numbered 2 to 5. The numerator for calculating the INRs for relationship and sex includes all data-defined persons that did not provide one and only one response to relationship and sex. For age and date of birth (DOB), the numerator includes all data-defined persons who did not give either a legitimate age or year of birth. For Hispanic origin, the numerator includes any data-defined person who did not check one or more of the boxes and did not provide a Hispanic group in the write-in. For race, the numerator includes any data-defined person who did not check one or more of the boxes and did not provide a race group in a write-in field.

Reviewing the items individually in Table 3, we observe that the relationship item resulted in no significant differences in the INRs overall and for HRAs. However, in LRAs, the sequential format resulted in a significantly lower INR. For the sex item, we observe no significant differences in the INRs overall and for HRAs and LRAs. Note that the item nonresponse measure for age and date of birth was combined. In other words if a respondent did not provide an answer to either item, we counted the combined measure as a nonresponse. Therefore based on this measure, we observe that for the age and DOB items, the sequential format produces a significantly lower INR overall and for LRAs. We did not observe a difference for HRAs. For the Hispanic origin item, we observe that the sequential format produces a significantly lower INR overall and for HRAs and LRAs. Finally for the race item, the results show that the sequential format produces a significantly lower INR overall and for HRAs and LRAs.

Table 3. Item Nonresponse Rates, Grid versus Sequential

Item/Strata	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Relationship					
National	1.5	1.3	0.1	± 0.5	No
HRA	1.3	1.4	0.0	± 0.6	No
LRA	2.1	1.0	1.1	± 0.7	Yes
Sex					
National	2.2	2.0	0.2	± 0.5	No
HRA	2.2	2.0	0.3	± 0.5	No
LRA	2.1	2.0	0.1	± 0.5	No
Age/Date of Birth					
National	3.1	2.4	0.7	± 0.7	Yes
HRA	3.1	2.4	0.7	± 0.8	No
LRA	3.4	2.5	1.0	± 0.8	Yes
Hispanic Origin					
National	8.0	5.5	2.6	± 1.0	Yes
HRA	7.5	5.0	2.5	± 1.2	Yes
LRA	11.0	8.1	2.9	± 1.4	Yes
Race					
National	7.5	3.8	3.7	± 0.9	Yes
HRA	6.7	3.3	3.5	± 1.1	Yes
LRA	11.6	6.4	5.2	± 1.6	Yes

5.3 Do changes in the layout of the basic demographic section of the mail form impact the "person incompleteness" rate (the proportion of people for whom we do not have an answer to all of the basic demographic questions)?

The "person-incompleteness" rate is defined as the percentage of data-defined persons for whom we did not have an answer to all of the basic demographic questions. The definition of "an answer" is the same as the response definitions used for our item nonresponse rates with the exception that person 1 is considered to have "reported" relationship. Note that the "person incompleteness" rate was calculated using only data from data-defined persons numbered 1 to 5 since the basic demographic data is not collected for data-defined persons 6 through 12 listed in the continuation roster. In production, the basic demographic data for persons 6 through 12 is collected through FEFU.

Table 4 shows the "person incompleteness" rates for the grid and sequential treatments nationally and by HRAs and LRAs. The data indicate that the sequential format significantly reduces the "person-incompleteness" for the basic demographic section overall and for the HRAs and LRAs.

Table 4. Person-Incompleteness Rate, Grid versus Sequential

Strata	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
National	16.1	12.4	3.7	± 1.4	Yes
HRA	15.1	11.6	3.5	± 1.6	Yes
LRA	21.5	16.9	4.6	± 1.9	Yes

5.4 Do changes in the layout of the basic demographic section of the mail form impact the proportion of respondents who inconsistently report the number of persons (i.e., the count on the cover differs from the number of persons with data in the basic demographic section)?

We define the person count discrepancy rate as the percent of cases where the total number of data-defined persons listed in the basic demographic section (persons 1-5 and persons 6-12 on the continuation roster) was not equal to the total number of persons reported on the cover.

Table 5 shows the person count discrepancy rates for the grid and sequential treatments nationally and by HRAs and LRAs. We observe that the sequential format significantly reduces the person count discrepancy rate overall and for the HRAs and LRAs.

Table 5. Person Count Discrepancy Rate, Grid versus Sequential

Strata	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
National	3.7	2.7	1.0	± 0.7	Yes
HRA	3.6	2.6	1.0	± 0.9	Yes
LRA	4.4	3.3	1.1	± 0.8	Yes

5.5 Do changes in the layout of the basic demographic section of the mail form impact the proportion of large households who inconsistently report the number of persons?

Now we restrict the previous comparison of person count discrepancy rates between the grid and sequential treatments to large households to isolate any effect due to the difference in the placement of the continuation roster between the grid and sequential forms. The continuation roster is provided to allow respondents in large households (greater than five persons) to list names of up to seven additional persons. We hypothesized that since the continuation roster was moved from the bottom of the grid layout on pages 2 and 3 to page 4 of the sequential layout, respondents for large households would be more likely to miss the roster, thus leaving it blank. To answer this research question, we compared the percent of large household cases (as indicated on the cover with a "total persons" count of 6 or higher) where the number of data-defined persons among persons 1 to 5 and persons reported in 6-12 is less than the number reported on the cover.

The data in Table 6 indicate that for large households, we find no significant differences between the grid and sequential formats. Note that our sample was not designed to over-sample for large households. As a result, large households made up less than 1 percent of our sample (205 large households). This limited our ability to detect differences in the characteristics of large households as indicated by the large margins of error in Table 6.

Table 6. Person Count Discrepancy Rate (Large Households Only), Grid versus Sequential

Strata	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
National	7.1	5.4	1.7	± 6.3	No
HRA	6.4	4.2	2.2	± 7.6	No
LRA	10.0	10.0	0.0	± 9.7	No

5.6 Does moving the rostering instructions from the basic demographic section to the front cover of the mail form impact the proportion of respondents who inconsistently report the number of persons? (Note: this analysis was not part of the selection criteria)

Aside from just comparing the count discrepancy rates between the grid and sequential treatments, we compared each grid-sequential treatment to the ACS production panel that corresponded with the time period for which we conducted the grid-sequential test (March 2007). The objective for performing this analysis was to determine the impact of moving the rostering instructions from the basic demographic section to the front cover on the grid-sequential test questionnaires. Note that the change in placement of the rostering instructions was introduced to create space for the new basic demographic questions. In the 2007 ACS production questionnaire the rostering instructions were located in the basic demographic section of the questionnaire (see Figure C-2 in Appendix C), and for the grid-sequential test, the instructions were placed on the front cover of the questionnaires used for both the grid and sequential treatments (see Figure B-1 or Figure B-4 in Appendix B). Note that the rostering instructions will be placed on the front cover for the 2008 ACS production questionnaire.

Table 7 shows the results of comparing the count discrepancy rate for the March 2007 ACS panel to that of the grid and sequential treatments. We find that the count discrepancy rate for production does not differ from the rate for the grid treatment. Therefore, controlling for the form layout between production and the grid-sequential test, we observe that changing the placement of the rostering instructions does not adversely affect the count discrepancy rate. Now that we have established that the placement of the rostering instructions produces no effect in terms of the count discrepancy rate, any significant differences in the rates between production and the sequential treatment can be attributed solely to the change in layout (otherwise we would not be able to discern which factor was producing an effect —the change in layout or the change in the placement of the rostering instructions). Reviewing the comparison of discrepancy rates between the sequential treatment and production, we find that the sequential layout significantly

reduces the discrepancy rate. This further supports our findings in comparing the discrepancy rates between the grid and sequential treatments.

Table 7. Person Count Discrepancy Rate, Production versus Grid-Sequential

Treatment	Production (%)	G-S Estimate (%)	Difference (%)	Margin of Error (%)	Significant
Grid	3.8	3.7	0.1	± 0.6	No
Sequential	3.8	2.7	1.1	± 0.6	Yes

5.7 Do changes in the layout of the basic demographic section of the mail form impact the proportion of respondents who did not continue through the detailed person section?

To answer this research question we measure the rate at which all data-defined persons from the basic demographic section do not have data reported for them in the detailed person section. We count in the numerator all data-defined persons for which there are no responses in the place of birth/citizenship, education, ancestry, or language series (the first two columns in the detailed person section).

Comparing between the two test treatments in Table 8, we observe no differences in the proportion of respondents who did not continue through the form to the detailed person section between the grid and sequential treatments overall and for HRAs and LRAs.

