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## 2012 AMERICAN COMMUNITY SURVEY RESEARCH AND EVALUATION REPORT MEMORANDUM SERIES #ACS12-RER-23

MEMORANDUM FOR	ACS Research and Evaluation Steering Committee
From:	James B. Treat ( <b>signed on 05/23/2012</b> ) Chief, American Community Survey Office
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Subject:	Understanding Differences in ACS and 2010 Census Information on Occupancy Status – Data Collection Methods

Attached is the final American Community Survey (ACS) Research and Evaluation report on Understanding Differences in ACS and 2010 Census Information on Occupancy Status – Data Collection Methods. Estimates of vacant housing units from the 2010 ACS differ markedly from the counts of vacants from the 2010 Census. This evaluation researches into the role of the ACS filed representative (FR) and the Census enumerator in the classification of unit status to determine if the procedures and training used in the ACS and the 2010 Census might help explain the difference.

If you have any questions about this report, please contact Sandra Clark at 301-763-5884.

Attachment

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May 23, 2012

# Understanding Differences in ACS and 2010 Census Information on Occupancy Status – Data Collection Methods

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A major goal of both the American Community Survey (ACS) and the Census is to determine the unit status for every address in their operation. This means classifying every sample address as valid or invalid and for all valid units determining if the unit is occupied or vacant. It is reasonable to expect that both the ACS and the 2010 Census would define the status of a housing unit the same. However, recently released 2010 ACS estimates of vacant housing units differ markedly from the counts of vacants from the 2010 Census. While the majority of sample units are relatively easy to classify, both operations face situations where classification is more difficult and it is possible that there are subtle differences in the way that the two handle these types of situations. Since most vacant units obtain their unit status during a personal interview, we wanted to research into the role of the field representative (FR) and the census enumerator in the classification of unit status. There were two main purposes for this research. One was to review the procedures and training materials used by FRs in the ACS and enumerators in the 2010 Census and identify any differences that could contribute to discrepancies in how they classify addresses. The second was to conduct debriefing sessions with ACS FRs in an attempt to gain insight into how they interpret the procedures and materials provided, as well as learn the challenges that they face when classifying housing units.

#### **Research Questions**

- a. How do the written procedures and training materials related to the enumeration of occupied versus vacant housing units that were used in the 2010 Census compare with the materials used in the ACS? How are the procedures and supporting materials alike? In what respect do the 2010 Census and the ACS procedures, training, and methods differ?
- b. Did ACS FRs encounter any problems in determining the occupancy status of housing units? Do they identify any areas of confusion or any likely sources of error that might explain the differences in the final results? What do the F7 notes<sup>1</sup> tell us about potential confusion in assigning type of vacancy in the ACS?
- c. Do ACS FRs that worked on the 2010 Census feel that the definitions and rules related to determining occupancy status were similar in the census and the ACS? Do they offer any explanations for differences in classifications?

#### **Review of Procedures and Materials**

#### **Methodology**

We conducted a thorough review of all written procedures and training materials related to the determination of occupancy and vacancy statuses<sup>2</sup> in the ACS and the 2010 Census. We

<sup>&</sup>lt;sup>1</sup> These are notes entered by the FRs in the instrument during an interview. FRs have the ability to enter notes pertaining to each screen in the instrument. The F7 notes studied for this evaluation are those associated with the screen asking about the type of vacant unit.

 $<sup>^{2}</sup>$  Occupancy status distinguishes between invalid, occupied, and vacant housing units, while vacancy status details the type of vacant unit – is it for sale, for rent, etc.

compared and summarized the set of definitions and procedures used to classify the occupancy status of sample addresses. We paid particular attention to the procedures suggested to resolve complex cases.

Both the ACS and the 2010 Census have several reference materials. The ACS materials reviewed in this research include the following:

- Computer Assisted Personal Interviewing (CAPI) manual (U.S. Census Bureau, 2011a),
- FR Pre-Classroom Self Study (U.S. Census Bureau, 2011b),
- FR Training Guide (U.S. Census Bureau, 2011c),
- Training Workbook (U.S. Census Bureau, 2011d),
- FR Flashcards, and
- various FR memos.

The 2010 Census materials reviewed include the following:

- Nonresponse Follow Up (NRFU) Guide for Training Enumerators (U.S. Census Bureau, 2009a),
- NRFU Enumerator Workbook (U.S. Census Bureau, 2009b),
- NRFU Enumerator Manual (U.S. Census Bureau, 2009c),
- 2010 Census Enumerator Quick Reference Guide (U.S. Census Bureau, 2009d), and
- the Information Sheet (U.S. Census Bureau, 2009e).

