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**CFU CPEX Experimental Question Cognitive Testing:
Undercount, Overcount and Duplicate
Experimental Question Sequences**

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Executive Summary

The objective of this research was to conduct cognitive testing of experimental questions to be added to the end of a sample of cases in the Coverage Followup (CFU) operation during the 2010 Census. These experimental questions are a part of the Census Program Evaluations and Experiments (CPEX). The experimental questions will gather data on households who reported an indication of overcount or undercount on their initial census response, but then did not respond to the CFU interview accordingly (i.e., did not mention another address or person, respectively), or cases where a potential duplicate was identified in the data, but no indication of a second address was reported during the CFU interview. In order to test this, we used cases from the 2008 Census Dress Rehearsal North Carolina test site that fit one of three criteria: 1) the household marked “yes” to the undercount question in the initial census form, but did not list any potential additional people during the CFU interview; 2) the household marked an affirmative overcount category for at least one household member on the initial census form, but did not flag that person as having another place to stay during the CFU interview; and 3) a suspected person duplicate was identified through computer matching of the census data, and the CFU interview did not reveal an additional address for that person. Results are presented in three sections below, corresponding to the above three criteria.

Undercount

We tested the experimental question wording for undercount situations with nine respondents. The main limitation to this section is the small sample size resulting in the fact that we only tested the scenarios “somebody was staying there temporarily” (in five cases), “a relative was staying there, such as adult children, cousins, or in-laws” (in three cases), and “a child was staying there, such as a newborn baby or foster child” (in one case). Our findings may or may not pertain to the other undercount category, “a non-relative was staying there, for example a roommate or live-in baby sitter.”

This question series (presented in full in the body and appendix of the report) was fairly successful. It elicited the name of a person in eight out of nine cases. In six of those cases, the respondent mentioned a person who was not already on the roster. In two cases, the respondent reported that the person they had in mind was already on the roster. In the case where a person was not identified during the survey, during the debriefing the respondent reported that she had probably been thinking of someone who was already on the roster. We have two recommendations to the question wording that we think will clear up the confusion that a few respondents experienced, as well as the situations where the “undercounted” person was actually already counted.

We also tested several follow-up questions to elicit information about why this person had not been listed during the CFU interview. One of these questions, which directly asked why the person was not mentioned earlier, was deemed too sensitive and not productive. An alternate series of follow-up questions is proposed in the report.

Overcount

We tested the experimental question wording for overcount situations with eight households, all of which involved someone who lived or stayed somewhere else “while in the military.” Two additional respondents were selected to receive the undercount questions, but also received the overcount experimental questions because the respondent indicated on the initial questionnaire that a person lived or stayed somewhere else “for another reason.” We did not test the categories “while attending college,” “while at a seasonal or second home,” “due to a child custody arrangement,” “while in jail or prison,” or “while in a nursing home.” Thus our findings may or may not apply to those cases.

The overcount question series worked reasonably well, and could, we think, perform well in 2010 with fairly minor revisions. The question series yielded an address or a place for five of the ten tested cases. In three of the other cases, it yielded information that the person sometimes deploys for the military, but not during the time frame posed in the CFU questions. This testing allowed us to propose some options for response categories for the experimental question that we think will account for a large portion of the followed-up people. We suggest supplementary follow-up probes to learn more about the situations of these people without asking respondents directly why the other address was not reported earlier, due to the fact that the direct question that we tested was sensitive and non-productive.

Duplicates

We tested the experimental question wording on seven households with duplicate situations, four of which were children that appeared to be duplicated in two different housing units. The wording of the tested questions differed depending on whether we were speaking with the actual suspected duplicated person or another household member. When speaking with the actual suspected duplicate, the tested question wording mentioned the state in which we thought the person might have been duplicated. We only tested the questions with the actual suspected duplicated people as the respondents in two cases, both of which, incidentally, were not actually person duplicates.¹ Most of our testing was conducted with respondents who were members of the duplicated person’s household, but not the duplicate him or herself (because four of the seven suspected duplicates were underage). The wording used when speaking to a proxy does not mention the name of the state in which the person was duplicated, but rather uses the generic wording, “another residence.” Since the duplicates were identified through a site test, all duplicates were identified within the same state. Thus, we did not test out-of-state duplicate question wording, except through a hypothetical scenario. Additionally, there were no housing unit-to-group quarters matches in the 2008 Census Dress Rehearsal. Therefore we could only test those questions in a hypothetical situation as well.

The first question in this series identified the duplicate person by name and said: “NAME may have been counted at another residence (fill: ‘in STATE NAME’) as well as on your census form.” Researchers found this phrasing was very sensitive, at least for one respondent – a father

¹ One seemed not to be a duplicate at all and the other was a housing unit duplicate, which means that the same housing unit was listed on the address list two times with slightly different designations. Thus, the respondent had completed two nearly identical census returns.

with sole custody of his children – who was upset because he inferred from this question that the mother of his children had reported the children on her census form. In this case, we think that we inadvertently provided information that allowed him to make a connection that may be perceived as a breach of confidentiality. Based on the interview, we do believe that he will tell the mother of the children about the visit and accuse her of completing her census form incorrectly. We had two other cases of duplicated children where a similar follow-up may have been made – in one case the respondent told the interviewer during a post-interview telephone conversation that she had called her daughter about the situation (the interviewer called the respondent back to ask a follow-up question), and in another case, based on the conversation, we believe that the respondent will follow up with the duplicated child's parent. We think this will be perceived as a breach of confidentiality by the other household. They may not realize that we did not give away confidential data in the interview; the connection was just inferred by the respondent. Though we saw this sensitive situation with duplicated children, we believe that this situation could also happen with adults. In one case of an adult son who sometimes stayed with his girlfriend, the respondent (his mother) made some very critical and hostile remarks about the girlfriend and reported inconsistently about how much time the son spent with the girlfriend. We deem this to be a sensitive reaction as well, and think it could also lead to a conversation by which the girlfriend feels her confidentiality has been breached.

Because we did not have the opportunity to ask about out-of-state duplicates, we did this during the debriefing by asking, “Would it bother you if we said that our records indicate that you may have been counted in Texas as well as on your census form?” Two respondents immediately said they would worry about identity theft – one whose son works in the police force said her son would investigate it, and the other said he would check his credit report. We think there is a high risk in asking questions about out-of-state duplicates because there is a chance (even if it is a small chance) that it might not be a real duplicate. Though this should seldom happen, out of the seven cases we investigated in this small study, two of them turned out not to be person duplicates. We acknowledge that the matching criteria may have been less strict in the dress rehearsal than it will be in 2010, but it still gives us cause for concern.

Because of these two areas of sensitivity, we do not recommend directly saying that our records indicate that a specific person may have been duplicated. While this text does not violate our confidentiality mandates, we feel that it might be perceived as violating confidentiality if the respondent figures out who duplicated them. Additionally, we do not recommend using the state name in the question wording for out-of state duplicates. Even if only a small percentage of cases turn out not to be real duplicates, we think the risk is too high. Instead, we recommend focusing the experimental questions for duplicates only on the duplicated people, putting less focus on people being counted somewhere else and more focus on giving examples of types of places where a person could have been counted that have not been mentioned in CFU previously, such as their parents' house and girlfriend's or boyfriend's house. Additionally, the question text should mention that we would like to know about another address the person has, even if they just go there on the weekends. The reason some respondents reported not providing the address sooner was that the person in question only stays at the other place on weekends. We do recommend that these questions be tested for sensitivity with real duplicate cases prior to fielding them.

CFU CPEX Experimental Question Cognitive Testing: Undercount, Overcount and Duplicate Experimental Question

1. Background

In 2010, households in the United States will complete a census form either by mail or with the assistance of an interviewer. Upon receipt, the Census Bureau processes these forms to see if the household warrants a follow-up phone interview to clarify who should be counted in each housing unit. That follow-up interview is called Coverage Followup (CFU). There are several characteristics of a census response that can initiate a CFU interview, including (but not limited to) respondents who 1) mark one of several pre-specified categories to the “undercount” question, indicating that there could be other people staying in the housing unit that were not listed on the form (see Figure 1, Question 2); 2) mark one of the pre-identified categories to the “overcount” question for at least one person in the household, indicating that the person may have another place where he or she could be counted in the census (see Figure 2); or 3) are identified through computer matching as having household members who may have been counted twice in the census. The CFU interview asks a more extensive set of questions aimed at determining census day residency status for each person who could have possibly been listed at that address.

