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**Summary Report of Cognitive Testing
on Residence Rules Instructions**

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1. Introduction

This report describes the results of cognitive testing on five new formats for presenting the residence instructions on the decennial short form mail questionnaire. These forms tested new approaches to improving coverage by presenting residence rules in more readable and understandable ways. The effort in this research was to explore new approaches to the presentation of these instructions, and not to test the exact wording intended as panels in the 2005 Content Test. It was anticipated that some of these approaches might not prove feasible in early testing, and that others would need revision and possible retesting in order to prepare them for use in the 2005 Content Test.

In order to be effective, the residence rules should promote accurate coverage. They should convey enough information to allow respondents to list people in their households according to the requirements of the census. Ideally, respondents should list everyone present in the household most of the time, even those not considered core members of the social group; and should not list people our rules require to be listed elsewhere, such as core members living away or in certain kinds of group quarters on census day. . An effective presentation of residence rules would limit both erroneous enumerations and omissions.

In practical terms creating effective presentations of the instructions is difficult, for two reasons. First, the instructions are not entirely a natural set of concepts for respondents. Following these overall concepts often requires respondents to ignore their own intuitions about who is considered to be a household member. Second, the instructions must draw attention, and induce respondents to read them, or they will have little effect. In assessing these cognitive interviews, we have attended primarily to the issues of understandability and readability.

All five of the presentations rested on prior research to improve the presentation of the residence rules. These included the Alternative Questionnaire Experiment in Census 2000, and cognitive research done in preparation for the 2004 Census Test. This research led to the development of a presentation of the residence rules which presents the household count question after the instructions, inclusion of an instruction to read the instructions, and enclosing both the instructions and question 1 in an outlined box with a shaded ground. All of the experimental questionnaires have preserved this presentation.

An additional feature was tested. This was the inclusion of a household level coverage question as Question 2 of the questionnaire. This coverage question is designed to serve as a flag for later callback. The household level coverage question is intended to produce information about possible omissions. The household level coverage questions were modified to reflect the different approaches which were taken in the residence instructions. (A person level coverage question, intended to identify possible erroneous enumerations, was not tested in this research.)

1.1 Text of the five versions.

RR-V1. This version has the following characteristics.

- An instruction to read the residence instructions, phrased as “Read these guidelines about who to include in your answer to Question 1.”
- This instruction is followed directly by two bulleted sentences, presenting the central concept of who we want to include. These bullets read:
 - We want to count people where they usually live or stay.
 - For people with more than one place to live, this is the place where they sleep most of the time.
- The “Do not include” list is placed to the left of the “Include” list.
- The heading of the “Do not include” list includes an explanatory sentence, saying “We will count them at the other place.”
- Question 2 reads, “Other than those you included in Question 1, were there any people staying at this place on February 15, 2004 who were not permanent residents?”

RR - V2. This version has the following characteristics:

- An instruction to read the residence instructions, reading “Before you answer Question 1, read our guidelines.”
- Three instructions follow, presenting a reference period for respondents to use in calculating “most of the time” and explaining what to do about in-movers and out-movers. The wording of the instructions are:
 - Count everyone who lived or stayed here **MOST OF THE TIME** between February 14, 2003 and February 15, 2004.
 - Except if someone **MOVED IN** between February 15 2003 and February 15, 2004, then count that person here.
 - Except if someone **MOVED OUT** during that time then do not count them here. We will count that person where he or she lives now.
- The include and “do not include” lists are identical to Version 1.
- Question 2 reads “Did anyone move into or out of this place between February 15, 2003 and February 15, 2004?”

RR-V3. This version has the following characteristics:

- This version is essentially identical to RR -V1 except that it replaces “live and stay” with “live and sleep” in the first sentence of the central instructions, and in Question 1.
- The instructions communicating the central concept read:
 - We want to count people where they usually live and sleep.
 - For people who have more than one place to live, this is the place where they live and sleep most of the time.
- Question 1 is rephrased as “How many people were living and sleeping in this house, apartment or mobile home on February 15, 2004?”
- Question 2 reads “Other than those you included in Question 1 were there any people sleeping at this place on February 15, 2004 who were not permanent residents?”