Table 8. Rate of Discontinuation to the Detailed Person Section, Grid versus Sequential

Strata	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
National	3.9	4.3	-0.4	± 0.7	No
HRA	3.5	4.0	-0.5	± 0.8	No
LRA	6.2	6.2	0.0	± 1.0	No

5.8 Do changes in the layout of the basic demographic section of the mail form impact the proportion of respondents who did not continue through the form to the housing section?

To measure the rate at which respondents continue on to the housing section from the basic demographic section, we count in the numerator all occupied housing units for which there is a response to either building type or year built.

From Table 9, we observe no differences in the proportion of respondents who did not continue through the form to the housing section between the grid and sequential treatments with the exception of a marginally significant difference for the LRAs, showing an increase in the discontinuation rate for the grid.

Table 9. Rate of Discontinuation to the Housing Section, Grid versus Sequential

Strata	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
National	1.2	0.9	0.3	± 0.4	No
HRA	1.1	0.8	0.2	± 0.5	No
LRA	2.0	1.3	0.6	± 0.6	Yes

5.9 Do changes in the layout of the basic demographic section of the mail form between grid and sequential impact the distributions of the basic demographic items?

To form the response distributions for the basic demographic items by version of the form received, we recoded some of the response categories. For age, the following age ranges were used: 0-17, 18-24, 25-44, 45-64, and 65+. For race, the basic race groups were used (white, black, American Indian or Alaskan Native (AIAN), Asian, Native Hawaiian or Other Pacific Islander (NHOPI), Other, and 2+ races). For the remaining items, relationship, sex, and Hispanic origin, the distributions were calculated using the checkbox items on the form.

To determine if the distributions were dependent on form type, we used a chi-square test adjusting for the complex sample design. In addition, we used individual t-tests to determine whether individual categories were significantly different.

5.9.1 Relationship

Tables A-1 through A-3 in Appendix A show the relationship distribution with un-collapsed categories by treatment overall and for HRAs and LRAs. Reviewing the chi-square test statistics for the relationship distributions, we observe no significant difference in the distributions between the grid and sequential treatments overall and for the HRAs and LRAs.

Tables A-4 through A-6 in Appendix A show the relationship distribution where the categories have been recoded to "related" or "not related." This re-code was based on our hypothesis that a relationship effect might exist. Similar to the un-collapsed relationship distribution, we observe that the distributions are not dependent on form type overall and for HRAs and LRAs.

Finally, tables A7 through A-9 in Appendix A show the relationship distribution recoded to first column and second column. In other words, if the relationship category was listed on the question layout in the first column it was coded as "first column," and similarly, if the category was placed in the second column, those categories were coded to the second column. This analysis was done to isolate any "column" effect, that is, respondents not reading through to the second column. Similar to the un-collapsed and the related/not related distributions, we observe that the column/no column distributions are not dependent on the question format overall and for the HRAs and LRAs.

5.9.2 Sex

Tables A-10 through A-12 in Appendix A show the sex item response distributions by treatment overall and for HRAs and LRAs. Comparing the sex distribution between the grid-sequential treatments showed a significant difference overall and for the HRAs (significantly higher proportion of males and a lower proportion of females for the grid format). We cannot formulate a reasonable hypothesis as to why the differences in layout would affect the sex distribution other than differences in the question items themselves between treatments may have contributed to the difference. On the sequential format the sex response items were listed horizontally and the instruction "Mark (x) one box" was present. On the grid layout the response items were listed vertically and the "Mark (x) one box" was not present. We observe no difference in the sex distribution between grid and sequential for the LRAs (see Table A-12).

5.9.3 Age

To calculate the age distributions, we recoded the age responses into five age categories (0-17, 18-24, 25-44, 45-64, 65+). Tables A-13 through A-15 in Appendix A show the age distributions by treatment overall and for HRAs and LRAs. We observe that the age distributions do not differ between the grid-sequential treatments overall and for HRAs and LRAs.

5.9.4 Hispanic Origin

For the Hispanic Origin item we used the available response categories to form the Hispanic origin distribution with the exception of recoding some cases where the respondent responded "Other" but wrote in a response in the write-in field that clearly mapped to one of the available Hispanic origin categories. Furthermore, if the respondent indicated two or more Hispanic origins we coded the response into a "two or more" category. Reviewing the Hispanic origin distributions in Tables A-16 through A-18 in Appendix A, we observe that the distributions are dependent on the questionnaire format overall and for LRAs. The Hispanic origin distribution for the HRAs was not dependent on questionnaire format, but with a p-value equal to 0.11, the difference between the grid-sequential distributions was close to being significant.

In addition to reviewing the detailed Hispanic origin distributions, we collapsed the detailed categories into Hispanic/Non-Hispanic to observe whether the Hispanic/Non-Hispanic distribution is dependent on the questionnaire layout. Indeed, in Tables A-19 through A-21 in Appendix A we observe a significantly higher reporting of Hispanics for the sequential treatment overall and for HRAs and LRAs. Note that the effect that the grid-sequential layout has on the Hispanic/Non-Hispanic distribution may be related to the increase in item nonresponse produced by the grid layout observed in Section 5.2 for the Hispanic origin item. That is, we suspect that the grid layout is causing an increased number of Hispanics to skip the Hispanic origin question.

5.9.5 Race

The race item contained 15 response categories with three write-in fields for "American Indian or Alaska Native," Other Pacific Islander," and "Some other race." To calculate the race

distributions, we recoded the response categories into seven race groups (white, black, American Indian or Alaskan Native, Asian, Native Hawaiian or Pacific Islander, other race, and two or more races).

Tables A-22, A-23, and A-24 in Appendix A show the race distributions by grid-sequential treatment overall and for HRAs and LRAs. Reviewing these distributions, we observe that the distributions do not differ between the grid-sequential treatments overall and for HRAs and LRAs.

5.10 Do changes in the layout of the basic demographic section of the mail form between grid and sequential affect household size? (Note: this analysis was not part of the selection criteria)

To measure household size, two variables were taken into account - the count of persons reported on the cover and the number of persons listed in the basic demographic section. If the two variables were in disagreement, the larger of the two was taken as the household size value. Based on this measurement, Tables A-25, A-26, and A-27 show the household size distributions for the grid-sequential treatments overall and for HRAs and LRAs. To determine whether the household size distribution was dependent on the form type we calculated a chi-square statistic adjusted for the sample design for each of the two-way contingency tables. Reviewing the chi-square statistics, we find that the distribution of the number of people per household does not depend on the questionnaire format overall and for HRAs and LRAs. In addition, we observe no significant differences between the grid and sequential formats for the individual household sizes (1,2,...,6, 7+ household sizes).

Table 10 shows the grid-sequential estimates of average household size overall and for HRAs and LRAs. Reviewing the differences between the grid and sequential estimates, we observe no significant differences, further supporting the previous result.

Table 10	A	Household	Ciro	C=: 4	*******	Cagnantial
Table 10.	Average	Housenoia	Size.	Gria	versus	Seduentiai

	<u> </u>	,	1				
			Grid (#)	Sequential (#)	Difference (#)	Margin of Error (#)	Significant
National			2.34	2.31	0.03	± 0.05	No
HRA			2.35	2.33	0.02	± 0.06	No
LRA			2.25	2.21	0.04	± 0.06	No

In addition to calculating the grid-sequential estimates of average household size, we also calculated the grid-sequential estimates of the median household size in Table 11. Similar to the results for the average household size, we observe no significant differences between the grid-sequential estimates of median household size overall and for HRAs and LRAs.

Table 11. Median Household Size, Grid versus Sequential

	Grid (#)	Sequential (#)	Difference (#)	Margin of Error (#)	Significant
National	1.56	1.55	0.01	± 0.04	No
HRA	1.58	1.57	0.01	± 0.05	No
LRA	1.47	1.43	0.05	± 0.05	No

5.11 Does moving the rostering instructions from the basic demographic section to the front cover of the mail form affect household size? (Note: this analysis was not part of the selection criteria)

Similar to Section 5.6, we compared the production estimates of average and median household size to the grid-sequential estimates to determine if an effect due to the change in placement of the rostering instructions exists. Table 12 shows the production estimate of the average household size compared to that of the grid-sequential estimates. Reviewing the differences, we observe no significant differences between the production estimate and the grid-sequential estimates.

Table 12. Average Household Size, Production versus Grid-Sequential

	Production (#)	G-S Estimate (#)	Difference (#)	Margin of Error (#)	Significant
Grid	2.3	2.3	0.1	± 0.0	No
Sequential	2.3	2.3	0.0	± 0.0	No

In addition to comparing the production estimate of average household size, we also compared the production estimate of median household size to the grid-sequential estimates. Table 13 shows the production estimate of the median household size compared to that of the grid-sequential estimates. We observe no changes in the median household size for either the grid or sequential treatments due to the change in placement of the rostering instructions. Based on the comparison results for both the median and average household size, we conclude that the change in placement of the rostering instructions will not adversely affect the within household coverage.