Because the focus of this research was how the two classify the unit status of the sample addresses, the review concentrated on the sections pertaining to this topic. We searched the materials for key words (such as occupied, vacants, temporarily occupied, deletes, noninterviews, two-month rule, residency rules, unit status, etc.) as to not overlook any related information.

#### Results

This section states the protocol used by the ACS and the 2010 Census to classify addresses, along with a summary of the similarities and differences between the two.

#### **ACS Protocol**

The ACS FR is required to classify every sample address into one of six different categories:

- Occupied Housing Unit,
- Temporarily Occupied Housing Unit,
- Vacant Housing Unit,
- Type A Noninterviews,
- Type B Noninterviews, and
- Type C Noninterviews.

These categories determine the path of the interview and are used to create the final housing unit status. The classifications of some sample addresses can be unresolved due to the inability to determine a final status (noninterview).

Occupied units are units with a "current resident", meaning there is someone living or staying at the residence on the day of the interview and he/she has stayed or plans to stay at the unit for more than two months.

Temporarily occupied units are units where there is at least one person present at the time of interview but he/she is not a "current residents". The FR initially classifies these units as occupied units during an interview, but the instrument later assigns them a status of temporarily occupied when the FR creates the household roster and determines that there are no "current residents" in the household. The ACS assigns a final unit status of vacant to temporarily occupied units.

Vacant units are units where an FR determines that the address is unoccupied, meaning no one is living or staying at the address at the time of the visit, and there are no occupants temporarily away for two months or less. To be considered vacant the unit must be protected from the elements, not severely damage by fire, and neither condemned nor scheduled to be demolished<sup>3</sup>.

Definitions of current residents, occupied, temporarily occupied, and vacant units are located in the FR Pre-Classroom Self Study (Lesson 5), FR training guide (Chapter H) and the FR CAPI manual (Chapters 2-5).

Units determined to be temporarily occupied or vacant require an additional question to determine if the unit is for rent, rented (not occupied), for sale only, sold (not occupied), for seasonal, recreational, or occasional use, for migrant workers, or for some other use. Chapters 3 and 4 of the FR CAPI Manual include detailed information on each classification type. Housing units assigned a vacant status are also asked, "How many months has this unit been vacant?"

When an FR is not able to obtain information for a sample unit, they assign the unit a noninterview status. When assigning a noninterview status, the FRs must specify why. When an eligible respondent is not located, unavailable or is unwilling to provide the survey information, or the sample unit cannot be found, the FR assigns a Type "A" status. For a Type "A" noninterview, the FR must choose one of the following reasons:

- No one home
- Residents Temporarily Absent
- Language Problems
- Other, (Occupied) Specify
- Unable to locate
- Respondent Refusal.

A Type "B" status is assigned when the sample unit area is not accessible due to a disaster (thus the FR cannot determine the unit status – like after Hurricane Katrina), and there is no way to contact or locate the resident. For a Type "B" noninterview, the FR must write in the reason and receive pre-approval from Headquarters to assign this status.

<sup>&</sup>lt;sup>3</sup> However, if there is a current resident present at the time of the interview, the unit is considered an occupied housing unit regardless of the condition of the unit.

The ACS applies a noninterview adjustment factor to the count of occupied units, which is based on the number of Type A and B noninterviews. More information on the noninterview adjustment factors is documented in the "American Community Survey: Design and Methodology" report.

A Type "C" status is assigned when the FR determines that the sample address is not a housing unit. For Type "C" noninterviews, the FR must choose one of the following reasons:

- Under construction
- Demolished
- House or trailer moved, or empty mobile home site
- Permanent business or storage
- Merged with another unit
- Condemned
- Address nonexistent
- Unit nonexistent Basic Street Address found
- Group quarters
- Other

ACS FRs must notify and receive permission from their supervisors before they can classify a case as:

- Any Type A noninterview
- Any Type B noninterview
- The following Type C noninterviews:
  - Address nonexistent
    - Unit nonexistent
    - Group quarters
    - Other

Chapter 8 of the FR CAPI Manual includes detailed information on each type of noninterview.

#### 2010 Census Protocol

The Census enumerators classify addresses into eight different types of categories:

- Occupied Housing Units,
- Vacant Housing Units -- Regular,
- Vacant Housing Units -- Usual Home Elsewhere (UHE),
- Demolished/burned out/cannot locate,
- Nonresidential,
- Empty mobile home/trailer site,
- Uninhabitable (open to the elements, condemned, under construction), or
- Duplicate.

If they cannot determine a status during their allotted contact attempts, they mark the case as unresolved following procedures mentioned below. The enumerator's classification determines the path of the interview and is used to assign the final status of those determined to be housing unit as occupied or vacant.

Occupied housing units are housing units where there was someone staying or living at the housing unit on Census Day (April 1st) and the unit was their usual residence, meaning where they stay most of the time.