RR- V4. This version has the following characteristics:

- The aim of this version was to present explanations of the reasons for the rules.
 - The first information presented is an explanation of the basic function of the census: “The census must count every person living in the United States on February 15, 2004.” A second sentence below reads “Before you answer Question 1, read our guidelines.”
 - Three paragraphs follow, labeled A, B, and C:
 - A. Every person should be counted at the place where he or she lives and sleeps most of the time.
 - B. The Census Bureau conducts counts in institutions and other places, so do not include:
 - anyone living away either at college or in the Armed Forces
 - anyone in a nursing home, hail, prison, or detention center on February 15, 2004.
- Such people should be left off your form, even if they will return here to live after they leave college, the nursing home, jail, etc. Otherwise, they may be double-counted.
- C. The Census must also include people who have no residence. If someone has no residence but was staying here on February 15, 2004, count the person. Otherwise, they may be missed in the census.
- Question 1 is phrased in terms of “living and staying”.
 - Question 2 reads, “To help us understand living situations in the United States, please tell us if there were any of the following people staying at this place but not included in Question 1.” The answer categories are, “Children, such as babies or foster children, Other relatives, Live-in employees, Other non-relatives, such as roommates, and No additional people.”

RR - V5. This version has the following characteristics

- It was designed to present residence instructions in terms of the number of places that an individual might be attached to.
- The initial instruction reads “To decide who should be included in Question 1, follow the STEPS below.
- The four steps following this instruction read:
 - Step A. Count everyone who lives here and sleeps **ONLY IN THIS PLACE**.
 - Step B. If someone has **MORE THAN ONE PLACE** to live and sleep, count that person if he or she lives and sleeps here most of the time.
 - Step C. Was someone in a **NURSING HOME, JAIL, PRISON OR DETENTION CENTER** on February 15, 2004? If so, do not count that person even if he or she was here most of the time. We will count them at the other place.
 - Step D. Answer Question 1, below.
- Question 1 is phrased in terms of “living or staying.”
- Question 2 reads, “Did you leave anyone out of the count in Question 1 because you were not sure if that person should be included?” The “yes” option is

followed by three lines for respondents to write in the names of such individuals.

2. Methods

Ten interviews were completed on each test format for this research, for a total of fifty interviews.

Recruiting for these interviews included persons with relatively complex living situations, including such cases households with children living away at college, respondents on active duty in the military, roommate situations, and households where unrelated young people frequently stay.

The interviews were carried out in Chicago, Illinois and the Washington, DC area and in rural Virginia. They took approximately an hour. Respondents were paid \$35 for their participation.

The interviews for this research were combined with cognitive interviewing on sections of the Coverage Research Follow-Up (CRFU) instrument. The aim of this was to test the CRFU, and to provide additional information about the coverage which might not have otherwise been elicited in the cognitive interview. The results of the cognitive interviews on the CRFU will be reported elsewhere. In this memorandum, the CRFU will be relevant primarily in its latter function.

The interviews followed a modified concurrent think aloud procedure. That is, respondents were given the think aloud instruction, but were allowed to begin the questionnaire and fill it out through Question 2 without probing. The aims of this procedure was to be able to assess where the respondent started in the questionnaire, and to observe whether or not the respondent appeared to read the instructions. These were key elements in assessing readability of the forms. The respondents were then asked about their reading behavior, and were probed about the meaning of the terms and concepts employed in the instructions (whether they had read them or not.) We did not ask them to read the questionnaire aloud. The coverage elicited by the instructions and Questions 1 and 2 were further debriefed by the use of relevant sections of the CRFU.

3. Limitations

The limitations of this research stem from the scale of the research and from inherent limitations of cognitive interviewing for these purposes. It should be noted that only ten cognitive interviews were completed for each format. This does not permit an assessment of a wide range of living situations for each form, and does not present a wide range of respondent abilities and habits in filling out questionnaires. In addition, cognitive interviewing probably causes respondents to pay more attention to the questionnaire, and perhaps to read more thoroughly, than they would in natural situations. We have to some extent preserved natural reading behavior by not probing until the respondent is finished with Question 2, and by not asking the respondent to read the questionnaire aloud. However, it seems likely that our respondents were more

conscientious about reading during our interview than they might have been naturally. This limits our ability to extrapolate from the reading behavior observed here to the reading behavior during a field test.