Table 13. Median Household Size, Production versus Grid-Sequential

	Production (#)	G-S Estimate (#)	Difference (#)	Margin of Error (#)	Significant
Grid	1.5	1.6	0.0	± 0.0	No
Sequential	1.5	1.5	0.0	± 0.0	No

6. SUMMARY

To determine the "best" layout for collecting the basic demographic data on the 2008 ACS questionnaire, the 2007 ACS Grid-Sequential Test compared a number of data quality indicators between the grid and sequential treatments. In addition, we tested whether any shifts in the response distributions were introduced through the layout change. For our defined data quality indicators, the sequential layout either maintained or improved the level of data quality produced. For example, the comparisons between the overall data quality indicators between the two layouts showed that the sequential layout increased the rate of unit response; reduced or maintained the level of missing data; reduced the "person incompleteness" rate and the person count discrepancy rate; and maintained the rate of discontinuation to the detailed person section and the rate of discontinuation to the housing section. When comparing the response distributions for the basic demographic items, changing from the grid to the sequential layout introduced no major shifts in the distributions excluding the sex and Hispanic origin distributions. Note that for the Hispanic origin item, we observed a substantial decrease in the level of missing data for the sequential layout. This likely changed the composition of respondents for this item, thus influencing the Hispanic origin distribution.

In Section 2, Table 1 outlined our decision process for choosing the grid or sequential format. From our previous discussion of the results, we observed little difference between the grid and sequential response distributions and estimates. In addition, we observed that the sequential format maintained or improved the quality of our data for the given quality measures. Therefore, based on these results and the decision process outlined in Table 1 in Section 2 we recommended the sequential format for the 2008 production ACS questionnaire.

References

Joshipura M. and Hefter S. (2007). "Specifications for Selecting the 2007 Grid-Sequential Questionnaire Test Sample," 2007 American Community Survey Sampling Memorandum Series #ACS07-S-8b, U.S. Census Bureau

Miller, L. (2007). "Final Demographic and Housing Content for the 2008 Census Dress Rehearsal and the 2010 Census," 2010 Decennial Census Program Decision Memorandum Series #17, U.S. Census Bureau

Williams, A. (2006). "Specifications for Calculation of American Community Survey and Puerto Rico Community Survey Panel Unit Response and Interview/Noninterview Rates," 2006 American Community Survey Research Memorandum Series #ACS06-R-2, U.S. Census Bureau

Appendix A: Tables

Table A-1. Relationship Response Distribution, Grid versus Sequential

Relationship	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Husband or Wife	43.9	44.2	-0.3	± 1.3	No
Biological son or daughter	41.6	40.8	0.7	± 1.7	No
Adopted son or daughter	0.9	1.2	-0.3	± 0.4	No
Stepson or stepdaughter	1.8	1.9	-0.1	± 0.6	No
Brother or sister	1.1	0.9	0.2	± 0.4	No
Father or mother	1.4	1.3	0.0	± 0.4	No
Grandchild	2.1	2.1	0.0	± 0.7	No
Parent –in-law	0.4	0.3	0.1	± 0.2	No
Son-in-law or daughter-in-law	0.4	0.2	0.2	± 0.2	Yes
Other relative	0.5	0.8	-0.3	± 0.3	No
Roomer or boarder	0.3	0.3	0.0	± 0.2	No
Housemate or roommate	1.3	1.5	-0.3	± 0.4	No
Unmarried partner	3.5	3.4	0.1	± 0.6	No
Other nonrelative	0.8	0.8	0.0	± 0.4	No
Total	100.0	100.0			

 $[\]chi^2 = 8.2$ with 13 degrees of freedom, not significant at the 10.0 percent level

Table A-2. Relationship Response Distribution, Grid versus Sequential (HRA)

	Grid	Sequential	Difference	Margin of Error	
Relationship	(%)	(%)	(%)	(%)	Significant
Husband or Wife	45.1	45.7	-0.6	± 1.5	No
Biological son or daughter	41.8	40.8	1.0	± 2.0	No
Adopted son or daughter	0.9	1.3	-0.4	± 0.5	No
Stepson or stepdaughter	1.7	2.0	-0.2	± 0.7	No
Brother or sister	0.9	0.7	0.3	± 0.4	No
Father or mother	1.2	1.1	0.1	± 0.5	No
Grandchild	1.9	1.8	0.0	± 0.8	No
Parent -in-law	0.5	0.3	0.1	± 0.3	No
Son-in-law or daughter-in-law	0.4	0.1	0.3	± 0.2	Yes
Other relative	0.4	0.6	-0.2	± 0.3	No
Roomer or boarder	0.2	0.3	0.0	± 0.2	No
Housemate or roommate	0.9	1.3	-0.4	± 0.5	No
Unmarried partner	3.3	3.2	0.2	± 0.7	No
Other nonrelative	0.7	0.8	-0.1	± 0.4	No
Total	100.0	100.0	·	·	

 $[\]frac{100.0}{\chi^2 = 11.5 \text{ with } 13 \text{ degrees of freedom, not significant at the } 10.0 \text{ percent level}$

Table A-3. Relationship Response Distribution, Grid versus Sequential (LRA)

	Grid	Sequential	Difference	Margin of Error	
Relationship	(%)	(%)	(%)	(%)	Significant
Husband or Wife	37.4	36.0	1.3	± 2.1	No
Biological son or daughter	40.2	41.3	-1.1	± 2.3	No
Adopted son or daughter	1.2	0.9	0.3	± 0.6	No
Stepson or stepdaughter	2.1	1.6	0.5	± 0.8	No
Brother or sister	1.8	2.0	-0.2	± 0.7	No
Father or mother	2.1	2.4	-0.4	± 0.7	No
Grandchild	3.5	3.8	-0.3	± 1.1	No
Parent -in-law	0.2	0.2	0.0	± 0.2	No
Son-in-law or daughter-in-law	0.4	0.7	-0.3	± 0.3	Yes
Other relative	1.1	1.8	-0.6	± 0.7	No
Roomer or boarder	0.9	0.8	0.0	± 0.5	No
Housemate or roommate	3.4	2.7	0.6	± 0.9	No
Unmarried partner	4.5	4.6	-0.1	± 0.9	No
Other nonrelative	1.5	1.1	0.4	± 0.6	No
Total	100.0	100.0			

 $[\]chi^2 = 11.9$ with 13 degrees of freedom, not significant at the 10.0 percent level

Table A-4. Relationship Response Distribution, Grid versus Sequential

Relationship	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Relative	94.1	93.9	0.2	± 0.9	No
Non-Relative	5.9	6.1	-0.2	± 0.9	No
Total	100.0	100.0			

Table A-5. Relationship Response Distribution, Grid versus Sequential (HRA)

Relationship	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Relative	94.9	94.4	0.4	± 1.0	No
Non-Relative	5.1	5.6	-0.4	± 1.0	No
Total	100.0	100.0			

Table A-6. Relationship Response Distribution, Grid versus Sequential (LRA)

Relationship	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Relative	89.8	90.8	-1.0	± 1.5	No
Non-Relative	10.2	9.2	1.0	± 1.5	No
Total	100.0	100.0			

Table A-7. Relationship Response Distribution, Grid versus Sequential (National)

Response Item Position	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Column 1	93.5	93.0	-0.4	± 0.9	No
Column 2	6.5	7.0	0.4	± 0.9	No
Total	100.0	100.0			

Table A-8. Relationship Response Distribution, Grid versus Sequential (HRA)

Response Item Position	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Column 1	94.4	93.8	-0.6	± 1.1	No
Column 2	5.6	6.2	0.6	± 1.1	No
Total	100.0	100.0			

Table A-9. Relationship Response Distribution, Grid versus Sequential (LRA)

Response Item Position	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Column 1	88.6	88.9	-0.3	± 1.5	No
Column 2	11.4	11.1	0.3	± 1.5	No
Total	100.0	100.0			

Table A-10. Sex Response Distribution, Grid versus Sequential

Gender	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Male	48.2	47.1	1.1	± 1.0	Yes
Female	51.8	52.9	-1.1	± 1.0	Yes
Total	100.0	100.0			

Table A-11. Sex Response Distribution, Grid versus Sequential (HRA)

Gender	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Male	48.3	47.1	1.3	± 1.2	Yes
Female	51.7	52.9	-1.3	± 1.2	Yes
Total	100.0	100.0			

Table A-12. Sex Response Distribution, Grid versus Sequential (LRA)