Housing units classified as "vacant – regular" are housing units intended for occupancy that were not occupied on Census Day, meaning no one was living or staying at the address on April 1, 2010.

Housing units classified as "vacant – usual house elsewhere" are housing units that were occupied on April 1, 2010, but the respondent answered "Vacation or seasonal home or held for occasional use" when asked, "Does someone usually live at this (house/apartment/mobile home), or is this a vacation or season home?"

Like the ACS, units classified as either vacant regular or vacant - UHE status require an additional question (question B in figure 1) to determine if the unit is for rent, rented (not occupied), for sale only, sold (not occupied), for seasonal, recreational, or occasional use, for migrant workers, or some other vacant. Chapter 5 in the NRFU Enumerator Manual includes detailed information on each of these vacant types.

#### Figure 1. Interview Summary Section of Census Questionnaire



If the enumerator determines that the unit is not a housing unit, they must choose one of the following to describe the unit (question A in figure 1):

- Demolished/burned out/cannot locate
- Nonresidential
- Empty mobile home/trailer site
- Uninhabitable (open to elements, condemned, under construction)
- Duplicate record

With the exception of 'Empty mobile home/trailer site' these categories get a final status of "delete" and are removed from the Census count and flagged on the Master Address File (MAF) as not in the Census.

The NRFU Enumerator Manual (Chapter 5) includes detailed information on the Census unit status types.

If the enumerator exhausts all contact attempts and is unable to obtain information about the housing unit they are still required to record some information in the questionnaire. Each time they attempt to contact the unit Census enumerators are required to complete an entry in the contact attempts section of the questionnaire (figure 2). When they make their final attempt, they must enter a final outcome code. There are four final outcome codes, 'CI = Conducted Interview,' 'NC = No Contact,' 'RE = Refusal,' and 'OT = Other.' Unresolved cases will have a final outcome code of NC, RE, or OT.



Figure 2. Record of Contact Section of Census Questionnaire

Unresolved cases also require an enumerator to complete information in the interviewer summary section of the questionnaire (figure 1). When the people living at the address refuse to provide the information to complete the questionnaire, and the enumerator is unable to obtain information about the household from a proxy, the enumerator is instructed to mark Item A, Unit Status on April 1, 2010, as 'Occupied,' and enter '99' in Item C to indicate that the population count is unknown. If they are able to determine the number of people in the household, they must enter it in Item C, but still mark an 'X' in Item H because they cannot collect data about the people who live at the address.

As a last resort, enumerators mark Item I when all attempts at collecting household data are made and they cannot complete the interview with a household member or a proxy respondent. This indicates that no more data are available. When an enumerator is unable to obtain enough information to know if the housing unit is occupied or vacant the case is unresolved and they would complete the questionnaire as instructed above.

Definitions and further details about the Census classifications are located in the NRFU Enumerator Manual (Chapter 5), and the NRFU Enumerator Quick Reference Guide.

#### Similarities

In general, the concept of unit status and the definitions of the types of classifications are similar between the ACS and the Census. For example, to be considered a housing unit, and given a

status of occupied or vacant, the unit must be habitable and protected by the elements. While there are differences in the reference periods and residency rules (discussed in the next section), occupied units are basically units where someone is living and vacants are those available but unoccupied. The types of vacants are identical between the ACS and Census. In addition, units determined to be Type C noninterviews in the ACS are very similar to deletes in the Census. Type A and Type B noninterviews in the ACS are similar to unresolved cases (ex. NC, RE, OT) in the Census.

Overall, the training materials and manuals provided to the interviewers are similar in nature and quantity. The contents covered are the same and the training for both includes examples of assigning unit status.

#### Differences

While the overall concepts are similar in nature, there are several noteworthy differences in the procedures and materials used by the ACS and the Census. Some are obvious differences that are a result of the construction of the survey/census, while others are more subtle differences. The differences are described below.

#### **Reference Period**

The reference period for the ACS is the date of the interview, while the Census reference period is April 1<sup>st</sup>. The ACS reference period is indirectly implied by the use of questions stated in the present tense. For example, the ACS question asks, "What is the status of this unit at: \_\_\_\_?" The materials that define "current residents" and "two-month rule" reiterate the reference period. The materials state, "The Two-Month Rule is not anchored by a specific reference date, but can encompass the two months prior to survey contact or the two months following the survey contact day. Each person's current residence status is determined as of this contact. For the mail phase, the current residence status is determined when the household respondent completes the ACS questionnaire, and for the CATI or CAPI phase, it is when the sample unit is contacted by an interviewer."

The Census reference period of April 1, 2010 is stated directly in the question, ".....Did you or anyone in this household live or stay here on April 1, 2010?" April 1, 2010, or "Census Day," is mentioned often in the enumerator materials and is widely known to the public due to the media and other exposure given to the Decennial Census.