4. Findings

4.1. Live/Stay vs. Live/Sleep.

Version 1 and Version3 contrast primarily in their use of the word “stay” or “sleep” in the centering concept at the beginning. Very little overall difference was detectable between respondent performance on the two versions in terms of the accuracy of the coverage which was elicited. However, in terms of respondent understanding, there appears to be a difference. The term “stay” was experienced as rather vague. As a result, it was noted that the term “live” was the focus of attention for respondents who filled out Version I. This indicates that they would interpret the central concept primarily in terms of the most permanent residents in their households, which they would have naturally tended to do in any case. By contrast, the term “sleep” appeared to be more specific. It had the effect of focusing respondents on people who “claim a bedroom,” and persons who “claim a bedroom” may not be core members of the household. Thus, the term “sleep” was given a more physical interpretation. For example, the term “sleep” brought in a tenuously attached individual, a teenage friend of the respondent’s child, who had an agreement only to sleep at the respondents home. This individual did not “live” in the household in any of the common senses, as he spent no waking hours there, but would probably be counted as a correct enumeration. Thus, it appears that “sleep” may thus be somewhat closer to the census concept than the term “stay.”

However, the term “sleep” may also be somewhat problematic in certain cases. Precisely because it has a more physical sense, it may cause people to think of visitors who were present on the date of the census. This appears to be most problematic if the respondent associates the term “sleep” with a particular date. (This leads to the conclusion that if the term “sleep” is used it should not be combined directly with the date, as it would be if it were used in Question 1.) It was also noted (for Version 5) that there is a possible discrepancy between “live” and “sleep” in some instances. However, since people who “live” there but do not “sleep” there are probably erroneous enumerations, it may be useful to raise this conflict in the minds of respondents.

This version also uses the concept of “more than one place to live” in the central concept. Most respondents had no difficulty with this, but one respondent believed that this referred to different rooms in her house. It seems likely that this is somewhat idiosyncratic.

4.2. Reference Period vs. Unspecified ‘Most of the Time’

Version 2 uses a reference period, while all of the other versions use the concept of “most of the time” without attaching it to a particular reference period.

The argument for including a reference period was that respondents would have difficulty in calculating “most of the time” when they did not understand what period was in mind. The presence of a reference period was intended to make this calculation logically consistent, avoiding confusion about what period “most of the time” was supposed to cover. Thus, for the reference period concept to be considered successful, it would have to enable respondent to clearly and accurately calculate the proportion of time a respondent spent in the household.

However, the version of the reference period fielded here apparently fails in that regard. The reasons presented by the researchers include the following:

- Anxiety was created by the reference period because respondents had difficulty in remembering the movements of their household members between the particular dates mentioned.
- Some respondents, who were less interested in accuracy, reported that they were only approximating the dates in their calculations.
- The dates presented seemed arbitrary. The dates used here were February 15, 2003 to February 15, 2004. The date used in the actual census would be April 1, which might be somewhat better than a date in the middle of a month. However, it is likely that April 1 would also seem somewhat arbitrary since people are used to thinking of calendar years.

Of all of the versions, Version 2 was the only one that elicited considerable negative comment from respondents. They are reported not only as anxious, but as laughing and as scornful when presented with Version 2.

Another difficulty which was cited here was that Version 2 does not provide any way of encouraging the enumeration of persons who are tenuously attached to the household until the Include and Do Not Include lists are reached. The top of the box deals only with persons who can be seen to have “lived” in the household at some point, and not those whose presence may have been more temporary or irregular. This seems a particularly problematic flaw.