The objective of this research was to conduct cognitive testing of experimental questions to be added to the end of the interview for a sample of cases in the CFU operation during the 2010 Census. These experimental questions are a part of the Census Program Evaluations and Experiments (CPEX). The experimental questions will gather data on households who reported an indication of overcount or undercount on their initial census response, but then did not respond to the CFU interview accordingly, or cases where a potential duplicate was identified in the data, but no indication of the duplicate address was reported during the CFU interview. This cognitive testing sought whether or not respondents understood these experimental questions, as well as whether or not the questions functioned as intended, revealing the person or address that had been alluded to on the initial return or the address that appeared via a computer match to contain a duplicate record for the same person.

2. Methods

In order to test respondents who fit these very particular criteria, we used cases from the 2008 Census Dress Rehearsal in a nine-county area surrounding Fayetteville, North Carolina. Decennial Statistical Studies Division (DSSD) staff searched the dress rehearsal data for cases that fit one of three criteria: 1) the household marked “yes” to the undercount question in the initial census form (see Figure 1, Question 2), but did not list any potential additional people during the CFU interview; 2) the household marked an affirmative overcount category for at least one household member on the initial census form (see Figure 2), but did not report that person as having another place to stay during the CFU interview; or 3) a potential person duplicate was identified through computer matching of the census data, and the CFU interview did not reveal an alternate address for that person. DSSD staff gathered a list of households and associated phone numbers from the dress rehearsal data that met these criteria. Statistical

Research Division (SRD) and DSSD staff used this list to recruit respondents to participate in a second test interview situation.

The test interviews occurred in the test site in North Carolina in August and September of 2008. In the test interview, DSSD staff administered the CFU questionnaire again, followed by the experimental questions. An SRD cognitive interviewer administered a semi-structured cognitive debriefing interview following the test interview to determine how the experimental questions worked, as well as to evaluate the sensitivity of the experimental questions. Additionally, respondents were asked hypothetical questions at the end of the interview to test experimental questions for which we were not able to recruit respondents during this test. Those debriefing questions are described in more detail in the results and recommendations section for each question.

2.1 Undercount

Nine cases in this study were recruited because the household marked “yes” to the undercount question in the initial census form (see Figure 1, Question 2), but did not list any potential additional people during the CFU interview. Figure 1 shows the context of the undercount question on the census form. It follows the “person count” question, where the respondent is asked for the number of people living or staying at the unit, according to census residence rules. Question 2 is the undercount question, and the figure shows all of the response options to this question. The goal of this question is to find out if there are potentially other people staying in the unit that have not been counted in the census (and thus, the household has an “undercount”).

In five of the tested cases, the respondent had indicated that “somebody was staying there temporarily” on their initial census form. In three of these cases, the respondent had indicated that “a relative was staying there, such as adult children, cousins, or in-laws” on their initial form. In one case, the respondent indicated that “a child was staying there, such as a newborn baby or foster child” on the initial form. All respondents had completed a CFU interview and none of them reported any additional people, thus qualifying them for this experimental interview.

Use a blue or black pen.

Start here

The Census must count every person living in the United States on April 1, 2010.

Before you answer Question 1, count the people living in this house, apartment, or mobile home using our guidelines.

- Count all people, including babies, who live and sleep here most of the time.

The Census Bureau also conducts counts in institutions and other places, so:

- Do not count anyone living away either at college or in the Armed Forces.
- Do not count anyone in a nursing home, jail, prison, detention facility, etc., on April 1, 2010.
- Leave these people off your form, even if they will return to live here after they leave college, the nursing home, the military, jail, etc. Otherwise, they may be counted twice.

The Census must also include people without a permanent place to stay, so:

- If someone who has no permanent place to stay is staying here on April 1, 2010, count that person. Otherwise, he or she may be missed in the census.

1. How many people were living or staying in this house, apartment, or mobile home on April 1, 2010?

Number of people =

2. Were there any additional people staying here April 1, 2010 that you did not include in Question 1? Mark all that apply.

- Children, such as newborn babies or foster children
- Relatives, such as adult children, cousins, or in-laws
- Nonrelatives, such as roommates or live-in baby sitters
- People staying here temporarily
- No additional people

Figure 1. Person Count Question and “Undercount” Question on the 2010 Census Form

2.2 Overcount

Eight cases were selected for this study because the household marked an overcount category for at least one household member on the initial census form (see Figure 2), but did not report that person as having another place to stay during the CFU interview. All of these cases involved the respondent reporting on the census form that someone lived or stayed somewhere else “while in the military.” Figure 2 shows the overcount question, as well as all the possible response options to that question. There were two additional cases, selected initially as undercount cases, where the respondent also indicated that a household member lived or stayed somewhere else “for another reason” on the census form. Again, neither of these respondents had reported other

places that people lived or stayed to their CFU interview, thus qualifying them for this experimental interview².

10. Does Person 1 sometimes live or stay somewhere else?

No Yes — Mark all that apply.

<input type="checkbox"/> In college housing	<input type="checkbox"/> For child custody
<input type="checkbox"/> In the military	<input type="checkbox"/> In jail or prison
<input type="checkbox"/> At a seasonal or second residence	<input type="checkbox"/> In a nursing home
	<input type="checkbox"/> For another reason

Figure 2. 2010 Census “Overcount” Question

2.3 Duplicates

We also interviewed seven suspected duplicate cases where an automated matching system identified people in seven units as possible duplicates to people in other units within the test site. Four of these cases were children that appeared to be duplicated in two different housing units. The wording of the questions differed depending on whether we were speaking with the actual duplicated person or another household member (the tested wording is presented in the results and recommendations section). When speaking with the actual duplicated person, the tested question wording mentioned the state in which we thought the person might have been duplicated. We only tested the duplicate questions with the actual suspected duplicated people as the respondents in two cases, both of which, incidentally, were not actually person duplicates.³ Most of our testing was conducted with respondents who were household members of the duplicated person’s household, but not the duplicate him or herself (because four of the seven suspected duplicates were underage). The wording used when speaking to a proxy does not mention the name of the state in which the person was duplicated, but rather uses the generic wording “another residence.” Since the duplicates were identified through a site test, all duplicates were identified within the same state. Thus, we did not test out-of-state duplicate question wording, except through a hypothetical scenario. Additionally, there were no housing unit-to-group quarters matches in the 2008 Census Dress Rehearsal. Therefore we could only test those questions in a hypothetical situation as well.

2.4 Limitations

Our findings are limited for a number of reasons. First, we had a small sample of each type of case. Because of this, we did not get to sufficiently test each variant of the possible scenarios that would be covered in 2010. For the undercount question series, we only tested the scenarios of “somebody was staying there temporarily,” “a relative was staying there, such as adult children, cousins, or in-laws,” and “a child was staying there, such as a newborn baby or foster child.” Our

² These two respondents were first given the experimental undercount questions, and then the experimental overcount questions. Therefore, the test of the overcount questions is less “clean” than the test of the undercount questions. That is the reason we view these two additional cases as somewhat supplementary data.

³ One seemed not to be a duplicate at all and the other was a housing unit duplicate, which means that the same housing unit ended up on the address list two times with slightly different designations. Thus, the respondent had completed two nearly identical census returns.

findings may or may not pertain to situations that would fall into the other undercount category, “a non-relative was staying there, for example a roommate or live-in baby sitter.”

For the overcount question series, the majority of the cases we tested fell into the category “while in the military,” and two cases were in the category “for some other reason.” We did not test situations that fell into the categories “while attending college,” “while at a seasonal or second home,” “due to a child custody arrangement,” “while in jail or prison,” or “while in a nursing home.” Thus, our findings may or may not apply to those cases.

For the duplicate question series, we tested the majority of cases about children who were duplicated. We only tested the duplicate question series with the actual duplicated people as respondents in two cases, both of whom, incidentally, turned out not to be actual person duplicates. Thus, most of our testing was with the questions that were developed to be asked of someone who lived in the household with the duplicated person (since children are not eligible respondents). Additionally, data used for this study were from a small scale test in part of North Carolina and all duplicates were identified within the state of North Carolina. Thus, we were not able to test wording developed for duplicates that were identified across state borders, except through a hypothetical scenario.⁴ Similarly, because these data came from a relatively small scale test, there were no housing unit-to-group quarters⁵ matches in the 2008 Census Dress Rehearsal; therefore we could only test those questions in a hypothetical situation as well.

Additionally, because all testing was conducted in North Carolina, it is possible that these findings would not pertain if applied in other regions of the country. We do not think this would be the case, but cannot be sure without further, more expansive testing.