Gender	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Male	47.7	47.3	0.4	± 1.3	No
Female	52.3	52.7	-0.4	± 1.3	No
Total	100.0	100.0			

Table A-13. Age Response Distribution, Grid versus Sequential

Age	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
0-17	19.7	19.9	-0.2	± 1.1	No
18-24	6.9	6.0	0.9	± 0.7	Yes
25-44	23.0	23.0	0.0	± 1.2	No
45-64	31.7	31.7	0.0	± 1.5	No
65+	18.6	19.4	-0.8	± 1.1	No
Total	100.0	100.0			

 $[\]frac{100.0}{\chi^2 = 5.4 \text{ with 4 degrees of freedom, not significant at the 10.0 percent level}$

Table A-14. Age Response Distribution, Grid versus Sequential (HRA)

Age	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
0-17	20.0	20.2	-0.1	± 1.3	No
18-24	6.5	5.5	1.0	± 0.9	Yes
25-44	22.5	22.6	-0.1	± 1.3	No
45-64	32.4	32.1	0.3	± 1.7	No
65+	18.6	19.7	-1.1	± 1.3	No
Total	100.0	100.0			

 $[\]chi^2 = 5.6$ with 4 degrees of freedom, not significant at the 10.0 percent level

Table A-15. Age Response Distribution, Grid versus Sequential (LRA)

Age	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
0-17	18.2	18.4	-0.2	± 1.6	No
18-24	8.9	8.4	0.5	± 1.1	No
25-44	25.9	25.3	0.7	± 1.6	No
45-64	28.2	30.0	-1.8	± 1.8	Yes
65+	18.8	18.0	0.9	± 1.6	No
Total	100.0	100.0			

 $[\]chi^2 = 3.4$ with 4 degrees of freedom, not significant at the 10.0 percent level

Table A-16. Hispanic, Latino, or Spanish Origin Response Distribution, Grid versus Sequential

Origin	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Non-Hispanic	94.4	92.7	1.8	± 1.0	Yes
Mexican, Mexican Am., Chicano	3.2	4.2	-1.0	± 0.8	Yes
Puerto Rican	0.7	0.9	-0.1	± 0.4	No
Cuban	0.4	0.7	-0.3	± 0.3	No
Other	1.2	1.5	-0.3	± 0.5	No
2 or more	0.1	0.1	0.0	± 0.1	No
Total	100.0	100.0			

 $[\]chi^2 = 9.8$ with 5 degrees of freedom, significant at the 10.0 percent level

Table A-17. Hispanic, Latino, or Spanish Origin Response Distribution, Grid versus Sequential (HRA)

Origin	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Non-Hispanic	95.8	94.3	1.5	± 1.1	Yes
Mexican, Mexican Am., Chicano	2.4	3.3	-0.9	± 0.8	Yes
Puerto Rican	0.6	0.6	0.0	± 0.4	No
Cuban	0.2	0.7	-0.4	± 0.4	Yes
Other	0.9	1.1	-0.2	± 0.5	No
2 or more	0.1	0.0	0.0	± 0.1	No
Total	100.0	100.0			

 $[\]chi^2 = 7.5$ with 4 degrees of freedom, not significant at the 10.0 percent level (Note that the categories for "Other" and "2 or more" were combined to ensure sufficient cell sizes for calculating the χ^2 statistic. These combined categories are not reflected in the estimates above.)

Table A-18. Hispanic, Latino, or Spanish Origin Response Distribution, Grid versus Sequential (LRA)

Origin	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Non-Hispanic	86.9	84.1	2.9	± 2.4	Yes
Mexican, Mexican Am., Chicano	7.6	9.3	-1.7	± 1.9	No
Puerto Rican	1.6	2.4	-0.8	± 0.7	Yes
Cuban	1.0	0.5	0.5	± 0.4	Yes
Other	2.6	3.3	-0.6	± 1.1	No
2 or more	0.2	0.5	-0.3	± 0.3	No
Total	100.0	100.0			
$\chi^2 = 11.3$ with 5 degrees of freedom, signi	ficant at the 1	0.0 percent le	vel		

Table A-19. Hispanic/Non-Hispanic Response Distribution, Grid versus Sequential

Origin	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Non-Hispanic	94.4	92.7	1.8	± 1.0	Yes
Hispanic	5.6	7.3	-1.8	± 1.0	Yes
Total	100.0	100.0			

Table A-20. Hispanic/Non-Hispanic Response Distribution, Grid versus Sequential (HRA)

Origin	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Non-Hispanic	95.8	94.3	1.5	± 1.1	Yes
Hispanic	4.2	5.7	-1.5	± 1.1	Yes
Total	100.0	100.0			

Table A-21. Hispanic/Non-Hispanic Response Distribution, Grid versus Sequential (LRA)

Origin	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
Non-Hispanic	86.9	84.1	2.9	2.4	Yes
Hispanic	13.1	15.9	-2.9	2.4	Yes
Total	100.0	100.0			

Table A-22. Race Distribution, Grid versus Sequential

Race	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
White	85.8	85.0	0.8	± 1.7	No
Black	5.8	6.3	-0.4	± 1.0	No
American Indian or Alaska Native	0.4	0.5	-0.1	± 0.3	No
Asian	4.9	4.4	0.5	± 1.1	No
Native Hawaiian and other Pacific Islanders race groups	0.0	0.2	-0.1	± 0.2	No
Some other race	1.1	1.2	-0.1	± 0.5	No
Two or more races	1.9	2.4	-0.4	± 0.7	No
Total	100.0	100.0			

 $[\]chi^2=2.2$ with 5 degrees of freedom, not significant at the 10.0 percent level (Note that the categories for "Native Hawaiian and other Pacific Islanders" and "Asians" were combined to ensure sufficient cell sizes for calculating the χ^2 statistic. These combined categories are not reflected in the estimates above.)

Table A-23. Race Distribution, Grid versus Sequential (HRA)

Race	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
White	88.6	87.9	0.7	± 1.9	No
Black	3.6	4.1	-0.5	± 1.1	No
American Indian or Alaska Native	0.3	0.5	-0.1	± 0.4	No
Asian	4.8	4.2	0.6	± 1.2	No
Native Hawaiian and other Pacific Islanders race groups	0.0	0.2	-0.2	± 0.2	No
Some other race	0.9	0.9	0.1	± 0.6	No
Two or more races	1.7	2.2	-0.5	± 0.8	No
Total	100.0	100.0			

 $[\]chi^2 = 2.4$ with 5 degrees of freedom, not significant at the 10.0 percent level (Note that the categories for "Native Hawaiian and other Pacific Islanders" and "Asians" were combined to ensure sufficient cell sizes for calculating the χ^2 statistic. These combined categories are not reflected in the estimates above.)

Table A-24. Race Distribution, Grid versus Sequential (LRA)

Race	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
White	70.3	69.3	1.0	± 2.5	No
Black	18.5	18.2	0.3	± 2.0	No
American Indian or Alaska Native	0.9	0.7	0.2	± 0.6	No
Asian	5.3	5.7	-0.3	± 1.3	No
Native Hawaiian and other Pacific Islanders race groups	0.0	0.1	0.0	± 0.1	No
Some other race	1.9	3.0	-1.1	± 1.1	Yes
Two or more races	3.1	3.1	0.0	± 1.1	No
Total	100.0	100.0			

 $[\]chi^2$ = 4.2 with 5 degrees of freedom, not significant at the 10.0 percent level (Note that the categories for "Native Hawaiian and other Pacific Islanders" and "Asians" were combined to ensure sufficient cell sizes for calculating the χ^2 statistic. These combined categories are not reflected in the estimates above.)