Version 2 uses the concepts of “moving in” and “moving out.” They are necessary concepts in this version, because persons who moved out during the reference period may have spent “most of the time” at the housing unit, and persons who moved in during the reference period may not have done so. (Other versions attempt to establish that the respondent should enumerate everyone who currently “lives” in the household, which avoids the issue of movers.) In this data, the concept of moving was generally seen as a clear and unitary event and did not cause difficulties for most respondents. However, there may be instances in which “moving” is somewhat more ambiguous. In one instance, a person who was present in a living situation with several other college students was not considered to have “moved in.” (He had slept on the couch for a considerable period, apparently over the objections of the respondent.)

The concept of “most of the time” was also generally experienced as understandable, in all of the versions. However, it must be noted that respondents gave varying definitions ranging from 50% to 75% of the time. Only in one instance was this concept perceived as difficult, and that was in a case where the respondent thought of the time as exactly 50-50. Problems with having

no reference period were not mentioned. This implies that respondents are willing to assume that they generally understand what period of time to use in their calculation of “most of the time.”

In sum, then, it appears that the reference period version did not encourage more accurate coverage, appears to have introduced new conceptual problems and was experienced as unacceptable by respondents.

4.3. Conceptual Understanding of the Census.

The aim of Version 4 was to provide respondents with a conceptual understanding of who should be listed on their census forms. Although there is no clear advantage shown in the actual coverage produced, this approach seems to have had some success in providing such a conceptual understanding. In particular, the instruction not to count individuals in group quarters was relatively acceptable in this version because an explanation was provided for why they should not be counted, by introducing (in Step B) the concept of double counting, which appeared to make sense to respondents. (It is suggested that this sentence needs more prominence, but this is a format, not a conceptual problem.)

Respondents in this version did not seem to have difficulty in generalizing the list of group quarters places in this version, which they had difficulty doing in some other versions (particularly Version 5).

Perhaps because of these conceptual elements, one of the researchers reported that this version had the effect of focusing “more attention” on the guidelines box than the other versions tested. This is particularly of interest because one potential drawback of this version is that it contains more text than the others, and so was at risk for not being read. However, no pattern emerges with respect to reading that indicates that this is a problem for this version.

Some difficulties with this version were also noted. This format in particular does not provide information to respondents about what to do with the information that they are receiving. Other versions use directive language, such as “include” or “count”. This version does not, requiring respondents to go through a lot of explanatory text with no direction before encountering the first direction to do something in Question 1.

In addition, although this version mentions people away in the military in the first part of Step B, it does not repeat this in the second paragraph, and this was believed to be potentially confusing.

4.4. One Place vs. More Than One Place.

Version 5 uses the concepts of “lives and sleeps only in this place” and “more than one place to live and sleep.” The intent of this was to allow respondents whose families have simple living

situations to respond easily, while saving the more complicated concepts of “most of the time” and being in certain institutions on census day for persons to whom they actually apply.

One positive feature of this format was that it gives respondents specific instructions about what to do with the information presented. One researcher felt that requiring respondents to make a running tally would enhance this feature.

In general, the concepts of “one place” and “more than one place” seemed to have been relatively understandable to respondents. This presentation led one respondent to understand that commuter workers should be counted at the other place, although she did not find this acceptable and became confused. (While such confusion is not desirable, it may be seen as success in decentering the respondent from her natural understanding of residence.) The only difficulty encountered with this concept was that the text does not specify where a person who spent most of his time away, but did not have a single alternate residence, should be counted. This potentially caused miscounting of a person who had a job as a traveling salesman.

Certain other difficulties were noted in the way that these concepts were presented.

- This version lacks a mention of college students. The original idea was that college students would be understood to have more than one place to live and sleep, and that therefore there was no need to mention them specifically. However, respondents tended to think of college students as “living” in their households, and so entered the count at Step A. It seems likely that this problem would also apply to members of the military.
- Some respondents thought that Step B and Step C were “contradictory.” Step B brings in the concept of ‘most of the time’ while Step C negates that calculation, if the person was in a group quarters on census day. At least one respondent was able to resolve this difficulty by realizing that it applied only to the specific institutions mentioned. It should be noted that this potential contradiction between “most of the time” and “census day” is not exclusive to this version, but may have been brought to prominence by the fact that they are presented as steps rather than in include and exclude lists.
- Respondents had a tendency to see the institutions mentioned in Step C as referring only to those specifically listed. They had some difficulty in generalizing this concept to other kinds of institutions.