Finally, the interviewers in these cases were DSSD staff who work on CFU. They may have administered the questions in a way that would differ from production interviews, including probing for more information when we believe production interviewers would not have done so.

3. Undercount Question Series: Results and Recommendation

The undercount question series was fairly successful and we believe it could be implemented in 2010 with minor changes to the tested question wording. The series elicited the name of a person in eight out of nine cases. In six of those cases, the respondent mentioned a person who was not already on the census roster. In two cases, the respondent reported that the “undercounted” person was already on the census roster. In the case where a person was not identified during the survey, during the debriefing the respondent reported that she had probably been thinking of someone who was already on the roster. We have two recommendations to the question text that we think will clear up the confusion a few respondents experienced as well as the situations where the “undercounted” person was actually already counted.

⁴ See the results and recommendations section for the different types of wording that were developed.

⁵ The Census Bureau enumerates people who stay in group quarters (i.e., places that house groups of people like college dormitories, nursing homes and jails) in the place where they stayed on Census Day. Sometimes people are listed both at their “home residence” and at the group quarters, thus duplicated in the census.

We also tested several follow-up questions to elicit information on why this person had not been listed during the CFU interview. One of these questions, which directly asked why the person was not mentioned earlier, was deemed too sensitive and not productive. In this section, we will present each question as it was tested, followed by detailed question-specific findings and recommendations.

3.1 Undercount Experimental Question 1

The Census Bureau is doing research about questions on the census form you completed earlier this year. At that time, you were asked how many people lived or stayed there on May 1, 2008. You were asked if there were any additional people staying with you on May 1, 2008. You indicated (*fill 1st undercount category marked, i.e. a child was staying there, such as a newborn baby or foster child; a relative was staying there, such as adult children, cousins, or in-laws; a non-relative was staying there, for example a roommate or live-in baby sitter; somebody was staying there temporarily*) but that person was not included in the number of people you reported.

Can you tell me whom you were thinking about?

_____ MI _____
First Name Last Name

Do not Know/Refuse - End Mod

The person's date of birth

_____ / _____ / _____
Month Day Year

Was there anyone else that you were thinking about when you answered that question?

Yes – collect Name and DOB and ask the “anyone else” question again.

No – go to Question 2

This question yielded the name of a person in eight out of nine cases. In one of those cases, the respondent initially did not understand the question and had to be further probed by the interviewer to gather the name of a person. In another, a person was identified (e.g., “my sister”) but the respondent did not give that person’s name until she was further probed. In another, the respondent gave two names. The additional name surfaced in response to the follow-up question, “Was there anyone else you were thinking about when you answered that question?”

There was only one tested case in which the respondent said that she could not remember whom she had been thinking of when she completed her census form. In the debriefing, she reported being somewhat confused by the instruction on the census form not to include military people staying away. When shown the undercount question on the census form, she said that she remembered marking that a relative, her husband, stayed there also, but her husband was already counted in the question above. She said it was confusing because she was not supposed to include her husband, who was a military person staying away, but he was still a part of her

household. We attribute this confusion to problems with the census form itself rather than problems with the CFU questions.

One of our cognitive testing goals was to find out whether the people listed in response to this question were people already included on the census form or new people. In five out of eight cases, the person whose name was given was not on the census form already (these were successes and what the experimental questions intend to gather). In two cases, the name given was a name that was already on the census form (this indicates confusion with the initial undercount question on the census form). In one case, the respondent listed one person who was already on the roster and one person who was not (one misunderstanding and one success).

A related cognitive testing goal was to find out if, in those cases in which the respondent *had* already included the person on the census form, the use of the phrase “that person was not included in the number of people reported” in the question text was confusing. In two cases, the respondent had or may have had a problem with this phrasing. One respondent seemed upset and said, “I guess I must have made a mistake...No, I must have made a mistake. I’m sorry. I put that someone else was living there?” Another respondent, the one who reported that her husband was the “other relative,” may have been confused by the part of the question that said “that person was not included in the number of people reported” because she had included him in the number of people reported.

The final goal of the cognitive test was to find out generally whether or not respondents were confused by or had difficulty with this question. In two of the cases, respondents reported having difficulty with the question and indicated that they found it confusing. One respondent said, “I’m sorry. I misunderstood that.” The interviewer had to repeat the question. In the other case, the respondent was confused about the time frame and had apparently been thinking of 2007 when he originally answered the question. He needed to have the time frame clarified before he could answer the question about 2008.

3.1.1 Recommendations

Based on those findings, we believe this question with minor changes will be successful in the field. We recommend shortening the question and removing the phrase “but that person was not included in the number of people you reported” because sometimes this person was included in the number of people reported. We also recommend allowing the interviewer to input name and relationship on the screen if relationship is also provided by the respondent (as it sometimes was). The recommended wording is as follows:

The Census Bureau is doing research about questions on the census form you completed earlier this year. At that time, you indicated there was an additional person or people staying here on April 1, 2010. You reported (*fill 1st undercount category marked, i.e. a child was staying there, such as a newborn baby or foster child; a relative was staying there, such as adult children, cousins, or in-laws; a non-relative was staying there, for example a roommate or live-in baby sitter; somebody was staying there temporarily*). Can you tell me whom you were thinking about?

First Name

MI

Last Name

Relationship, if offered _____

Do not Know/Refuse - End Mod

What is this person's date of birth?

Month Day Year

See Appendix A for recommendations for the full question series.

3.2 Undercount Experimental Question 2

To help us understand more about how we ask questions, why didn't you mention (FULLNAME) earlier in this interview?

This question was asked in four cases. In two of those, it did not elicit any useful information and the person reacted in a way that we thought was defensive or self-conscious. One respondent said, "I did. . . I mentioned him when you asked the question again. When you went down the list." The other respondent said, "I did not know that. . . I did not know, you know. I did not know that that was important."

In the other two cases, the respondent did not seem affected in a negative way, and provided some additional information, but we felt that the usefulness of that information was limited. One respondent said that she did not include the person because he did not "contribute" to the household. The other respondent said, "I did not really consider him a resident. You know, my daughter has her friends that'll come over and stay four or five days, I do not consider that a resident; that's kind of a guest."

3.2.1 Recommendation

We recommend dropping this question from the series. It gathered minimal information, at best, and made respondents feel defensive at worst.

3.3 Undercount Experimental Question 3

Can you tell me if there are other places (FULLNAME) stays? If needed, How often did [fill FULLNAME] stay here? Did [fill FULLNAME] move or move back and forth?

This question was asked in four cases, and in all four it elicited useful information. However, in one of these cases the interviewer paraphrased the question by asking, "So you said he was in another place," rather than asking the question as phrased in the protocol.

A similar question was administered eight times as a debriefing probe: **Please tell me how much time NAME spent at each of his/her addresses in the past year.** In seven of these cases, asking this question elicited useful information. In one case, it did not. Furthermore, the respondent in the latter case found the question to be sensitive. (This was a case of a respondent

who was an older widow who had a man staying with her who she insisted was not a romantic partner – she thought asking how much time he spent there was sensitive, because it showed that he spent a lot of time there.) These questions do yield open-ended responses, which would need to be coded in order to be processed.

3.3.1 Recommendation

Based on those findings, we recommend parsing this line of questioning into four questions, as follows:

1. A yes/no question asking if the person stays somewhere else (because sometimes they do not)
2. A “permanent address” question to let respondents give their own judgment as to where the person “should” be counted
3. A “most of the time” question to code census day residency based on census residence rules
4. An open-ended question for research purposes to get a good qualitative picture of the living situation. This is where we expect the respondent will tell their story

The recommended wording for those four questions is as follows:

- 1. In the last 12 months, was there any other place NAME stayed?**
 Yes
 No
- 2. What address do you consider to be [fill name / your household]’s permanent address?**
 This address
 Another place
 Both places equally
- 3. In March and April of this year, where did [fill name / your household] spend most of the time?**
 This address
 Another place
 Both places equally
- 4. Please tell me how much time NAME spent at each of his/her addresses in the last 12 months.**
(open text)

See Appendix A for recommendations for the full question series.

4. Overcount Question Series: Results and Recommendation

The overcount question series also worked reasonably well, and we think it will perform well in 2010 with fairly minor revisions. The question series yielded an address or a place for five of the ten tested cases. In three of the other cases, it yielded information that the person sometimes deploys for the military, but not during the time frame posed in the CFU questions. This testing allowed us to propose some options for response categories to the experimental question that we

think will account for a large portion of the people who will be the subject of the follow-up. Additionally, we suggest supplemental follow-up probes to learn more about the situations of these people without asking respondents directly why the other address was not reported earlier, as the direct question was found to be sensitive and non-productive. This section presents the question series that was tested for overcount situations, the detailed question-specific results, and our recommendations.