The rotating reference period of the ACS means that the data are collected throughout the year, therefore estimates produced from the survey include seasonal trends. Another observation is that the Census places a burden on respondents, requiring them to think back a couple of months to Census Day, while the ACS asks about the current day. Many of the Census's follow-up operations were conducted in early May and ran until June 10, challenging respondents to remember back to April 1<sup>st</sup>.

#### **Residence Rules**

The residence rules are different between the two. The ACS refers to current residents –defined as people who stayed or are staying at the unit for more than two months, while the Census follows the usual resident rule – which refers to people who stay at the unit most of the time. Therefore, the ACS will include as occupied those units that include people who may have

another usual residence somewhere else if they live at this residence for two months or more, whereas the Census will enumerate such a unit as vacant. Both the ACS and the 2010 Census rules classify a housing unit as occupied if the current residents have no other place that they might live.

#### ACS/Census Questions

Figure 3 displays the main ACS question used to determine the status of an address. This is the only question necessary to assign a unit status of vacant or noninterview. Occupied units, however, are verified in the roster creation because an occupied unit is changed to temporarily occupied if it is determined that there are no "current residents" at the address. If it is determined that there are no "current residents" at the address. If it is determined that there are no "current residents" at the address. If it is determined to "vacant"; the instrument is designed to capture this behind the scenes and the only thing affected is the path of the instrument.

#### Figure 3. ACS Main Unit Status Question

#### UNITSTAT\_CP

If unit occupied, enter 1 and continue to introduction
For Vacant or Noninterview, read if necessary
Hello, I'm from the United States Census Bureau. Here is my identification card (show ID card). We are conducting a survey in this community.
What is the status of the unit at:
<address></address>
<ol> <li>Occupied</li> <li>Vacant</li> <li>Noninterview</li> </ol>
Unit status

Figure 4 displays the Census questions used to determine if a unit is occupied, vacant, or not a housing unit (delete).

#### **Figure 4. Census Unit Status Questions**

<ul> <li>S2. I'm here to complete a Census questionnaire for this address. It should take about 10 minutes. (Hand respondent an Information Sheet.) The first part explains that your answers are confidential. I'll refer to the other parts later. Did you or anyone in this household live or stay here on April 1, 2010?</li> <li>Yes - Continue with question S3.</li> <li>No - Skip to question S4.</li> </ul>
<ul> <li>S3. Does someone usually live at this (house/apartment/mobile home), or is this a vacation or seasonal home?</li> <li>Usually lives here - Skip to question S5.</li> <li>Vacation or seasonal home or held for occasional use - Skip to "Respondent Information" on back page.</li> </ul>
<ul> <li>S4. (Only ask if no household member lived here on April 1.) On April 1, was this unit vacant, or occupied by a different household?</li> <li>Vacant - Skip to "Respondent Information" on back page.</li> <li>Occupied by a different household - Using a knowledgeable respondent, complete this questionnaire for the Census Day household.</li> <li>Not a housing unit – Skip to "Respondent Information" on back page.</li> </ul>
<ul> <li>S5. We need to count people where they live and sleep most of the time.</li> <li>Please look at list A. It contains examples of people who should and should not be counted at this place.</li> <li>Based on these examples, how many people were living or staying in this (house/apartment/mobile home) on April 1?</li> <li>Number of people</li> </ul>

The Census design is more thorough, understandable, and makes the job of assigning a unit status easier. The ACS question, "What is the status of the unit at: <inserted address>?" is not required to be read, however it is included on the instrument and therefore is likely read during some interviews. One could argue that this ACS question is a strange question that may be difficult for respondents to understand, which could lead to incorrect classifications. The ACS question, even though in present tense, lacks a specific reference period to clarify that the focus is on the current date.

#### **Eligible Respondents**

In the ACS, an eligible respondent for occupied or temporarily occupied housing units must be a household member and at least 15 years old. FRs may not interview a nonhoushold (proxy) respondent for occupied or temporarily occupied units. The only exception is when the only person available in the unit is physically or mentally unable to respond for him/herself in which case the FR may interview a proxy respondent. The proxy respondent must either live or spend time in the sample unit caring for the disabled person and be knowledgeable about the household.

An eligible respondent for an ACS interview of a vacant housing unit is someone knowledgeable about the vacant unit. A knowledgeable respondent may be the landlord, owner, apartment manager or real estate agent. ACS FRs are instructed to use a neighbor as a knowledgeable respondent only if the vacant unit information cannot be obtained from other recommended contact sources. As a last resort, an ACS FR may determine a unit vacant "by observation" when no local, knowledgeable source is available. ACS materials clearly state that this option should only be used when necessary and require field supervisor approval. More details on eligible and knowledgeable respondents are located in Chapters 3 and 5 of the ACS CAPI Manual.