4.5. Reading Behavior

Although cognitive interviews are not the best situation for determining if respondents will read the information provided on the census form, it was thought that differences in this respect might emerge between versions. The table below indicates the extent of reading noted for the five test version. Because the interview summaries did not always indicate whether the residence rules had been read prior to the beginning of probing, there are substantial number of cases in which reading cannot be ascertained. (All respondents read the form during probing.)

Table 1. Number of respondents who read the residence instructions prior to probing.

	Read or skimmed	Not read	Not indicated	
Version 1	4	3	3	
Version 2	6	3	1	
Version 3	5	0	5	
Version 4	7	0	3	
Version 5	7	0	3	
Total	29	6	15	N =50

For the methodological reasons noted above, it is difficult to draw any certain conclusions about the respondents' tendency to read these residence instructions under natural conditions. However, it is perhaps interesting that the three versions which presented the newest approaches appear to have elicited the highest levels of reading. These include Versions 2, 4, and 5. This may have been due to unexpected presentations of the material, giving respondents a quick impression that they needed the information contained in the instruction box. Versions 1 and 3 mention the concept of who lives in the household early on, and thus may have given respondents the impression that they already knew what to do. Another reasonable hypothesis is that the respondents assigned to the new versions may have had more complex households, and thus tended to rely on the form for guidance. Whether either of these hypotheses are valid is not possible to determine from this research.

Version 4, the conceptual approach, had most text and was thought to be vulnerable to lack of reading. However, it apparently did not suffer from this flaw in comparison to other versions.

It should also be noted that respondents who read the information presented may choose not to follow it. This has been noted previously in all qualitative research on residence instructions. The pattern is also evident in the current interviews. In several instances, respondents read and understood our rules, but rejected them. In this data, the instances involve requirements not to list people who are considered core members of their households. College students and people who might have been in group quarters on Census Day are examples. At times this causes respondents to have strong negative feelings. Here is an example:

“This isn't how they want me to answer this, ‘if so do not count that person even if he or she was here most of the time’ and I would kinda get mad at that...Like I said, that's a loved one. Why, why can't I count them?...I don't like that, I don't like not including my loved one **if** I know they are coming back to live here...”

4.6. Include and Do Not Include lists

Versions 1, 2, and 3 share identical, bulleted lists presenting information about who should be included or not in the respondent's count of the household.

The include and do not include lists provide important information to respondents. In versions

which do not have these lists, it was difficult to present an adequate amount of information to respondents. It has already been mentioned that in Version 2, there is no indication that tenuously attached persons should be included until the bulleted lists are reached. In addition, information about college students is necessary in several of these versions, because other indications, like the concept of “most of the time” are not sufficient to cue their exclusion from the form. Thus, the inclusion of the include and do not include lists is a positive feature of the versions where they occur

Respondents clearly need specific information about college students and how to list them. (The absence of this information is a flaw for Version 5, as noted above.) However, The way that this information is currently presented the inclusion may be potentially confusing for some respondents. One of the respondents interviewed here was living in an apartment with several roommates near her college. She became confused as to whether or not she should include herself on the list because the information about college students appeared on the “do not include” list.

The final bullet on the include list, “People staying here on February 15, 2004 who have no other permanent place to stay” seemed to elicit a reasonable accurate list of examples, including “foreigners”, boarders, foster children, and homeless persons and “drifters”. One respondent at first included visitors from out of town, but was able to self-correct. This misinterpretation may have been the result of interpreting the concept of “no other place to stay” in terms of “staying while they are here in this city.” (It may be useful to include information about not listing visitors with their own residences.)

One respondent needed to find the first include bullet, “Babies and children living here, including foster children,” in order to list her own infant. The retention of this information is important.

An observation should be made about the way in which respondents discuss these bulleted lists. When respondents have absorbed the information and are discussing it with the interviewer, they very frequently begin to use the term “exclude” rather than “do not include.” One of the researchers suggested that the term “exclude” is preferable because it is a more natural term and makes a clearer visual contrast with “include.” While this suggestion may have merit, it should be tested. “Do not include” has been considered softer, and less likely to be perceived negatively; and these considerations may be more important than enhancing the distinction between the two bulleted lists.