4.1 Overcount Experimental Question 1

The Census Bureau is doing research about questions on the census form you completed earlier this year. At that time, you indicated that [Name] lives or stays somewhere else while in the military/for some other reason. Can you tell me what you were thinking about when you reported that?

This question yielded a place or address for five out of ten respondents. The places that were mentioned were: Afghanistan and Iraq; Texas; a military school in another state; and two alternative local addresses. The situations are described below:

- *Afghanistan and Iraq* – Husband’s deployment in 2007
- *Texas* – Respondent’s permanent address is in Texas (but he only visits there and currently lives in the test-site area)
- *Military school in another state* – Respondent was referring to the two months (Jan/Feb) in 2008 that he spent in military school living at the barracks
- *Two alternative local addresses*
 - In one case, the respondent said that her daughter stays over at her sister’s apartment on most nights, but stays with her during the day. The respondent thought her residence is her daughter’s permanent address, at least in part because that is where she gets her mail.
 - In another case, the respondent said his daughter is temporarily staying in his house because of marital difficulties. She sometimes stays with her husband at their residence.

In four other cases this question did not yield a different address. Instead, it elicited clarification on military deployments in several cases. One respondent, whose spouse most recently returned in 2007, said “I just mean like, when, you know, he deploys for years at a time, that’s what I meant. He does not stay in a separate house or anything.” Another respondent whose spouse returned in March of 2008 said, “He just was not home with me.” And a third respondent whose spouse returned in September of 2007, said, “I probably did not realize you meant at that time. He had just gotten back from Iraq, and he had been in Iraq for 18 months...”

One of the respondents did not remember what she had in mind at the time of filling out the form. She said, “I have no idea...unless I was thinking about my husband being a member of the household but staying someplace else maybe... I have not been anywhere else in a couple of years, so...” This respondent had correctly not listed her husband on the census form because he was currently deployed. At a later time in the interview she remembered she was referring to herself on the census form.

One respondent was not asked this question. He stated at the beginning of the interview that he lived in another state during all of May 2008 while doing military training. He also reported that he told the initial CFU interviewer this, but the CFU interviewer said it did not count, and did not record it. This was an error on the part of the original CFU interviewer.

In summary, most often the reason for not mentioning another place during the CFU interview was that it was not within the time frame mentioned in the CFU questions. Most of these cases were military deployments.

4.1.1 Recommendations

Based on these findings, we do not recommend any changes to the question text. By way of recommendation, we offer some possible closed response options to the question. The recommended response options are as follows:

1. Away for military sometimes, but not March/April 2010
2. Away for college at some time, but not March/April 2010
3. In nursing home at some time, but not April 1, 2010
4. In jail at some time, but not April 1, 2010
5. Permanent residence elsewhere
6. Other address

If a specific address can be gathered, we recommend doing so to see if the person was duplicated at the other address. We recommend adding a question to certain response options (particularly 5 and 6 above) to gather an address.

See Appendix B for recommendations for the full question series.

4.2 Overcount Experimental Question 2

To help us understand more about how we ask questions, why didn't you mention the other place earlier in this interview?

This question was asked to eight out of ten respondents. Overall, this question did not elicit new information, but rather explanations as to why they answered the way they did. Note that in some cases the responses seem apologetic or even somewhat defensive. Respondent's answers are listed:

- “Afghanistan? I think because of the May 1st, that it just asks ‘On May 1st, who was in the household and why?’ I think that’s why.”
- “I did not know I was supposed to because I know my mom was not going to count me— Like I discussed it with her so...I know to count myself.”
- “I was not...I thought you just meant like other houses.”
- “Iraq? Well, it’s a deployment. It’s military. But at that time in ’08 he was home, but maybe when I filled out the paperwork I was not sure if you meant ‘at that moment’ or ‘does he sometimes’ and I think it might have asked ‘in the last year’ and he was in Iraq for most of ’07.”
- The respondent said she did mention during the phone interview that her husband was in the military.

- The respondent said “Because my mind wasn’t...I had to think it through. I wasn’t thinking it through technically. Um, I guess when I answered the Census question, I’m more concerned about the people who stayed in the house, not people coming and going.”
- The respondent could not remember why she reported “somewhere else” to begin with and did not provide an answer.
- The respondent mentioned the other place (training elsewhere in early 2008) at the beginning of the interview, and the interviewer modified the question: “To help us understand more how we ask questions, is that what you were mentioning earlier in this interview when you said the 30 or 45 days [that respondent was elsewhere]?” The respondent agreed.

4.2.1 Recommendation

Based on these findings, we recommend dropping the question. It did not elicit new information, and sometimes made respondents feel defensive or self-conscious.

4.3 Overcount Experimental Question 3

Please tell me what you can about the time [fill you/FULLNAME] spent at that place. *If needed*, How often did [fill you/FULLNAME] stay here? Did [fill you/FULLNAME] move or move back and forth?

Interviewers asked slightly different versions of this question for eight respondents. This question seemed sensitive only for the first respondent, who understood it as asking about her husband’s activities during his absence rather than duration. However, the wording varied by respondent, and what seemed to work best was asking something like “how much time was spent at that place.” This question did elicit useful information that was not revealed by earlier questions.

The exact questions and answers are listed below to illustrate the potential productiveness of each type of probe:

- Q: Please tell me what you can about the time [Name] spent at that place.
A: [Laughs] “Um, he does not tell me, but he was part of the [brigade] deployment.”
Q: Can you tell me how much time he spent there?
A: “He was gone for nine months and he came home for a month in between.”
- Q: Can you please tell me about the time you spent at that place?
A: “I’ve been staying there since November of last year.”
Note: He is there temporarily for training.
- Q: So, can you tell me how much time [Name] spent in each of the places in the past year, when he was at home and he was not here?
A: “[Name] was away for 15 months but returned in March 2008.”
- Q: Can you tell me a little bit about that, how often are you here and how often are you staying somewhere else?
A: “I mean....I could stay somewhere else, but I do not do that often.”

Note: When probed she said she answered “Yes” to the overcount question because being in the military sometimes she has to stay somewhere else, and because she could be deployed tomorrow. However, she has not been anywhere in the last two years.

- Q: Can you tell me more about the time that you spent there? When were those 30 or 45 days that you were gone?
A: “January and February.”
- Q: And can you tell more, how often she stays here and stays there?
A: “[Name] stays at home whenever needed during the day, but she sleeps in her relative’s apartment most nights...So you could say probably equally [living here and there].”
- Q: Could you tell me a little bit more about how often they stay here; how long they stay here...your daughter, how long has she been in the house?
A: “She’s been there for about four months. Four or five months.” Respondent said that she was living in his house in May, but he sees this as a temporary situation and that he “didn’t anticipate it would be long.” He had given her one more week to move back in with her husband. When probed respondent said he listed his daughter on the roster because “when you talk about at the moment, who’s living at your house at the moment, that’s what I was trying to give you with that answer.”

In the debriefing, interviewers asked most respondents an alternate version of this question, which was worded as follows:

Please tell me how much time NAME spent at each of his/her addresses in the past year. Where does NAME stay most of the time? Where was NAME staying most of the time around May 1?

Their answers are presented here as examples of the types of information we might receive from this open-ended probe (the responses are written as if they were interviewer notes):

- In 2007, [Name] was in Afghanistan for nine months. [Name] is here and was here around May 1.
- Stationed here since November 2007. In the past year spent two weeks in Texas, which is his permanent address. Visited Texas in March for two weeks. Most of the time he stays here, and he was staying here most of the time around May 1. Respondent was not sure he needed to report his address in Texas because his mother told him she would not list him on the roster in Texas.
- He was here on May 1 (away May 7 to 31st) but most of May he was in Texas for training. In 2007 he stayed in another city for two and a half months as part of a recruitment assignment. Respondent would say he was in Texas if asked where he was ‘around May 1st’; but he would say ‘here’ if he were asked where he was ‘on May 1st’.
- Went to training school in January and February of 2008. During training, about once a year, he stays in some sort of a barracks. Most of the time he stays here, and he was here around May 1.