Table A-25. Household Size, Grid versus Sequential

Household Size	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
1-person	27.9	28.0	-0.1	± 1.8	No
2-person	39.5	40.1	-0.7	± 2.0	No
3-person	14.4	14.6	-0.2	± 1.4	No
4-person	11.7	11.1	0.6	± 1.4	No
5-person	4.5	4.1	0.4	± 0.9	No
6-person	1.1	1.2	-0.1	± 0.4	No
7 to 12-person	1.0	0.9	0.1	± 0.4	No
Total	100.0	100.0			

Table A-26. Household Size, Grid versus Sequential (HRA)

Household Size	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
1-person	26.9	26.6	0.3	± 2.2	No
2-person	40.1	41.1	-1.0	± 2.3	No
3-person	14.2	14.6	-0.5	± 1.6	No
4-person	12.1	11.3	0.8	± 1.6	No
5-person	4.7	4.3	0.4	± 1.0	No
6-person	1.1	1.2	-0.1	± 0.5	No
7 to 12-person	0.9	0.8	0.1	± 0.4	No
Total	100.0	100.0			

 $[\]chi^2 = 1.7$ with 6 degrees of freedom, not significant at the 10.0 percent level

Table A-27. Household Size, Grid versus Sequential (LRA)

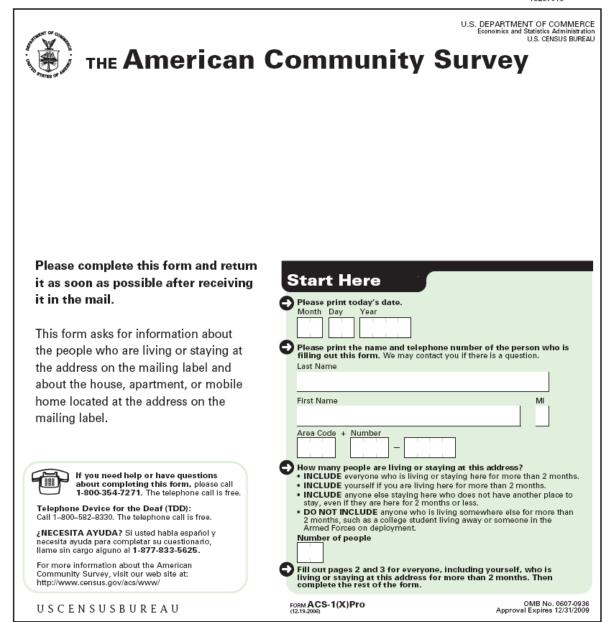
Household Size	Grid (%)	Sequential (%)	Difference (%)	Margin of Error (%)	Significant
1-person	32.9	35.1	-2.1	± 2.3	No
2-person	36.1	35.1	1.1	± 2.2	No
3-person	15.3	14.1	1.2	± 1.6	No
4-person	9.6	9.8	-0.1	± 1.5	No
5-person	3.6	3.3	0.3	± 1.0	No
6-person	1.1	1.5	-0.3	± 0.6	No
7 to 12-person	1.3	1.2	0.0	± 0.5	No
Total	100.0	100.0			

 $[\]chi^2$ = 4.6 with 6 degrees of freedom, not significant at the 10.0 percent level

Appendix B: Grid-Sequential Questionnaire Images

Figure B-1. Grid Layout – Page 1

13257019



ACS-1(X)Pro, Page 1, Base (Black)

ACS-1(X)Pro, Page 1, GREEN Pantone 354 (20 and 40%)

Figure B-2. Grid Layout – Page 2

				13257027	
List of Residents	How is this person related to Person 1? Mark (X) ONE		What is this person's sex?	What is this person's age and what is this person's date of birth? Please report babies as age 0 when the child is less than 1 year old.	
apartment is own	erson living or staying here in who ned, being bought, or rented. If the me of any adult living or staying he	re is no such person,	☐ Male	Age (in years) Print numbers in boxes.	
First Name MI	X Person 1			Month Day Year of birth	
Last Name (Please print) First Name MI	Relationship of Pers Husband or wife Biological son or daughter Adopted son or daughter Stepson or stepdaughter Brother or sister Father or mother Grandchild	son 2 to Person 1. Parent-in-law Son-in-law, daughter-in-law Other relative Roomer or boarder Housemate or roommate Unmarried partner Other nonrelative	☐ Male ☐ Female	Age (in years) Print numbers in boxes. Month Day Year of birth	
Person 3 Last Name (Please print) First Name MI	Relationship of Pen Husband or wife Biological son or daughter Adopted son or daughter Stepson or stepdaughter Brother or sister Father or mother Grandchild	son 3 to Person 1. Parent-in-law Son-in-law, daughter-in-law Other relative Roomer or boarder Housemate or roommate Unmarried partner Other nonrelative	☐ Male ☐ Female	Age (in years) Print numbers in boxes. Month Day Year of birth	
Person 4 Last Name (Please print) First Name MI	Relationship of Pera Husband or wife Biological son or daughter Adopted son or daughter Stepson or stepdaughter Brother or sister Father or mother Grandchild	son 4 to Person 1. Parent-in-law Son-in-law, daughter-in-law Other relative Roomer or boarder Housemate or roommate Unmarried partner Other nonrelative	☐ Male ☐ Female	Age (in years) Print numbers in boxes. Month Day Year of birth	
Person 5 Last Name (Please print) First Name MI	Relationship of Pera Husband or wife Biological son or daughter Adopted son or daughter Stepson or stepdaughter Brother or sister Father or mother Grandchild	son 5 to Person 1. Parent-in-law Son-in-law, daughter-in-law Other relative Roomer or boarder Housemate or roommate Unmarried partner Other nonrelative	☐ Male ☐ Female	Age (in years) Print numbers in boxes. Month Day Year of birth	
their names in the spa	five people living or staying here, print ces for Person 6 through Person 12. nore information about them.	Person 7 Last Name (Please print) First Name	Last	Name (Please print) Name MI	
2					

ACS-1(X)Pro, Page 2, Base (Black)

ACS-1(X)Pro, Page 2, GREEN Pantone 354 (10, 20, and 40%)

Figure B-3. Grid Layout – Page 3

			13257035				
For this survey, Hispanic origins are	For this survey, Hispanic origins are not races. 4 Is this person of Hispanic, Latino, or 5 What is this person's race? Mark (X) one or more boxes.						
No, not of Hispanic, Latino, or Spanish origin Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, Cuban Yes, another Hispanic, Latino, or Spanish origin − Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. **P	White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. ✓	Asian Indian Chinese Filipino Japanese Korean Vietnamese Other Asian — Print race, for example, Hmong, Laotian, Thai,	Native Hawaiian ☐ Guamanian or Chamorro ☐ Samoan ☐ Other Pacific Islander — Print race, for — example, Fijian, Tongan, and so on. ☐ Some other race — Print race. ⊋				
No, not of Hispanic, Latino, or Spanish origin Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, Cuban Yes, another Hispanic, Latino, or Spanish origin − Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. ✓	White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. ✓	Pakistani, Cambodian, and so on. – Asian Indian Chinese Filipino Japanese Korean Vietnamese Other Asian — Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on. –	Native Hawaiian ☐ Guamanian or Chamorro ☐ Samoan ☐ Other Pacific Islander — Print race, for — example, Fijian, Tongan, and so on. ☐ Some other race — Print race. 7				
No, not of Hispanic, Latino, or Spanish origin Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, Cuban Origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on	White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. ✓	Asian Indian Chinese Filipino Japanese Korean Vietnamese Other Asian — Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.—	Native Hawaiian Guamanian or Chamorro Samoan Other Pacific Islander — Print race, for — example, Fijian, Tongan, and so on. Some other race — Print race. 7				
No, not of Hispanic, Latino, or Spanish origin Ses, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Ses, Cuban Ses, another Hispanic, Latino, or Spanish origin – Print origin, for example, Argentinesn, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.	White Black, African Am., or Negro American Indian or Alaska Native − Print name of enrolled or principal tribe.	Asian Indian Chinese Filipino Japanese Korean Vietnamese Other Asian — Print race, for example, Hmong, Lsotian, Thai, Pakistani, Cambodian, and so on.—	Native Hawaiian Guamanian or Chamorro Samoan Other Pacific Islander — Print race, for example, Fijlan, Tongan, and so on. Some other race — Print race. ₹				
No, not of Hispanic, Latino, or Spanish origin Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, Cuban Yes, another Hispanic, Latino, or Spanish origin – Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.	White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe.	Asian Indian Chinese Filipino Japanese Korean Vietnamese Other Asian — Print race, for example, Hmong, Lactian, Thai, Pakistani, Cambodian, and so on.—	Native Hawaiian ☐ Guamanian or Chamorro ☐ Samoan ☐ Other Pacific Islander — Print race, for example, Fijlan, Tongan, and so on. ☐ Some other race — Print race. ▼				
Person 9 Last Name (Please print) First Name MI First Name	Please print) Last I	SON 11 Name (Please print) Name MI	Person 12 Last Name (Please print) First Name MI				
TIST NAME	rvii First I	■ When you	rare finished, turn the page nue with the Housing section.				

ACS-1(X)Pro, Page 3, Base (Black)

ACS-1(X)Pro, Page 3, GREEN Pantone 354 (10, 20, and 40%)

13247010

U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU



THE American Community Survey

Please complete this form and return it as soon as possible after receiving it in the mail.

This form asks for information about the people who are living or staying at the address on the mailing label and about the house, apartment, or mobile home located at the address on the mailing label.



¿NECESITA AYUDA? Si usted habla español y necesita ayuda para completar su cuestionario, llame sin cargo alguno al 1-877-833-5625.