4.7. Coverage questions.

The coverage questions tested in this research all followed the residence instructions box, and were numbered as question 2. Different versions of the coverage question were used in each case, and were designed to be a logical extension of the aims of the presentation of the instructions included in each version.

4.7.1. Version 1: Live/stay.

This coverage question was: “Other than those you included in Question 1, were there any people staying at this place on February 15, 2004 who were not permanent residents?” The main problem encountered with this version was that the language “permanent residents” is reminiscent of the official terminology used by immigration authorities. Respondents who were reminded of this were misled into thinking that the question was asking about residence status. This observation was made by all three researchers.

4.7.2. Version 2: Reference period

This coverage question was “Did anyone move into or out of this place between February 15, 2003 and February 15, 2004?”

This coverage question caused some of the same problems that have already been reported for this version previously, in that the dates seemed difficult and arbitrary to respondents. Because it covers the exact same concept as the main roster instructions, it was also perceived as redundant by respondents.

4.7.3 Version 3: Live/sleep

This coverage question was “Other than those you included in Question 1 were there any people sleeping at this place on February 15, 2004 who were not permanent residents?” This coverage question is almost identical to the one which was used in Version 1, but it replaces the term “stay” with the term “sleep.”

This coverage question was successful in eliciting the presence of some part time residents, such as a resident’s boyfriend who stayed was frequently there.

Since this version of Question 2 uses the same concept of “not permanent residents” it also suffers from the problem of reminding respondents of “permanent residents of the United States.” In addition, the use of the term “sleep” in this context may be problematic, because it combines the idea of “sleeping here” with a specific date. This apparently caused some respondents to interpret the question as asking about people who were “visitors or guests.” The question thus becomes more of a de facto question, and is likely to make respondents over-include people.

4.7.4. Version 4: Conceptual Approach

This coverage question was “To help us understand living situations in the United States, please tell us if there were any of the following people staying at this place but not included in Question 1.” The answer categories are, “Children, such as babies or foster children, Other relatives, Live-in employees, Other non-relatives, such as roommates, and No additional people.”

This question apparently elicited some resistance from respondents. Respondents saw it as “double checking” or “nosy” and were reported as being “taken aback.” The reason for this appears to be that the categories presented cover the same conceptual territory as the material presented within the residence instruction box. Respondents therefore did not understand why

they were being asked this again, when they had just included these categories of people in their calculations for Question 1. Thus, the interpretation of Question 2 apparently does not take account of the phrase “but not included in Question 1”. It could be that this concept needs more prominence to make the concept workable.

A few respondents had difficulty in finding the category “no additional people.” This may have also been a cause of frustration and increased the sense of redundancy. Finding the category might have supported the idea that they were not required to repeat the same information as in Question 1, and would have exempted them from having to decide which category everyone in their household belonged to.

Even for respondents who use the question as intended, it may be difficult to use the categories because they seem to require only one mark. Some respondents noted that it is possible for a household to have additional persons to report in more than one of these categories. For that reason, it may be appropriate to make this question “mark all that apply.” Since the question is primarily intended for use as a flag for coverage follow-up, multiple marks should not be problematic.

The categories themselves appeared to be generally understandable. One respondent is reported as misinterpreting the category “live-in employees” which apparently reminded the respondent of people from work who might be staying with the household for some reason. This interpretation is not problematic, since that is also a part-time situation which would be included in coverage follow-up.

4.7.5. Version 5: One place/more than one place

This coverage question was “Did you leave anyone out of the count in Question 1 because you were not sure if that person should be included?” The “yes” option is followed by three lines for respondents to write in the names of such individuals.

This question prompted two respondents to mark that they were “unsure.” In one instance, this reflected the respondent’s lack of confidence in his answers, because he had been “just guessing” about some of the information he had provided. In another instance, the respondent had difficulty in calculating “most of the time” for a particular individual, because he perceived the time spent as exactly 50-50. However, the suggestion of uncertainty was apparently upsetting to the first respondent. This question is reported as having “increased his agitation.”