- [Name] stays over at her sister’s apartment most nights, but she is here almost every day during the day. This is [Name]’s official address. Her sister would not report her in the roster because she lives in a business, so it is unlikely that she’ll get a Census form.
- [Name] is respondent’s daughter and she was staying at the respondent’s house in May. She stays over with her husband sometimes, or the daughter’s husband stays at the respondent’s house. The other address is the daughter’s residence but she is separated from her husband; however, they seem to be getting along again: “He was sleeping there one night, two nights. She was washing his clothes...”

4.3.1 Recommendations

Based on these findings, we think this question, or something similar, could be used with minor changes. We recommend rewording the question not to ask about the time spent, but rather to ask about the *amount* of time spent at each place. We also recommend only asking this question if an answer category is chosen for Question 1 that indicates that the stay away might be an in-scope time period. Finally, we recommend using a similar question series as was recommended for the undercount series.

The recommended wording is as follows:

What address do you consider to be [fill name / your household]’s permanent address?

- This address
- Another place
- Both places equally

In March and April of this year, where did [fill name / your household] spend most of the time?

- This address
- Another place
- Both places equally

Please tell me how much time NAME spent at each of his/her addresses in the last 12 months.

(open text)

See Appendix B for recommendations for the full question series.

5. General Overcount and Undercount Findings

In this section, we present some general findings about the sensitivity and difficulty of the overcount and undercount question series. Because they are similar, we present them together and in contrast to the findings on the sensitivity of the duplicate question series, presented in the next section.

5.1 Sensitivity of Questions

Most respondents did not find the overcount and undercount experimental question series to be sensitive. One respondent who has a frequent overnight guest in her home said that asking about how often the guest is at her home is sensitive. (It should be noted that the visitor is not a relative, and the respondent pointed out that their relationship was not romantic.)

None of the respondents reported thinking the question investigating the missing/extra person on the roster as sensitive, although one respondent said it made her feel as though she “was not answering properly.”

5.2 Difficulty of Questions

Generally, respondents did not find either question series very difficult. However, several specific questions were cited as being difficult or possibly difficult for some respondents to answer. One respondent said that recalling dates was not easy. Another respondent offered the advice to “be more specific” when asking questions involving periods of time. One respondent thought that the questions might prove difficult for someone with a low educational level. Three respondents said that having a family member who is on active duty in the military makes things complicated, because they often move around or are deployed and are temporarily away from home.

We do not believe that any of these concerns warrant a major change to the question series for the overcount or undercount situations.

6. Duplicate Question Series: Results and Recommendation

The question series for potentially duplicated people was much more problematic than either of the first two. The first question in this series identified the duplicate person by name and said “NAME may have been counted at another residence [fill: in STATE NAME] as well as on your census form.” Researchers found this phrasing was very sensitive, at least for one respondent – a father with sole custody of his children – who was upset because he inferred from this question that the mother of his children had reported the children on her census form. In this case, we think that we inadvertently provided information that allowed him to make a connection that may be perceived to be a breach of confidentiality. Based on the interview, we do believe that he will tell the mother of the children about the visit and accuse her of completing her census form incorrectly. We had two other cases of duplicated children where a similar conversation probably happened – in one case the respondent told the interviewer during a post-interview telephone conversation that she had called her daughter about the situation (the interviewer called the respondent back to ask a follow-up question) and in another case, we believe that the respondent will follow up with the child’s parent based on what was said during the interview. We think this will be perceived as a breach of confidentiality by the other household, because they may not know that we did not give away confidential data in the interview; the connection was just inferred by the respondent. Though we saw this sensitive situation with children, we believe that this situation could also happen with adults as well. In one case of an adult son who sometimes stayed with his girlfriend, the respondent (his mother) made some very critical and hostile

remarks about the girlfriend and reported inconsistently about how much time her son spent with his girlfriend. We deem this to be a sensitive reaction as well, and think it could also lead to a conversation by which the girlfriend feels her confidentiality has been breached.

Because we did not have the opportunity to ask about out-of-state duplicates, we did this during the debriefing by asking “Would it bother you if we said that our records indicate that you may have been counted in Texas as well as on your census form?” Two respondents immediately said they would worry about identity theft – one whose son works in the police force said her son would investigate it; the other said he would check his credit report. We think there is a high risk in asking questions about out-of-state duplicates because there is a chance that it might not be a real duplicate. Though this should seldom happen, out of the seven cases for which we conducted interviews, two did not turn out to be person duplicates. We acknowledge that the matching criteria may have been less strict in the dress rehearsal than it will be in 2010, but it still gives us cause for concern.

Because of these two areas of sensitivity, we do not recommend directly saying that our records indicate that a specific person may have been duplicated. While this text does not violate our confidentiality mandates, we feel that it might be perceived as violating confidentiality if the respondent guesses who duplicated them. Additionally, we do not recommend identifying the name of the state in the question wording for out-of state duplicates. Despite the fact that we think the chances of a mistaken duplicate are low, we think that the possibility of this happening is enough to recommend against it. Instead, we recommend focusing the experimental questions for duplicates only on the duplicated people, by putting less focus on people being counted somewhere else and more focus on giving examples of types of places where a person could have been counted that have not been mentioned in CFU previously, such as their parents’ house and girlfriend’s or boyfriend’s house. Additionally, the question text should mention that we would like to know about another address the person has, even if they just go there on the weekends. The reason some respondents reported not providing the address sooner was that the person only stays there on weekends. We do recommend that these questions be tested for sensitivity with real duplicate cases prior to fielding them.

The section that follows focuses on the cases that were identified for this test and interviewed as duplicate matches. First, we present details of the situations that were investigated, then the question wording that was tested, and finally the question-by-question results and recommendations from this testing.

6.1 Duplicate Respondent Situations

Because these cases are so unique, and this is the first time we have experimented with question wording that identifies people that were duplicated in the census, first we present a case-by-case summary to set up the situations that we investigated.

CASE 1: Two people were on the roster, one was identified as a duplicate. The respondent (the suspected duplicate) reported that she has a seasonal or second residence during the CFU interview, but emphasized that it is not “really hers” since it is her son’s inheritance. She provided the address, although not the house number, and was apprehensive about giving this

information. She reported that she has never lived in that other residence. She was very annoyed when the interviewer continued to ask her about the second address and other possible addresses. After analyzing the case, we believe this respondent was not a duplicate and had been mistakenly identified. The address she gave was not the address where the duplicate was found, and the duplicate person's age was one year different from the respondent's. In addition, the respondent had a very common name.

CASE 2: Two people were on the roster, both were identified as duplicates. The husband could not hear well, so the wife answered most of the questions. This case was a housing unit duplicate. Based on what she said, we think she received two original census forms in the mail and only filled out one. She reported that she received a replacement questionnaire and filled that out as well. As a result, the respondent submitted duplicate census forms. This case should not have been on the followup list – both addresses were identical. It was a clear housing unit duplicate.

CASE 3: Four people were on the roster. The respondent's son and grandson were duplicated in the son's girlfriend's house. The interviewer asked the duplicate questions about the son, but accidentally did not ask about the grandson until the debriefing. The respondent said she did not know of any other place where her son could be counted, but she sounded agitated. When further probed, she said her son works odd hours or sometimes stays with his girlfriend, so she keeps his child. She later admitted that her son stays with the girlfriend sometimes on weekends but he *lives* with the respondent. When probed, the respondent said her son spends about three or four nights a week in the respondent's home and the remainder in girlfriend's home. The respondent said that sometimes her grandson also stays with the girlfriend, about one night a week. She reported that her son was mostly at her home around Census Day (May 1) because he had not started staying with his girlfriend. The respondent said she did not know the address of that the girlfriend's home, but she knew the town. When probed, the respondent said she did not mention the other address during the interview because she did not think about it.

CASE 4: Three people were on the roster, and two were identified as duplicates. The respondent (the parent of the duplicates) reported during the main CFU that there is another place where his children could have been counted and reported an alternative address (street and city). His two children stayed every other weekend with their mother, but they spend most of their time at this address and he has custody of them. He was very angry when he came to the conclusion that the children's mother had listed them on her census form and was frustrated about being questioned about his children's custody situation.

CASE 5: Three people were listed on the roster. A young child on the roster is duplicated in another address. The respondent immediately mentioned that the child could be listed at her mother's, and that they had not checked if she had listed the child, too. She gave the mother's old address but did not know the new address (she moved in June). Her grandchild sometimes stays with her for a month, sometimes one or two weeks at a time. The respondent said the child stays about equal time in each place, and now that she's going to start school, she will stay more with her mother. But in the past the respondent reports that she has probably been a little bit more at her mother's home than here.