For more information about the American Community Survey, visit our web site at: http://www.census.gov/acs/www/

USCENSUSBUREAU

Start Here					
Please print today's date. Month Day Year Please print the name and telephone number of the person who is					
filling out this form. We may contact you if there is a question.					
Last Name					
First Name MI					
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, 3, and 4 for everyone, including yourself, who is					
living or staying at this address for more than 2 months. Then complete the rest of the form.					
FORM ACS-1(X)Seq OMB No. 0607-0936 (12.19-2008) Approval Expires 12/31/2009					

ACS-1(X)Seq, Page 1, Base (Black)

ACS-1(X)Seq, Page 1, GREEN Pantone 354 (20 and 40%)

Figure B-5. Sequential Layout – Page 2

				13247028
		Person 1		Person 2
1			•	What is Person 2's name?
	or	erson 1 is the person living or staying here in whose name this house apartment is owned, being bought, or rented. If there is no such		Last Name (Please print) First Name MI
1	pe	rson, start with the name of any adult living or staying here.)		
1			2)	How is this person related to Person 1? Mark (X) ONE box.
a	w	hat is Person 1's name?	Τ	Husband or wife
٦	Las	st Name (Please print) First Name MI		☐ Biological son or daughter ☐ Son-in-law or daughter-in-law
1				Adopted son or daughter Other relative
-1				Stepson or stepdaughter Roomer or boarder
٨	\			☐ Brother or sister ☐ Housemate or roommate
Ľ) Ho	ow is this person related to Person 1?		Father or mother Unmarried partner
1	X	Person 1		Grandchild Other nonrelative
Ġ	w	hat is Person 1's sex? Mark (X) ONE box.	3	What is Person 2's sex? Mark (X) ONE box.
1		Male Female		☐ Male ☐ Female
9	Ple	hat is Person 1's age and what is Person 1's date of birth? ease report babies as age 0 when the child is less than 1 year old. int numbers in boxes.	4	What is Person 2's age and what is Person 2's date of birth? Please report babies as age 0 when the child is less than 1 year old. Print numbers in boxes.
- 1	Ag	e (in years) Month Day Year of birth		Age (in years) Month Day Year of birth
1				
1	L			
	NO Qu	OTE: Please answer BOTH Question 5 about Hispanic origin and lestion 6 about race. For this survey, Hispanic origins are not races.		NOTE: Please answer BOTH Question 5 about Hispanic origin and Question 6 about race. For this survey, Hispanic origins are not races.
G	Is	Person 1 of Hispanic, Latino, or Spanish origin?	a	Is Person 2 of Hispanic, Latino, or Spanish origin?
Т		No. and of Minarcia Latina or Country arisin	T	Ma and of Ulameria Latina on Country points
-1	_	No, not of Hispanic, Latino, or Spanish origin		No, not of Hispanic, Latino, or Spanish origin
-1	_	Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican		Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican
- 1		Yes, Cuban		Yes, Cuban
- 1	1			
1		Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard,		Yes, another Hispanic, Latino, or Spanish origin – Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard,
1		and so on. 7		and so on. 7
1				
1			\perp	
6	W	hat is Person 1's race? Mark (X) one or more boxes.	6	What is Person 2's race? Mark (X) one or more boxes.
Τ		White	Τ	White
-1		Black, African Am., or Negro		Black, African Am., or Negro
1		American Indian or Alaska Native — Print name of enrolled or principal tribe. $ abla$		American Indian or Alaska Native — Print name of enrolled or principal tribe.
1		American indian of Alaska Native — Frint hame of emolied of principal tribe.		American indian of Alaska Native — Finit haine of enforced of principal tribe.
1				
1				
		Asian Indian Japanese Native Hawaiian		Asian Indian Japanese Native Hawaiian
1		Chinese		☐ Chinese ☐ Korean ☐ Guamanian or Chamorro
1	Ē			Filipino Vietnamese Samoan
1	一百	Other Asian – Print race, Other Pacific Islander –		Other Asian - Print race, Other Pacific Islander -
-1		for example, Hmong, Print race, for example,		for example, Hmong, Print race, for example,
1		Laotian, Thai, Pakistani, Fijian, Tongan, and Cambodian, and so on. 📈 so on. 📈		Laotian, Thai, Pakistani, Fijian, Tongan, and Cambodian, and so on. ✓ so on. ✓ so on. ✓
1		Some other race – Print race.		☐ Some other race – Print race. ✓
L	_			
	2			

ACS-1(X)Seq, Page 2, Base (Black)

ACS-1(X)Seq, Page 2, GREEN Pantone 354 (20 and 40%)