In the Census, an eligible respondent for occupied housing units is an adult age 15 and over who is a household member of the address, or an adult nonhousehold member (proxy) who is knowledgeable about the address. Unlike the ACS, Census enumerators can use a proxy respondent to conduct an occupied interview if they determine the household members will be absent during the entire enumeration period or if they have exhausted their allowed attempts.

If a Census enumerator determines the housing unit is vacant they are instructed to complete an interview with a person who is knowledgeable about the address. Examples listed in the materials are neighbors, rental agents, or building managers. Priorities, such as the one given to neighbors in the ACS, are not listed in the Census materials. In addition, the materials do not mention an option allowing enumerators to designate a housing unit as vacant "by observation."

#### **Interview Attempts**

Another difference in methods is the number of attempts an FR/enumerator can take to get an interview. The Census restricts the number of contact attempts to six, of which only three can be personal visits (Chapter 5 of the Census NRFU Manual). The ACS materials do not specify a maximum number of personal visits allowed for each case. The ACS FR training guide states, "You must make repeated attempts on different days and at different times throughout the day to find someone at home. This includes weekends as well. Someone may suggest other options for finding a respondent at home. You must be very persistent in your attempts to contact people who are hard to find." When asked about the number of person contact attempts, staff in ACSO

responded that there is no restriction on the number of visits but there are production standards (hours per case) for each FR to follow. This allows FRs to return several times in an attempt to catch someone at the unit or a proxy respondent near the unit. Census enumerators may find it more difficult to confirm that the unit is vacant in their three personal attempts to locate someone knowledgeable about the unit.

#### Noninterviews and Non-existent Housing Units

Some minor differences exist in handling noninterviews and deletes between the two. The ACS is much more specific in its types of noninterviews, offering more choices for classification, including an "other" category. The Census uses only five categories to categorize "deletes" and two for unresolved statuses, while the ACS uses over 20 categories of "noninterviews" that include both delete situations and reasons for noninterviews.

The ACS offers several strategies to convert Type A noninterviews into interviews. Suggestions stated in Chapter M of the ACS FR Training Guide include:

- using interview techniques and skills to convert reluctant respondents such as being professional, and persistent but pleasant
- discussing refusals with supervisor
- making repeated attempts on different days and at different times throughout the day to find someone at home
- having the regional offices send a letter to units where no one is home or the occupant refuses to participate

Chapter M of the training guide also mentions that Type A policies are in place, such as discussing all problems with the team leader. These policies are not stated directly in the ACS materials, but are communicated by the regional offices.

Comments that discourage the FRs from classifying a unit as a "noninterview" are included in the ACS materials. Here are several examples from the ACS FR Training Guide:

"As you know, your job is to visit sample units and complete interviews using the ACS-HU CAPI instrument. Whenever you can't obtain a completed interview for a sample unit, you'll code the case as a noninterview. We expect that only a very small percentage of the households you contact will refuse to participate."

"A Type A noninterview occurs when a sample unit is occupied, but you fail to get an interview. You have some control over Type A noninterviews. For example, by using certain interviewing skills and techniques, you can convince a reluctant respondent to cooperate."

"Too many Type A noninterviews can distort the survey data. Remember, each sample unit represents many other housing units in the same geographic area. When your Type A noninterview rate is high, the sample data may not be representative of the local population." "Always do your best to minimize the number of Type A noninterviews. Remember, we lose valuable data for each Type A case, which could affect the quality and meaningfulness of the information for the local community."

"Keep in mind that you shouldn't have too many of these types of Type A noninterviews. You must make repeated attempts on different days and at different times throughout the day to find someone at home. This includes weekends as well. **Do not** classify a case as a 'Type A – No one home' without first discussing the problem with your team leader or the Regional Office. Someone may suggest other options for finding a respondent at home. You must be very persistent in your attempts to contact people who are hard to find."

The Census training guide offers suggestions on how to handle common objections (figure 5), however strong language, like the ACS quotes above, are not found in the Census materials that discuss deletes or unresolved addresses.