CASE 6: Five people were in the household. One of the respondent's granddaughters (the duplicate) sometimes stayed with her mother on the weekend (once or twice a month), but the respondent reported that she mostly lived with the respondent. The respondent provided the full alternative address for her granddaughter, but said that in April or May her granddaughter spent most of her time with her and not at the other residence. The child goes to school near this house and so she stays here during the week and stays with her mother some weekends. She reported that she had not mentioned the other address in the earlier interview because she did not think about it, and because she told her daughter that she was putting her on her census form and did not think that the child would also be listed at the other place.

CASE 7: Four people on the roster. The respondent said he did not know of any other place where the duplicated child could have been counted. During debriefing, the respondent said that the child stays with her parent on weekends. When probed about not mentioning this other address, the respondent said that the question went over his head. The child "just goes to school out here; it's a better school than where she's at," but she lives with her dad in the summer. The respondent's wife said that she mentioned to the original census interviewer that the child stays with them part time, Monday through Friday. The daughter's residence and custody is with her dad.

6.2 Duplicate Experimental Question 1

Option A:

The Census Bureau is doing research to make sure no one was counted in the Census more than once, and we have some additional questions to ask you [about (*fill duplicated person's name* / your household)]. [You/ (*fill duplicated person's name*) / your household] may have been counted [at another residence in (*fill state*) / at a residence in another county in (*fill state*)] as well as on your Census form. Do you know of any other place in [*fill state*] where [*fill name* / your household] could have also been counted, even if you have never lived there? *Read if necessary: For example, a friend's house, a relative's house, or a vacation home?*

OR

Option B:

The Census Bureau is doing research to make sure no one was counted in the Census more than once. Our records indicate that [*fill duplicated person's name*] may have been counted at another residence as well as on your census form. Do you know of any other place where [*fill duplicated person's name*] could have also been counted for any reason? *Read if necessary: For instance, a friend's house, a relative's house, or a vacation home?*

Option A used state-specific wording and is used when interviewing the duplicate person. Option B uses the more generic "another residence" wording and is used when we could not interview the duplicate person and, instead, spoke with another household member. We tested two cases with the state-specific wording of Option A, which was within the same state in both cases; and five cases with Option B, the more generic wording. The two state-specific wording cases were, incidentally, the two that were not real person duplicates. However, we did get to expose the

state-specific wording to respondents to whom it did not actually apply through hypothetical questions, and this provided useful data. All respondents were probed in the debriefing on asking these questions pertaining to duplicates within their own state as well as in a different state.

In four cases, the Option B question yielded another place. Two of the cases were grandchildren who also stay with a parent. The respondents in these situations did not seem upset. One of the other cases was children living with one parent and spending time (every other weekend) with the other. This respondent was upset about the children being counted at the other parent's place. The fourth case was two people (one adult and one child) who sometimes stay at a girlfriend's house. The respondent was reluctant to admit that her son was staying at the other place as often as he was, and answered "no" to this question at first.

In one other Option B case, no address was obtained until the end of the debriefing. At the end, the respondent seemed somewhat embarrassed that he had not thought about the child's parent as the other place where the child was counted.

In the two Option A cases, neither respondent reported the duplicate address. One of the respondents did report a house that she had purchased for her son. She was annoyed by the questions about the other house. When researching this case further, we found that the identified person duplicate was not an exact match – the age differed by one year and she had a very common name. We believe this was not a real duplicate. The other case appeared to be a housing unit duplicate (the house was at the intersection of two streets, so was possibly listed on both streets), and should not have been in-sample for this test.

Respondents reacted to this initial duplicate question in a variety of ways. Below are selected quotes and descriptions of the interview situations:

- "I cannot imagine another place [laughs] in my whole life!" *Note: This respondent did mention another home that she owns, but does not live in during the main CFU interview and was hesitant to mention that place. This is the respondent that we do not think was actually duplicated.*
- Another respondent did not immediately admit she knew of another place where her son could be counted, "No! I do not." But after the interviewer paused and read the examples, she did add that her son works odds hours and sometimes spends the night at his girlfriend's house, "but it's no big thing. He's single." However, after further probing, respondent explained her initial answer by, "all of his clothes are here, so I'd say he lives here." And with further probing, respondent admitted her son stays at the other address three or four nights per week, but adds, "They're not married. They do not want to get married." Sometimes the respondent's grandchild also stays at the other address, and the respondent said, "He might be over there [at girlfriend's] one night a week." The respondent noted that she was very protective of her grandson and did not let him stay elsewhere. When asked if the grandson could have been counted on another census form, she replied that the girlfriend was young and she does not know what she's doing so she might have counted him. *Note: We think this was a hostile response.*

- A third respondent responded with an angry question, “Somebody counted them?!” and “No, they should not have been counted.” He said his children stay with their mother every other weekend, but they live with him most of the time and he has full custody. Upset, he offered to call the other house and verify that address. At the very end of the interview, he said, “I’m still kind of weirded out by this. What’s the deal? What is the purpose of this?” The interviewers tried to explain that it was for research purposes only.
- The next respondent immediately offered, “Oh, I guess her mother, which we did not even check if she put her down” and mentioned that respondent listed the child because she is just “so used to having her with me.” The child’s mother used to live nearby but now has moved. This respondent did not seem upset about this question.

Another respondent did not seem upset, but did mention that she was going to call her daughter about this. Several other respondents mentioned at the end of the interview that they hoped they were not in trouble. We want to note the sensitivity that these responses implied. We will come back to this in the recommendations section for the entire series.

6.3 Duplicate Experimental Question 2

What is the address of that place?

House Number	Street Name	
City	State	Zip

Four respondents provided some sort of address information. Of those, two respondents gave street name, city and state only. Initially one of these respondents said she did not know the address, but when probed, she came up with street, city and state. Two additional respondents provided the house number, street name, city, state, and zip with no probing. Another respondent was not asked during the interview since he had said that he did not know of any other place where his grandchild could have been counted. After the debriefing, when he remembered that the child sometimes stays with a parent, he gave an address with street and number, city, state, and zip code with some probing.

Our most notable finding to this question is that people can often give more address information than they initially offer if they are probed for each piece of information (i.e., Do you know the city? The state?). We think this is a finding that the production CFU interview can take advantage of as well.

6.4 Duplicate Experimental Question 3

Can you tell me about that other place? *Read if necessary: For example, is it a friend’s house, a relative’s house, or a vacation home?*

- parents’ house
- son/daughter’s house

- ex-spouse's house
- other relative's house
- friend's house
- boyfriend's / girlfriend's house
- vacation home
- home just moved from
- home just moved to
- place to stay for work
- college dorm
- college apartment
- military barracks, ship or dormitory
- other military housing either on-base or off-base
- nursing home or skilled nursing facility
- correctional facility, jail or detention facility
- emergency or transitional shelter
- religious facility such as a convent or monastery
- other: _____

This question was asked in three cases and the interviewer recorded already-received information in an additional two cases. The chosen categories for these five households were as follows:

- 1 boyfriend's / girlfriend's house
- 1 ex-spouse's house (children's parents)
- 3 parents' house

The case of the "ex-spouse's house" was identified that way because the respondent was the divorced parent, so it was his ex-spouse. The interviewer also wrote in "children's parents" in parenthesis. From the perspective of the child, this could also be reported as "parent's house." We do not think this is a big problem, but just want to bring it to the data users' attention.

The other cases marked as "parents' house" are children living with grandparents and either spending equal or less time with their parents at the other place. In two cases, the children go to school near the grandparents' home and visit their parents on weekends.

6.5 Duplicate Experimental Questions 4 and 5

Q4. Did [fill name / your household] ever live or stay at that other place?

- Yes
- No

Q5. In March and April of this year, where did [fill name / your household] spend most of the time?

- This address
- Another place
- Both places equally

Questions 4 and 5 were asked in four out of seven cases. In three of those cases, the respondent reported that the person in question had lived or stayed at the other place but that they spent the majority of their time in March and April at “this address.” In one case, the interviewer asked the question as a negative verification: “But you said that [name] never lived or stayed at that place?” The respondent said, “No,” confirming that the person in question spent the majority of his time at “This address.” Although the final respondent later said that the person in question spent three or four nights of the week at the other address, the respondent answered Q4 with “No,” because “All of his clothes are here, so I’d say he lives here.”

In summary, we found one respondent who reported with the way she sees the situation “officially” even though it did not match to the situation she described in fact. Other respondents seem to have answered this question appropriately.