Figure B-6. Sequential Layout – Page 3

What is Person 3's name? Last Name (Please print) How is this person related to Person 1? Mark (X) ONE box. Hasband or wife Biological son or daughter Adopted son or daughter Adopted son or daughter Bother or slater Brother or daughter Brother or daughter Brother or daughter Coher indicated patter Coher mother Brother or daughter Coher mother Coher Mark (X) ONE box. What is Person 4's sape and what is Person 3's date of birth? Please answer BOTH Question Sabut Hispanic origin and Question 6 about Hispanic origin and Question 6 ab					13247036
Last Name (Please print) First Name Mi Last Name (Please print) First Name Min Last Name Min Last Name (Please Print) First Name Min Last Name	Pers	on 3		Per	son 4
Last Name (Please print) First Name Mi Last Name (Please print) First Name Min Last Name Min Last Name (Please Print) First Name Min Last Name	What is Person 3's name?			What is Person 4's name?	
How is this person related to Person 1? Mark (X) ONE box. Hubband or wrife Person 1-law or daughter Son-in-law or salter Son-in-la		First Name	_		First Name MI
Husband or wife Parent-in-law Biological son or daughter Cher relative Cher rela	,				
Biological son or daughter Son-in-law or daughter-in-law Adopted son or daughter Other relative Stepson or stepdaughter Other ronarder Stepson or stepdaughter Roomer or boarder Brother or alster Housemate or roommate Brother or alster Housemate Other norrelative What is Person 4's sear and what is Person 4's date of birth? Part of the child is less than 1 year old. Part of the child is less than 1 year old. Part of the child is less than 1 year old. Part of the child is less than 1 year old. Part of the child is less than 1 year old. Part of the child is less than 1 year old. Part of the child is less than 1 year old. Part of the child is less than 1 year old. Part of the child is less than 1 year old. Part of the child is less than 1 year old. Part of the child is less than 1 year old. Part of the child is less than 1 year old. Part of th	How is this person related to Pers	son 1? Mark (X) ONE box.	2	How is this person related to Pe	erson 1? Mark (X) ONE box.
Stepson or stepdaughter Roomer or boarder Brother or sister Housemate or roommate Brother or mother Unmarried partner Grandchild Other nonrelative What is Person 3's sex? Mark (X) ONE box. Male Female Female What is Person 3's age and what is Person 3's age and what is Person 3's date of birth? Please report bebies as age 0 when the child is less than 1 year old. Print numbers in boxes. Male Female What is Person 3's age and what is Person 4's age and what is Person 4's date of birth? Please report bebies as age 0 when the child is less than 1 year old. Print numbers in boxes. Male Female What is Person 4's age and what is Person 4's date of birth? Please report bebies as age 0 when the child is less than 1 year old. Print numbers in boxes. Age (in years) Month Day Year of birth Please answer BOTH Question 5 about Hispanic origin and Question 6 about race, For this survey, Hispanic origin are not races. Person 3's factor of hispanic, Latino, or Spanish origin? No. not of Hispanic, Latino, or Spanish origin Yea, Mexican Am., Chicano Yea, Detro Rican Yea, Outban Yea, Detro Rican Yea, Detro Rican Yea, Outban Yea, Detro Rican	Biological son or daughter	Son-in-law or daughter-in	-law	Biological son or daughter	Son-in-law or daughter-in-law
Brother or sister					_
Gather or mother Cher nonrelative Grandchild Cher nonrelative Grandchild Cher nonrelative Grandchild Cher nonrelative Grandchild Cher nonrelative				p	
Grandchild Other nonrelative Other nonrelative Grandchild Other nonrelative Development Deve		=			
Male Female					
What is Person 3's age and what is Person 3's date of birth? Please report babies as age 0 when the child is less than 1 year old. Print numbers in boxes. Age (in years) Month Day Year of birth What is Person 4's age and what is Person 4's date of birth? Please report babies as age 0 when the child is less than 1 year old. Print numbers in boxes. Age (in years) Month Day Year of birth NOTE: Please answer BOTH Question 5 about Hispanic origin and Question 6 about race. For this survey, Hispanic origins are not races. Is Person 3 of Hispanic, Latino, or Spanish origin Yes, Mexican, Mexican Am., Chicano Yes, Quban Yes, Quban Yes, Quban Yes, Quban Origin, Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. What is Person 3's race? Mark (X) one or more boxes. What is Person 3's race? Mark (X) one or more boxes. What is Person 3's race? Mark (X) one or more boxes. What is Person 4's race	What is Person 3's sex? Mark (X)	ONE box.	3	What is Person 4's sex? Mark (X	() ONE box.
Please report bables as age 0 when the child is less than 1 year old. Print numbers in boxes. Age (in years)	☐ Male ☐ Female			☐ Male ☐ Female	
NOTE: Please answer BOTH Question 5 about Hispanic origin and Question 6 about race. For this survey, Hispanic origin and Question 6 about race. For this survey, Hispanic origin are not races. Is Person 3 of Hispanic, Latino, or Spanish origin? No, not of Hispanic, Latino, or Spanish origin? No not of Hispanic, Latino, or Spanish origin? No not of Hispanic, Latino, or Spani	Please report babies as age 0 when t		_	Please report babies as age 0 when	
Question 6 about race. For this survey, Hispanic origins are not races. Is Person 3 of Hispanic, Latino, or Spanish origin? No, not of Hispanic, Latino, or Spanish origin Yes, Quban Yes, Quban Yes, Quban Yes, Another Hispanic, Latino, or Spanish origin – Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. What is Person 3's race? Mark (X) one or more boxes. What is Person 4's race? Mark (X) one or more boxes. White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. Asian Indian Chinese Chines	Age (in years) Month Day	Year of birth		Age (in years) Month Da	y Year of birth
Question 6 about race. For this survey, Hispanic origins are not races. Is Person 3 of Hispanic, Latino, or Spanish origin? No, not of Hispanic, Latino, or Spanish origin Yes, Puerto Rican Yes, Quban Yes, Ouban Yes, Ouban Yes, Another Hispanic, Latino, or Spanish origin – Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. What is Person 3's race? Mark (X) one or more boxes. What is Person 4's race? Mark (X) one or more boxes. White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. Asian Indian Chinese Korean Guamanian or Chamorro Filipino Other Asian — Print race, for example, Filian, Tongan, and so on. This, Pakistani, Cambodian, and so on. This, Pakistani, Cambodian, and so on. This, Pakistani, Cambodian, and so on. This Pakista					
No, not of Hispanic, Latino, or Spanish origin Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban	NOTE: Please answer BOTH Quest Question 6 about race. For this sur	tion 5 about Hispanic origin and vey, Hispanic origins are not race	s.	NOTE: Please answer BOTH Que Question 6 about race. For this s	estion 5 about Hispanic origin and urvey, Hispanic origins are not races.
Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, Cuban Yes, Se, Cuban Yes, Cuban Yes, Cuban, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. ✓ Yes, another Hispanic, Latino, or Spanish origin – Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. ✓ What is Person 3's race? Mark (X) one or more boxes. What is Person 4's race? Mark (X) one or more boxes. White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. White Asian Indian Japanese Native Hawaiian Chinese Korean Guamanian or Chamorro Filipino Vietnamese Samoan Other Asian – Print race, for example, Hmong, Ladian, Thai, Pakistani, Cambodian, and so on. ✓ Other Pacific Islander – Print race, for example, Fijian, Tongan, and so on. ✓ Other Pacific Islander – Print race, for example, Fijian, Tongan, and so on. ✓					
Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, Cuban Yes, Se, Cuban Yes, Cuban Yes, Cuban, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. ✓ Yes, another Hispanic, Latino, or Spanish origin – Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. ✓ What is Person 3's race? Mark (X) one or more boxes. What is Person 4's race? Mark (X) one or more boxes. White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. White Asian Indian Japanese Native Hawaiian Chinese Korean Guamanian or Chamorro Filipino Vietnamese Samoan Other Asian – Print race, for example, Hmong, Ladian, Thai, Pakistani, Cambodian, and so on. ✓ Other Pacific Islander – Print race, for example, Fijian, Tongan, and so on. ✓ Other Pacific Islander – Print race, for example, Fijian, Tongan, and so on. ✓	No, not of Hispanic, Latino, or Span	ish origin	T	No, not of Hispanic, Latino, or Sp	anish origin
Yes, Puerto Rican Yes, Cuban Yes, Cuban Yes, Cuban Yes, another Hispanic, Latino, or Spanish origin − Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. ▼ What is Person 3's race? Mark (X) one or more boxes. 6 White Black, African Am., or Negro American Indian or Alaska Native − Print name of enrolled or principal tribe. White Black, African Am., or Negro American Indian or Alaska Native − Print name of enrolled or principal tribe. Chinese Korean Guamanian or Chamorro Filipino Vietnamese Samoan Other Asian - Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on. ▼ Other Pacific Islander - Print race, for example, Fijian, Tongan, and so on. ▼ Yes, Quban Yes, Qub	Yes, Mexican, Mexican Am., Chicano			Yes, Mexican, Mexican Am., Chica	ano
Yes, another Hispanic, Latino, or Spanish origin − Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. What is Person 3's race? Mark (X) one or more boxes. White Black, African Am., or Negro American Indian or Alaska Native − Print name of enrolled or principal tribe. White Black, African Am., or Negro American Indian or Alaska Native − Print name of enrolled or principal tribe. White Black, African Am., or Negro American Indian or Alaska Native − Print name of enrolled or principal tribe. Asian Indian Japanese Native Hawaiian Chinese Korean Guamanian or Chamorro Filipino Vietnamese Samoan Other Pacific Islander − Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Rative Hawaiian Other Pacific Islander − Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Rative Hawaiian Other Pacific Islander − Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Rative Hawaiian Other Pacific Islander − Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Rative Hawaiian Other Pacific Islander − Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Rative Hawaiian Other Pacific Islander − Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Print race, for example, Highian, Tongan, and so on. Print race				Yes, Puerto Rican	
Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. What is Person 3's race? Mark (X) one or more boxes. White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. Asian Indian Chinese Notinease Other Asian — Print race, for example, Hilpino Other Asian — Print race, for example, Hilpin, Cambodian, and so on. This pastistani, Cambodian, and so on. Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Salva	Yes, Cuban			Yes, Cuban	
What is Person 3's race? Mark (X) one or more boxes. White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. Asian Indian Chinese Chinese Chinese Cother Asian — Print race, for example, Hilpin on Chamors, Laotian, Thai, Pakistani, Cambodian, and so on. White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. White Black, African Am., or Negro American Indian or Alaska Native — Print name of enrolled or principal tribe. Chinese	Argentinean, Colombian, Dominican	anish origin – Print origin, for example , Nicaraguan, Salvadoran, Spaniard,		Argentinean, Colombian, Dominio	Spanish origin – Print origin, for example, an, Nicaraguan, Salvadoran, Spaniard,
White □ Black, African Am., or Negro □ American Indian or Alaska Native — Print name of enrolled or principal tribe. □ Asian Indian □ Chinese □ Korean □ Guamanian or Chamorro □ Filipino □ Vietnamese □ Other Pacific Islander — Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on. □ White □ Black, African Am., or Negro □ American Indian or Alaska Native — Print name of enrolled or principal tribe. □ Asian Indian □ Japanese □ Native Hawaiian □ Chinese □ Korean □ Guamanian or Chamorro □ Filipino □ Vietnamese □ Samoan □ Other Asian – Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on. □ Other Pacific Islander — Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian, and so on. □ Other Pacific Islander — Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Pacific Islander – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □ Other Asian – Print race, for example, Fijian, Tongan, and so on. □	and so on.			and so on.	
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for example, Hmong, Print race, for example, Laotian, Thai, Pakistani, Fijian, Tongan, and Cambodian, and so on. So on. Cambodian, and so on.		nese 🗌 Samoan			
Laotian, Thai, Pakistani, Fijian, Tongan, and Laotian, Thai, Pakistani, Fijian, Tongan, and Cambodian, and so on. So o	Other Asian - Print race,				
	Laotian, Thai, Pakistani,	Filian, Tongan, and		Laotian, Thai, Pakistani,	Fijian, Tongan, and
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ACS-1(X)Seq, Page 3, Base (Black)

ACS-1(X)Seq, Page 3, GREEN Pantone 354 (20 and 40%)