#### **Figure 5. Excerpt From Chapter 6 – Interview Situations of the Census Enumerator Manual**

How to Handle Common Objections	There are several things you can do to answer common objections and persuade a reluctant respondent to cooperate.
	<ul> <li>Anticipate and know the answers to common questions.</li> <li>Be prepared with the proper credentials and materials to explain your reason for asking census questions.</li> <li>Know the laws that govern the census, and the laws that protect the respondent's privacy and the confidentiality of their data. Show the respondent the section of the D-1F, <i>Information Sheet</i>, that provides information about their rights and the confidentiality laws that protect their privacy.</li> <li>Be able to explain the benefits the census provides for the nation, state and local government, businesses, and individuals.</li> <li>Although every census question is important, let the respondent know a question he or she finds objectionable can be skipped. It is better to get as much information as possible rather than nothing at all. You will usually find that, once you start the interview, the respondent will answer all the questions.</li> </ul>

The ACS and Census handle "unable to locate" units differently. The Census enumerators mark the unit status "Demolished/burned out/cannot locate", and consider the unit a delete. The ACS FR classifies the unit as a "Type A Noninterview," and the unit is later counted as an occupied unit through the ACS noninterview weighting adjustment factor that is applied to occupied units.

The section on "Noninterviews" (Chapter 8 in the ACS FR Manual) includes information on when to conduct a vacant interview instead of a noninterview. The manual includes several examples (figure 6), which could confuse FRs and result in incorrect classifications.

#### Figure 6. Excerpts From Chapter 8 - Noninterviews of the ACS FR Manual

Occupants Away Two Months or Longer	If you determine that the occupants have been gone or will be gone for two months or longer, consider the sample unit as vacant. Conduct a Vacant interview for that unit using a local, knowledgeable source (Note: review Topic 2, Knowledgeable Respondent, in Chapter 5 of this manual).
Under Construction (outcome = 229)	Classify a sample unit as "under construction" when the address identifies a new structure that is not ready for occupancy. A structure must exist at a lot in order for you to use this code. Specifically, walls or a frame need to exist on the foundation. A house number or other designation does not have to have been assigned to the lot or structure. When ALL of the exterior windows and doors have been installed <u>and</u> finished floors are in place, the unit is no longer "under construction." You will conduct a Vacant interview.
Abandoned Units	For abandoned units that have all exterior windows, doors and floors - even when the unit is boarded up - conduct a Vacant Interview. If an abandoned unit does not meet this criteria (and is exposed to the elements), then code the case a Type C, 248 - Other.
Under Renovation	Sample units under renovation do NOT include new structures under construction. If the sample unit is under renovation and ALL of the exterior windows and doors are installed <u>and</u> finished floors are in place, conduct a Vacant interview. If the sample unit under renovation does not meet this criteria, then code the case a Type C, 248 - Other.
Temporary Storage of Household Goods	Note: If a sample unit is used for <u>temporary</u> storage of household goods, consider this a vacant housing unit and conduct a vacant interview.

#### Supervisors Permission

ACS FRs must contact their supervisor before assigning Type A, Type B, and most Type C noninterview classifications. This is not a requirement of the Census. Neither ACS FRs nor Census enumerators are required to notify supervisors before classifying a unit as any type of "vacant."

#### **Field Representative Debriefings**

#### Methodology

In addition to reviewing the procedures and materials used by the ACS FRs and 2010 Census enumerators we believed it would be beneficial to conduct debriefing sessions with the FRs. We hoped they would be able to share their challenges as well as provide insight and

recommendations on how they deal with situations where classifying units is difficult. We also hoped to learn if differences exist, that could help explain the gap in vacancy rates between the operations. A series of debriefing sessions were conducted with FRs from the following regional offices: Atlanta, Dallas, Detroit, and Denver. These regional offices were chosen because they included areas having the largest discrepancy in vacancy rates between the ACS and 2010 Census and/or were areas with high levels of expected challenges.

Prior to the debriefings, staff in ACSO, Field Division (FLD), and Social, Economic, and Housing Statistic Division (SEHSD) created a protocol to facilitate the interview. This protocol is included in appendix 1. Following the debriefings, staff in FLD took the answers to the protocol questions from each session and combined them into a single document summarized by question. All information shown in the document was anonymous with no comments attributed to a particular FR. The debriefing attendees from headquarters circulated the document for review and comments (U.S. Census Bureau, 2011e).

#### Results

#### Challenges

To answer research question b, we began by asking FRs about the challenges they face in classifying a housing unit. Particularly we were interested in knowing if they have trouble determining if a unit is occupied or vacant; and if it is difficult to distinguish a unit as vacant as opposed to a type C noninterview (ineligible unit). We wanted to know which types of situations are hardest to determine. The most common answer was that the hardest situations are those where the unit is inaccessible. Examples given were housing units with security issues, gated communities, and condominiums with no public access. There are often visual clues that help FRs determine a unit's status, such as toys in the yard, furniture seen in the house, mail or newspapers lying around, maintained lawns, trashcans waiting for pickup, etc. However, if the unit is not visible then there is no immediate way of knowing if the unit appears occupied.