6.6 Duplicate Debriefing: Comparing the Information Elicited in Experimental Questions to Debriefing

Q6. Please tell me how much time NAME spent at each of his/her addresses in the past 12 months. (Open text)

There were only three cases in which a comparison could be made to evaluate the consistency between the answers to Q4 and Q5 and the answers to Q6. In one of those cases, the answers were a good match and either question would have elicited the information that the person in question was sometimes found at another residence, but spent the majority of their time at “this address.”

In another case, all three questions elicited the information that the person in question was at “this address” around May 1. However, the respondent gave contradictory information in Q4 and Q6 regarding whether the person in question ever stayed at the “other place.” In Q4 the respondent said “no” because the person’s clothes are kept at “this address” but in Q6 she indicated that the person in question slept three or four nights a week at the “other place” after May. (Note that Q4 does not ask about a specific time period, so the respondent should have said “yes” even if the person in question did not start sleeping three or four nights a week at the other place until after the reference period mentioned in Q5.)

In the last case, it was unclear where the person in question spent most of her time, or whether she split her time equally between the two addresses. The respondent said that she spent most of her time at “this place” in response to Q5 but in Q6 she said both that she spent more time at the “other place” and also that she divided her time equally between the two places. The respondent was also unable to remember May 1 specifically, even with the aid of a calendar. As a result, it is unclear which set of questions gave more accurate information, although it seemed like the respondent was emotionally attached to counting the person in question at “this place” and that this may have biased her answers to Q5.

6.7 Cases with No Other Place Reported

The debriefing questions attempted to use other probes to try to uncover an alternate address if none had been uncovered with the regular CFU interview, or the experimental questions. We had two situations in which no address had been uncovered. The debriefing was successful in revealing an additional address in one of these situations.⁶ The debriefing probe “Can you think of any place where [name] might have been staying around the end of April or May?” did elicit new and useful information about the whereabouts of a child during the school year and on weekends. It elicited the address of a parent, which had not previously come up. This question was prefaced by an event-history type probe that might have helped aid memory recall: “Can you remember back to May of this year, or any particular events that happened around April or May? Maybe like a move?” The respondent was embarrassed he had not thought of this other place sooner. This could indicate that an event-history type preamble may be useful in aiding memory recall.

6.8 Hypothetical Experimental Group Quarters Question 1

Respondents were debriefed with the Group Quarters question using a hypothetical scenario. These questions would be administered if someone is matched from a Group Quarters to a Housing Unit. Since we had no cases that fit these criteria for the dress rehearsal, we asked it in a hypothetical way to all respondents with what we believe is the most-likely-to-be-sensitive category, “Correctional facility such as a jail, detention center, or prison.” After getting an initial reaction to this question, we asked about each of the other group quarters places that could be used in the question text testing for either sensitivity or problems with understanding.

Respondents heard the following hypothetical question and were asked how sensitive they felt it to be:

The Census Bureau is doing research to make sure no one was counted in the Census more than once. Our records indicate that you may have been counted at a Correctional facility such as a jail, detention center, or prison in (North Carolina/Texas) as well as on your Census form. Did you stay in a Correctional facility such as a jail, detention center, or prison in (North Carolina/Texas) in March or April of this year, even for just one night?

Researchers concluded that two out of seven respondents found this question sensitive. Respondents’ reactions were as follows:

- One respondent said that the question would offend someone who had never stayed in a correctional facility. He said that the question should only be asked if the interviewer knows that the person has been in jail.
- One respondent initially said no, but later in the interview changed his mind. He said, “I had one instance where I spent a day in a correctional facility and when I think of that it’s just embarrassing to me [...] Is it sensitive? Yes.”
- A few respondents (including the one above) said that they understood that questions like this have to be asked to ensure an accurate census.

⁶ The other case was the housing unit duplicate. No address was ever uncovered and we believe there was no other address.

- One respondent seemed doubtful that someone who had been in jail would be truthful about it: “I think it would be a good one to ask, to see if they’re going to tell the truth about it!”

6.9 Hypothetical Experimental Group Quarters Question 2

Respondents heard the second hypothetical question and were asked how sensitive they felt each category would be to ask about. The question they were asked was as follows:

Now what if we asked the same question, saying that our records indicated that a person may have been counted at a:

- **juvenile institution**
- **nursing home or skilled nursing facility**
- **hospital, hospital ward, hospice, or school for the handicapped**
- **college dormitory, fraternity house, or sorority house, either on- or off-campus**
- **military barracks or dormitory, a ship, military treatment facility, disciplinary barracks or jail, or other military quarters either on-base or off-base**
- **hotel or motel**
- **emergency or transitional shelter**
- **religious group quarters such as a convent or monastery**

Two respondents thought asking about a juvenile institution could be sensitive. One of those respondents wanted to know if this question would only be asked of people who are known to have stayed in such a place. This is the same respondent who thought that asking if someone had been in jail (Question 8) would be sensitive if asked of someone who had never been in jail.

Another respondent indicated that asking about a hotel or motel might be sensitive. She said, “Really they do not have an address there and some people may be there because they have no other place to go.” She later said that it would not be sensitive if the person was counted at a hotel/motel and again at their house (because this shows that they did have another place to go). Similarly, about an emergency or transitional shelter, one respondent said, “There’s a lot of people [who] do not want people to know they stay in places like that. They do not want other people to know their luck is down so bad they have to stay in a place like that.” This respondent expressed doubts that a person who had stayed in a shelter would be truthful about it.

And, finally, one respondent thought asking about a religious group quarters, such as a convent or monastery, could be sensitive. This respondent said that religion could be a sensitive topic for some people, but she also said that it might be okay because these questions are for people who are thought to have stayed in these kinds of places.

Respondents in this study did not report thinking that any of the other places probed about would be sensitive or make people feel uncomfortable.

We also probed respondents on the meaning of each of the categories listed above. The term “juvenile institution” has varied meanings for different respondents. It brought to mind a “prison for young people” for one respondent, while another specifically said that he would not use the term “prison” when talking about it. Another respondent, a schoolteacher, thought that people might not know what is meant by the term. Another respondent asked the interviewer to repeat the term as though she had not understood it. The interviewer asked her if she thought people would know what it means, to which she replied, “They should know what that means!”

One respondent thought a person with a low education level would not know what a sorority or a fraternity is.

6.10 Explicitly Mentioning a State Where a Person Could be Duplicated

Respondents were asked about their reactions to hearing that someone in their household “may have been counted twice in North Carolina” or, to introduce another dimension, that someone in their household may have been counted in a different state (Texas was used as the example in all interviews). During the actual interview, two respondents were administered the question wording that used the state name (within-state) in the experimental questions. The other respondents were asked hypothetically about if it would bother them if we asked the question mentioning the state name in particular.

None of the respondents said that they were bothered by being told either in the interview or hypothetically that they might have been counted twice at another location in North Carolina (the within-state wording).

However, two respondents were very uncomfortable with the hypothetical case of being counted twice, once in North Carolina and again in Texas. Both of them immediately cited concerns over identity theft, and one went so far as to say that upon hearing this news, he would immediately check his credit report. One respondent exclaimed, “Something’s going on, if he was counted in Texas, ‘cause he’s never been to Texas.” Then she conceded that maybe someone in Texas has the same name as her son. When asked if she would do anything about her concern, she said that her son is on the police force and he would do an investigation to search for a person with the same name in Texas to investigate identity theft. (We assured her that we had not found a person with the same name in Texas and this was a hypothetical situation.)

6.11 Recommendations for Duplicate Cases

Based on the findings described above, we have a number of recommendations for fielding a set of questions aimed at clarifying suspected duplicate records, most dealing with things we recommend not saying. We recommend not telling the respondent that “our records indicate that NAME may have been counted at another residence. . .” We believe it will be perceived as violating the confidentiality of the other person.

Based on this small test, we do not recommend mentioning an out-of-state location for two reasons: 1) It may be perceived to violate the confidentiality of the person in that state who

reported the duplicate on their form; and 2) If it is not a true duplicate, we could raise suspicion of identity theft. It is possible that the respondent would take action on this and look up someone by the same name in the other state – as one respondent reported she would do.

We recommend putting less focus on people being counted somewhere else. In this study, respondents did not know the duplicate people were counted somewhere else. Some respondents were upset to think they might have been counted somewhere else. Instead, we recommend shifting the focus of these questions to the duplicate person generally and giving examples of types of places where a person could have been counted, such as their parents' house and girlfriend or boyfriend's house (these were the cases we came across.) These particular examples also are not explicitly mentioned in the main CFU questions. We recommend focusing questions on staying somewhere else even "just for the weekends." The reason some respondents reported not providing their duplicate address sooner was that the person only stays there on weekends. We recommend that any new questions be tested for sensitivity with real duplicate cases prior to fielding them.