It should be noted that this question does not present any reason why the respondent might be unsure, and it therefore more likely to be interpreted as an attempt to make the respondent admit that he or she may have made mistakes. Some means of suggesting reasons why the respondent might have been unsure might improve this question.

The question also met resistance in another way. This is the only question that requires respondents to list name of people who they include in a positive answer to Question 2. This was perceived by one respondent as “extraneous and invasive.” This apparently rested on a

perception that the respondent had no right to provide information about people who were not members of his family. This sense of not having the right to divulge the presence of non-core members without express permission to do so has been encountered previously in residence rules research. It may be made even more problematic here because this is the first place in the questionnaire where names are elicited, before a listing of names of core household members. Thus, the questionnaire elicits the most sensitive information first, before other, more acceptable, material is covered. Thus, it seems likely that the sensitivity of this question a result of the request for names, and not of the question itself.

5. Recommendations

5.1. Because the term “sleep” seems to best approximate the census concept, the initial sentences in Version 3 are preferable to that contained in Version 1. However, the term “sleep” presents difficulties when combined with the date, as it appears in Question 1 of Version 3 and in the coverage question in Version 3. We therefore recommend using the term “stay” these venues.

5.2. The use of the reference period did not appear to improve respondent’s calculation of the concept of ‘most of the time.’ In addition, it appeared difficult and arbitrary, and was rejected by respondents. We therefore recommend against further development of this concept.

5.3. The approach of providing respondents with a conceptual understanding of the census shows promise. At least among these respondents, there did not appear to be a lower level of reading compared with other versions, as a result of the longer text. In addition, it was reported to have drawn the attention of respondents rather well. The explanation of double counting was thought to be effective, and we recommend giving this sentence increased prominence in the format. Another recommendation is to provide language which directs respondents about what to do with the information that is contained in the box. This language should involve directions to “count” or “include” the kinds of people mentioned in the answer to Question 1. We also recommend editing the presentation to see if the amount of text can be reduced.

It is recommended that these revisions be further cognitively tested.

5.4. Version 5 had some serious problems, but these interviews do not appear to stem from the basic concept of “one place” vs. “more than one place.” The element of providing specific instructions to the respondents is a strength of this version. We recommend continuing to develop the idea of using a tally as the result of each bit of information, if the elements can be made conceptually exclusive of one another. This is essentially the worksheet idea.

The main confusion seems to have arisen from a conflict between the perceived meaning of Steps B and Step C. Step B led respondents to think that the concept of “most of the time” applied to everyone, but then in Step C those in group quarters are excepted if they are not present on census day. This contradiction is implicit in all presentations of the “most of the time” concept, but it is particularly noticeable when presented as a series of steps. Therefore, we recommend the alteration of the “more than one place” concept in Step B to include *only*

households. This would define the difference between Step B and the group quarters instruction in Step C. In addition, this presentation appears to require the specific mention of college students (and probably members of the armed forces) who are likely to be over-included in Step A. This indicates that they should be included as examples. Thus, revised language might be: “If someone has more than one residence where they live or sleep, such as a college student or a member of the military living away, count that person here **only** if he or she sleeps here most of the time.” An alternative possibility would be to use the word “household” instead of “residence.”

It might also be useful to indicate that Step C is not exclusively focused on the three kinds of institutions which have been bolded in this presentation. A possible revision might be: “Was someone in a **NURSING HOME, JAIL, MENTAL HOSPITAL OR DETENTION CENTER** or any similar place on [census day]? We will count them at this place, so do not include such people even if they were here most of the time.”

The sequence would thus be:

Step A: Count everyone who lives and sleeps **ONLY IN THIS PLACE**.

Step B: If someone has **MORE THAN ONE RESIDENCE** where they live or sleep, such as a college student or a member of the military living away, count that person here **only** if he or she sleeps here most of the time.

Step C: Was someone in a **NURSING HOME, JAIL, MENTAL HOSPITAL, OR DETENTION CENTER** or any similar place on [census day]? We will count them at this place, so do not include such people even if they were here most of the time.