Another common challenge was finding a knowledgeable respondent who could and was willing to confirm the occupancy status. Often neighbors were uncomfortable answering questions or simply did not know the occupancy status. While inaccessible units and lack of knowledgeable respondents were by far the two most common challenges, there were also some other challenges mentioned. Sometimes FRs found it difficult to determine if the unit was exposed to the elements (meaning it would be a Type C), or if it was habitable but just not occupied (which would be considered a vacant). They stated that the following situations were sometimes difficult to classify: seasonal housing units, trailers, abandoned properties, foreclosures, bank-owned properties, student rentals, blue tarp houses (e.g., damaged by Katrina), boarded but occupied homes, new builds without final permits, rural homes with no neighbors, and corporate rentals.

We also asked FRs how they would classify a unit that appeared to be in foreclosure and they all agreed that foreclosures usually received a vacant classification. They said they often received confirmation of foreclosures by a neighbor, a realtor, or sometime through an 800 number posted on the unit. The most common vacancy status given to foreclosures was "Other vacant". The FRs agreed that the "Other vacant" category was meant to be a catchall and represent anything that could not be classified in one of the other vacancy categories listed in the response options. In

addition to foreclosures, other examples given for the "Other vacant" category were: vacant units not ready to be sold or rented, estates that had not been settled, units where the occupant has either permanently or temporarily moved to a care facility or somewhere else, and units currently being remodeled.

The debriefing sessions also covered newly constructed units. In some areas of the country, the current economic climate caused work to stop on new construction. Therefore, some regional offices experienced situations where the unit was just about ready to be sold but the construction was not entirely complete. Most FRs said that it was not difficult to classify these units. If they appear habitable then they were considered a vacant unit, otherwise, they were uninhabitable and considered a Type C noninteriew. However, there was some discussion about how to classify units that appear to be habitable (closed to the elements), but do not have final approval for the building or occupancy permit.

When asking the FRs about their challenges, it appears that most of the time the status of the unit is obvious. This is particularly true if the unit is occupied, which represents the vast majority of units. There are however, situations for which it is more difficult to classify a unit's status.

During the debriefing sessions, some ACS FRs said they provided information on vacant units in the F7 – Notes screen of the instrument. This screen appears during a vacant interview after the FR enters the contact information for the proxy respondent. ACS analysts researched F7 notes data collected during May and June. Major findings are shown in appendix 2. They concluded that roughly 10 percent of the vacant units in their study may have been actually been Type C Noninterviews. This suggests that some FRs may experience difficulty distinguishing vacant and noninterview statuses.

#### **ACS and Census Differences**

To answer research question (c) we asked additional questions of the ACS FRs who also worked on the 2010 Census. The questions related to how they felt the ACS and Census differed on the topic of classifying unit status. All FRs agreed that they thought the definition of vacant units was the same between the ACS and Census. They also believe that the definition of Type C Noninterviews in the ACS was the same as the definition of a delete status in the Census.

The FRs were well aware of the differences between the reference periods and the residence rules and were able to provide appropriate examples of how the status of the same unit may differ between the two given the inherent differences.

#### Conclusion

In reviewing the procedures and materials that the ACS and Census field interviewers use to classify the unit status of sample addresses it appears that in general the concepts and definitions regarding classifying units are similar. However, we did notice some minor differences. It is possible that the differences noted could have slightly contributed to the differences in estimates; but we failed to identify anything that could explain the differences in their entirety.

The definitions provided for both the ACS and Census are thorough, however more examples of vacants and noninterviews (deletes) would be helpful. The ACS training guide walks FRs

through a vacant interview by first telling the FR the unit is vacant. Likewise, the example used in Census training begins with an apartment manager saying one of the apartments is vacant. Providing a scenario and letting the FR determine the status would offer a better learning experience. While the materials provide a couple "vacant/noninterview" scenarios, they should also include some examples of complex scenarios so the FRs and enumerators can obtain more experience.

From the debriefing sessions, we learned that there are challenges that both ACS FRs and Census enumerators must face when classifying the status of some units. It appears that the material provided are used and interpreted similarly most of the time, however we realize that often a good amount of personal interpretation is necessary when classifying challenging units, which makes standardizing very difficult.

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### Appendices

#### Appendix 1 – Page 1 of 2

#### **Questions for ACS-Census Unit Status Field Debriefing**

Purpose: The purpose of these debriefings is ask for your help in understanding the way you classify vacant housing units in the field in the ACS and challenges you have in doing so. For those of you who worked on the 2010 Census, we want to understand the similar challenges in the Census. We appreciate your participation, and we look forward to learning from you about this topic.

#### For all field representatives

1. What challenges do you face in classifying housing units as occupied versus vacant in the ACS? What types of situations are hardest to determine?

2. What challenges do you face in classifying a unit as a vacant as opposed to a Type C noninterview? What types of situations are hardest to determine? Do you feel the training is clear on defining the characteristics of a housing unit?