Figure B-7. Sequential Layout – Page 4

	Perso	n.5	Mahara ara mara shan fiya naanla liying ar staying bara	
wis	at is Person 5's name?		If there are more than five people living or staying here, print their names in the spaces for Person 6 through Person 1: We may call you for more information about them. →	2.
	: Name (Please print)	First Name MI	Person 6	
			Last Name (Please print) First Name	МІ
Ho	w is this person related to Perso	n 1? Mark (X) ONE box.		
	Husband or wife Biological son or daughter Adopted son or daughter Stepson or stepdaughter Brother or sister Father or mother	Parent-in-law Son-in-law or daughter-in-law Other relative Roomer or boarder Housemate or roommate Ummarried partner	Sex Male Female Age (in years) Person 7 Last Name (Please print) First Name	МІ
	Grandchild at is Person 5's sex? Mark (X) ON	Other nonrelative		-
	Male Female	ie box.	Sex	
Plea Prii	at is Person 5's age and what is ase report bables as age 0 when the at numbers in boxes. (in years) Month Day		Person 8 Last Name (Please print) First Name	МІ
Que	TE: Please answer BOTH Questic estion 6 about race. For this surve	y, Hispanic origins are not races.	Sex Male Female Age (in years)	
	No, not of Hispanic, Latino, or Spanisl Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban		Last Name (Please print) First Name	МІ
	Yes, another Hispanic, Latino, or Span Argentinean, Colombian, Dominican, I and so on.	ish origin – Print origin, for example, Vicaraguan, Salvadoran, Spaniard,	Sex Male Female Age (in years)	
	and so on.		Person 10 Last Name (Please print) First Name	МІ
) Wh	at is Person 5's race? Mark (X) or	ne or more boxes.		
	White Black, African Am., or Negro American Indian or Alaska Native — P	rint name of enrolled or principal tribe. 📝	Sex Male Female Age (in years)	
			Person 11 Last Name (Please print) First Name	MI
	Asian Indian	Guamanian or Chamorro		_
	for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.	Print race, for example, Fijian, Tongan, and so on.	Sex Male Female Age (in years) Person 12	
			Last Name (Please print) First Name	МІ
	Some other race – Print race. 📈			-
			Sex Male Female Age (in years)	

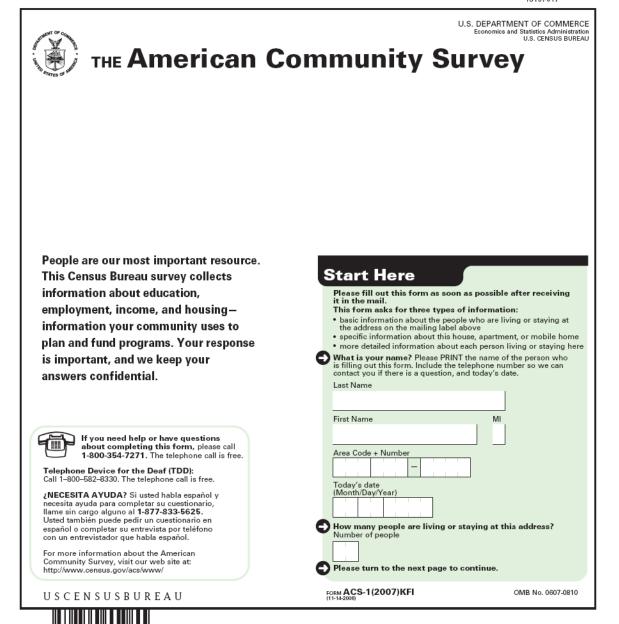
ACS-1(X)Seq, Page 4, Base (Black)

ACS-1(X)Seq, Page 4, GREEN Pantone 354 (20 and 40%)

Appendix C: 2007 ACS Questionnaire Images

Figure C-1. 2007 ACS Questionnaire – Page 1

13197017



C-1

Figure C-2. 2007 ACS Questionnaire – Page 2

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	List of Res	sidents	What is this person's sex?	What is this person's age and what is this person's date of birth? Print numbers in boxes.	How is this person related to Person 1?	
	READ THESE INSTRUCTIONS FIRST This survey collects information about the people who are living or staying here for more than 2 months.	Person 1 Last Name (Please print) First Name MI	☐ Male ☐ Female	Age (in years) Month Day Year of birth	Person 1 Person living or staying here in whose name this house or apartment is owned, being bought, or rented. If there is no such person, start with the name of any adult living or staying here.)	
0	On the List of Residents - • Include everyone living or staying here for more than 2 months. In the Person 1 space, list one of the people living here who owns or rents this house or apartment. Remember to include yourself on the list if	Person 2 Last Name (Please print) First Name MI	☐ Male ☐ Female	Age (in years) Month Day Year of birth	Relationship of Person 2 to Person 1. Husband or wife Roomer, boarder Son or daughter Housemate, roommate Brother or sister roommate Father or mother Unmarried partner Grandchild Foster child In-law Other nonrelative Other relative	
	you are staying here for more than 2 months. Include anyone 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	Person 3 Last Name (Please print) First Name MI	☐ Male ☐ Female	Age (in years) Month Day Year of birth	Relationship of Person 3 to Person 1. Husband or wife Roomer, boarder Son or daughter Housemate, roommate Father or mother Unmarried partner Grandchild Foster child In-law Other nonrelative Other relative	
	living away. If no one is staying here for more than 2 months, do not list any names in the List of Residents. Complete only pages 4, 5, and 6 and return the form. If you are not sure whom to list, call	Person 4 Last Name (Please print) First Name MI	☐ Male ☐ Female	Age (in years) Month Day Year of birth	Relationship of Person 4 to Person 1.	
	If there are more than five people living or staying here, print their names in the spaces for Person 6 through Person	Person 5 Last Name (Please print) First Name MI	☐ Male ☐ Female	Age (in years) Month Day Year of birth	Relationship of Person 5 to Person 1. Husband or wife Roomer, boarder Son or daughter Housemate, roommate Father or mother Unmarried partner Grandchild Foster child In-law Other nonrelative Other relative	
9	12. We may call you for more information about them. After you complete the List of Residents, answer the questions asked at the top of pages 2 and 3 for the first five people on the list.	Person 6 Last Name (Please print) First Name MI	Person Last Nam First Nam	e (Please print)	Person 8 Last Name (Please print) First Name MI	
2						

Figure C-3. 2007 ACS Questionnaire – Page 3

				13197033
4	What is this person's marital	NOTE: Please answer BOTH Questio	What is this person's race? Ma	ark (X) one or more races to indicate what this
	status?	Latino? Mark (X) the "No" box if not Spanish/Hispanic/Latino.	person considers himself/herself	to De.
	Now married Widowed Divorced Separated Never married	No, not Spanish'Hispanic/Latino Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, Cuban Yes, other Spanish'Hispanic/ Latino — Print group.	White Black or African American American Indian or Alaska Native — Print name of enrolled or principal tribe.	Asian Indian Chinese Guamanian or Chamorro Filipino Samoan Japanese Other Pacific Islander — Print race below. Vietnamese Other Asian — Print race.
	Now married Widowed Divorced Separated Never married	No, not Spanish/Hispanic/Latino Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, Cuban Yes, other Spanish/Hispanic/ Latino — Print group.	White Black or African American American Indian or Alaska Native − Print name of enrolled or principal tribe.	Asian Indian Chinese Guamanian or Chamorro Filipino Samoan Other Pacific Islander — Print race below. Vietnamese Other Asian — Print race.
	Now married Widowed Divorced Separated Never married	No, not Spanish/Hispanic/Latino Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, Cuban Yes, other Spanish/Hispanic/ Latino — Print group.	White Black or African American American Indian or Alaska Native − Print name of enrolled or principal tribe.	Asian Indian Chinese Guamanian or Chamorro Filipino Samoan Other Pacific Islander — Print race below. Vietnamese Other Asian — Print race.
	Now married Widowed Divorced Separated Never married	No, not Spanish/Hispanic/Latino Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, other Spanish/Hispanic/ Latino — Print group.	White Black or African American American Indian or Alaska Native → Print name of enrolled or principal tribe.	Asian Indian Native Hawaiian Chinese Guamanian or Chamorro Filipino Samoan Japanese Other Pacific Islander — Print race below.
	Now married Widowed Divorced Separated Never married	Ne, not Spanish/Hispanic/Latino Yes, Mexican, Mexican Am., Chicano Yes, Puerto Rican Yes, Cuban Yes, other Spanish/Hispanic/ Latino — Print group.	White Black or African American American Indian or Alaska Native − Print name of enrolled or principal tribe. ✓	Asian Indian Native Hawaiian Chinese Guamanian or Chamorro Filipino Samoan Other Pacific Islander — Print race below.
	Person 9 Last Name (Please p	Person 10 Last Name (Please print)	Person 11 Last Name (Please print	Person 12 Last Name (Please print)
	First Name	MJ First Name	MI First Name	MI First Name MI When you are finished, turn the page
				Then you are missied, turn the page

C-3