It is recommended that these suggestions be further cognitively tested. If promising language can be developed for the tally sheet idea, this should be cognitively tested along with the revision of the current version.

5.5. The version of the coverage question in Version 3 and Versions 1 and 5 differ only by the use of the word “sleep” instead of “stay.” Since “sleep” is misleading in this context, the term “stay” should be retained. The term “permanent residents” should be altered to something less reminiscent of immigration status. “Not living here all of the time” might be a possible replacement. A possible revision might be:

“Other than those you included in Question 1, were there anyone else at this place on February 15, 2004 who was not staying here all of the time?”

This or a similar revision should be cognitively tested.

5.6. The coverage question which follows the conceptual version, (Version 4) had some serious problems. Most of these had to do with the perceived redundancy between the instruction box and Question 2. This might be ameliorated by making the concept of “not included in Question

1" more prominent. It might be necessary to put it at the beginning of the sentence to do this. "Was there anyone else you did not include in Question 1 who had the following kinds of living situations?" is a possible revision. In addition, it is necessary to make it "mark all that apply" and to put "no additional people at the top of the list to make it easier for respondents to find. An example should be included for "live in employees." The question should thus be:

2. Was there **anyone else** you did not include in Question 1 who had the following kinds of living situations? Mark [X] all that apply:

- No additional people
- Children, such as babies or foster children
- Other relatives
- Live in employees such as nannies
- Other nonrelatives, such as roommates

This or a similar revision should be cognitively tested.

5.7. The coverage question included in Version 5 appears to be unacceptable to some respondents because it suggests that they are "not sure" of their answer to Question 1. While the question did elicit two "yes" responses among these respondents, means should be found to soften the implication that the government is checking up on respondents' answers. One possible revision might be: "Did you leave anyone out of the count in Question 1 because we did not provide enough information to decide if that person should be included?" The answer categories would be "yes" and "no." This would put any possible blame on the Census Bureau and still allow respondents to say that they were unsure. Another possibility is to retain the concept of "unsure" but supplement it with some examples of complex living situations. This would provide an implicit reason why the respondent might have been unsure and reduce the impression of the question being a double-check on accuracy. (Such examples are used in the question for the Canadian census, which provided a model for this question.)

This question was also experienced as sensitive by some respondents, who objected to having to provide names of people who were not core members of the household. We believe that collecting this information in the second question, prior to the collection of any other names, is inappropriate. Therefore, we recommend dropping the collection of names from any revision of this question.

Possible revisions include:

"Did you leave anyone out of the count in Question 1 because you were not sure if that person should be included, such someone with two places to live or a child in joint custody?"

or

"Did you leave anyone out of the count in Question 1 because we did not provide enough information to decide if that person should be included?"

One of these revisions should be cognitively tested.

5.8. These interviews suggest that some revisions to the include exclude lists might be useful. In particular, the include bullet “no other permanent place to stay” created a tendency to include guests and visitors from out of town. It might be useful to add an instruction under the “do not include” list”indicating that “guests and visitors who will return home” should not be listed.

The bullet that informs respondents not to include “college students living away” should be specified further, to avoid the possibility of respondents in student apartments excluding themselves from the form. The bullet could be revised to say “College students who live away from this address most of the year.”

It might be useful to test using “Exclude” instead of “Do not include” as a column heading, since this appears to be natural language for expressing these concepts.

Thus, the suggested revisions would result in the following bulleted lists:

<u>Exclude</u>	<u>Include</u>
(We will count them at the other place)	
College students who live away from this address most of the year	Babies and children living here including foster children
Armed Forces personnel who live away	Roommates or boarders
People who, on (census date) were in a	People staying here on (census date) who had no other permanent place to stay
-Nursing home or mental hospital	
-Jail, prison, or detention facility	
Guests and visitors who will return home	

The inclusion of “mental hospitals” here is the result of suggestions made by persons interested in group quarters enumerations. Room for an extra line of bullets would be provided by excluding the “Please also note” line currently in the tested versions.

These revisions should be cognitively tested.