When revising the question series, we recommend continuing to ask for the address of the other place. However, instead of a question that asks the respondent to "tell me about that other place," script an "ask or verify" question about the type of place, as many times this information has already been provided by the respondent. We recommend using the same two questions about "most of the time" and an open-text research purposes question as was recommended for the other overcount and undercount sequences.

If we are to follow up on housing unit-to-group quarters matches as tested in our hypothetical scenarios, we do not recommend specifically picking out the category for which the person is thought to be the duplicate. Instead, we recommend asking them about the whole list of possible categories for that particular person. Also, we recommend revising the text for "Juvenile institution" to mention examples of this type of place.

The question wording that we recommend to be tested for housing unit-to-housing unit matches is:

The Census Bureau is doing research and we have some additional questions to ask you [about (NAME)]. [Does (NAME)/ Do you] ever stay somewhere else, even just on the weekends?

Yes

No - **How about a parents' house, a girlfriend or boyfriend's house, or a relative's home? (Does NAME ever stay at a place like that?)**

Yes

No - End

See Appendix C for recommendations for the full housing unit-to-housing unit suspected duplicate question series.

The question wording that we recommend to be tested for housing unit-to-group quarters matches is:

The Census Bureau is doing research and we have some additional questions to ask you about [you/NAME]. I'm going to read a list of categories, and we would

like to know if NAME stayed in a place like that in March or April of this year, even for just one night?

- **Correctional facility such as a jail, detention center, or prison? Yes No**
- **Juvenile facility such as a group home, juvenile detention facility or residential treatment center? Yes No**
- **Nursing home or skilled nursing facility? Yes No**
- **Hospital, hospital ward, hospice, or school for the handicapped? Yes No**
- **College dormitory, fraternity house, or sorority house, either on- or off-campus? Yes No**
- **Military barracks or dormitory, a ship, military treatment facility, disciplinary barracks or jail, or other military quarters either on-base or off-base? Yes No**
- **Hotel or motel? Yes No**
- **Emergency or transitional shelter? Yes No**
- **Religious group quarters such as a convent or monastery? Yes No**

See Appendix D for recommendations for the full housing unit-to-group quarters suspected duplicate question series.

7. General Recommendations and Conclusions

Based on all of the findings reported from this study, we have two general recommendations on interviewer training for implementing these questions in the field. These recommendations apply to the production CFU interview as well as any experimental CFU questionnaires.

7.1 General Recommendations for CFU Interviewer Training

Interviewers need to understand that they should report any other person that the respondent mentions as well as any other address. We saw several cases where the person reported that they mentioned the relevant piece of information but the CFU interviewer had not recorded it.

Interviewers need to probe for complete addresses. Sometimes respondents will say they do not know the address, but actually they do know the street, city and state. You only find this out if you probe them. Census Coverage Measurement uses a probe for if the initial address question yields a “don’t know.” The follow-up question is: “Do you know the city, state, or any other part of the address?” We recommend using something similar in CFU.

7.2 Conclusions

In conclusion, the question series on undercount and overcount were successful and we feel they can be fielded in the 2010 CPEX program with the minor recommended changes described in this report. However, we do not think the duplicate question series was successful and we recommend against fielding it as it was developed. We offered suggestions in text to alter the question wording so that it would not have the negative consequences that we observed in testing. However, we recommend that any revised questions be cognitively tested as well for potential sensitivity.

Appendix A: Recommended Series of Questions for Undercount

1. The Census Bureau is doing research about questions on the census form you completed earlier this year. At that time, you indicated there was an additional person or people staying here on May 1, 2010. You reported (*fill 1st undercount category marked, i.e. a child was staying there, such as a newborn baby or foster child; a relative was staying there, such as adult children, cousins, or in-laws; a non-relative was staying there, for example a roommate or live-in baby sitter; somebody was staying there temporarily*).

Can you tell me whom you were thinking about?

First Name MI Last Name

Do not Know/Refuse - End Mod

The person's date of birth

Month Day Year

Was there anyone else that you were thinking about when you answered that question?

Yes – collect Name and DOB and ask the “anyone else” question again.

No – go to Question 2

2. In the last 12 months, was there any other place NAME stayed?

Yes

No – END

DK - END

3. What address do you consider to be [*fill name / your household*]'s permanent address?

This address

Another place

Both places equally

4. In March and April of this year, where did [*fill name / your household*] spend most of the time?

This address

Another place

Both places equally

5. Please tell me how much time NAME spent at each of his/her addresses in the last 12 months.

(open text)

Appendix B: Recommended Series of Questions for Overcount

1. The Census Bureau is doing research about questions on the census form you completed earlier this year. At that time, you indicated that [Name] lives or stays somewhere else *while in the military/for some other reason*. Can you tell me what you were thinking about when you reported that?

- Away for military sometimes, but not March/April 2010 – *go to 4*
- Away for college at some time, but not March/April 2010– *go to 4*
- In nursing home at some time, but not March/April 2010– *go to 4*
- In jail at some time, but not March/April 2010– *go to 4*
- Permanent residence elsewhere - *go to 2*
- Other address – *go to 2*
- Other – *go to 3*

2. What is the address of that place?

_____		_____	
House Number		Street Name	
_____		_____	
City	State	Zip	

DK - Do you know the city, state, or any other part of the address?

3. What address do you consider to be [*fill name / your household*]'s permanent address?

- This address
- Another place
- Both places equally

4. In March and April of this year, where did [*fill name / your household*] spend most of the time?

- This address
- Another place
- Both places equally

5. Please tell me how much time NAME spent at each of his/her addresses in the last 12 months.

(open text)

Appendix C: Recommended Series For Further Testing for Duplicate Cases – HU to HU matches

1. The Census Bureau is doing research and we have some additional questions to ask you [about [NAME / your household]. Does [NAME/ your household] ever stay somewhere else, even just on the weekends?

Yes

No - **How about a parents' house, a girlfriend or boyfriend's house or a relative's home? (Does NAME ever stay at a place like that?)**

Yes

No - End

2. What is the address of that place?

_____ _____
House Number Street Name

_____ _____ _____
City State Zip

DK - Do you know the city, state, or any other part of the address?

3. (Ask or Verify) Can you tell me about that other place? Read if necessary: For example, is it a friend's house, a relative's house, or a vacation home?

parents' house

son/daughter's house

ex-spouse's house

other relative's house

friend's house

boyfriend's / girlfriend's house

vacation home

home just moved from

home just moved to

place to stay for work

college dorm

college apartment (on or off campus)

military barracks, ship or dormitory

other military housing either on-base or off-base

nursing home or skilled nursing facility

correctional facility, jail or detention facility

emergency or transitional shelter

religious facility such as a convent or monastery

other: _____

4. What address do you consider to be [fill name / your household]'s permanent address?

This address

Another place

Both places equally

5. In March and April of this year, where did [NAME / your household] spend most of the time?

This address

Another place

Both places equally

6. Please tell me how much time NAME spent at each of his/her addresses in the past 12 months. (Open text)

Appendix D: Recommended Series For Further Testing for Duplicate Cases – HU to GO matches

1. The Census Bureau is doing research and we have some additional questions to ask you about [you/NAME]. I'm going to read a list of categories, and we would like to know if NAME stayed in a place like that in March or April of this year, even for just one night?

- Correctional facility such as a jail, detention center, or prison? Yes No
- Juvenile facility such as a group home, juvenile detention facility or residential treatment center? Yes No
- Nursing home or skilled nursing facility? Yes No
- Hospital, hospital ward, hospice, or school for the handicapped? Yes No
- College dormitory, fraternity house, or sorority house, either on- or off-campus? Yes No
- Military barracks or dormitory, a ship, military treatment facility, disciplinary barracks or jail, or other military quarters either on-base or off-base? Yes No
- Hotel or motel? Yes No
- Emergency or transitional shelter? Yes No
- Religious group quarters such as a convent or monastery? Yes No
 - Yes to any - continue
 - No - END

2. What is the address of that place?

_____		_____	
House Number		Street Name	
_____		_____	
City	State	Zip	

DK - Do you know the city, state, or any other part of the address?

3. Was NAME at that <Fill selection from 1> on April 1?

- Yes
- No

4. Please tell me how much time NAME spent at each place in the past 12 months.
(Open text)