3. We would first like to discuss units that are under or near foreclosure. How can you tell if a unit that appears to be in foreclosure or in a "short sale" situation is vacant or occupied? For foreclosures, how do you decide which of the seven vacancy statuses to enter for the VACUNIT\_CP question (shown on the next page)?

4. What are examples of the types of units you or other field representatives you know of classify as "Other vacant" when completing the VACUNIT\_CP question?

5. We now would like to discuss units that are under construction but not yet completed. Do you have many of these cases? Do you ever have trouble determining if a newly constructed unit is completed (and therefore a vacant unit – if not occupied), or under construction?

6. We now would like to discuss units that are uninhabitable for other reasons. Do you have many of these cases? Do you ever have trouble determining if a unit is habitable or not?

#### For field representatives who worked on the 2010 Census

7. In the 2010 Census's Nonresponse Followup or (if applicable) the Vacant/Delete Check, was it clear to you that the status of interest was as of April 1st and not the date of the interview? What challenges did you have in those operations in determining the occupied/vacant/delete status of units as of April 1st?

8. Does it seem to you that the definition of a vacant unit in the ACS is the same as the definition for the vacant status used in the Census? Does it seem to you that the definition of a Type C Noninterview in ACS is the same as the definition of a delete status in the Census?

9. Have you had situations in the Census or the ACS where the residence status of a person would have been different under the Census' "usual residence" rule compared to the ACS' "current residence" rule? (As a reminder the Census' "usual residence" rule is: (1) Count people at their usual residence, which is the place where they live and sleep most of the time, (2) People in certain types of facilities or shelters (i.e., places where groups of people live together) on Census Day should be counted at the facility or shelter, and (3) People who do not have a usual residence, or cannot determine a usual residence, should be counted where they are on Census Day.)

10. In the Census, if you coded a HU as either "Vacant – Regular" or "Vacant – Usual House Elsewhere," in Item A of the Interview Summary on the Enumerator Questionnaire (see below), you were required to check the "Type of Vacant" in Item B in the next column. When would you have classified a unit as "Other vacant?"

#### Review of the CAPI F7 Notes on the Vacant\_CP (Vacancy Type) Screen

Prepared by: Samantha Fish, ACSO 01/24/2012

#### Introduction

In trying to understand the difference in vacancy measures between the 2010 Census and the 2010 1-year ACS, the workgroup heading the investigation sought to review the interviewers' notes input into the ACS CAPI instrument for vacant unit interviews. ACS interviewers can leave notes about a case by hitting the "F7" key on their laptops when in the instrument (hence why these notes are called the "F7 Notes"). The objective for our review was to gain insight into what types of housing situations are being classified as vacant. In the comparison of Census and ACS estimates, it was noted that a large difference existed for vacant housing units that were classified as "seasonal/recreational/occasional use" or "other vacant".

#### Methodology

We were only able to look at the vacant interviews in 2011 ACS March-May panels for CAPI cases because ACSO archives only a few months of the F7 notes. These particular cases were interviewed during the months of May through June in 2011.

I looked at more than 155 unique cases with their F7 notes filled. I ignored some comments that just weren't clear what the FR was saying or didn't tell anything about the case, such as when they leave a phone number or contact name in relation to the case. In all, there were 155 cases with descriptive F7 notes about the situation of the vacant unit. In the tally chart below, these cases are categorized by grouping like comments together—the categories were "data driven".

#### Results

Some of comments indicated that a few vacants should or could be a Type C (HUs to be demolished, model homes, long term storage, etc). I've gone back to add up these categories and see that they accounted for roughly 10 percent of the 155 cases. (Take caution with this figure because it is unweighted and subjective to my interpretation of the FR's comment.) I wonder if it was easier for FRs to classify these types of units in the Census than in the ACS? For example, an FR was told by a neighbor that the house and those next to it were going to be demolished and rebuilt for teacher housing. If that FR were a Census enumerator, they may have chosen the category "unlivable, ... condemned" on the Census' enumerator questionnaire because it may be the most logical category out of occupied, vacant regular, vacant usual home elsewhere, ..., unlivable/condemned, etc.

On the next page is the tally chart that was distributed via the O drive to the ACS-Census Vacancy Work Group:

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## Categories of "F7" Notes for "VacantUnit\_CP" Screen

Data: ACS Panels 201103 – 201105 collected during May – June in CAP	Ι
Estate situation or owner being hospitalized, gone to nursing facility, or being cared for elsewhere	22
Don't Know (could not find a contact, contact didn't know, etc.)	21
Remodeling, renovated, repairing	19
Usual Resident Elsewhere	11
Near foreclosure or short sale	10
None of the Above (reserved for certain kinds of individuals, pending litigation, etc.)	10
In process of putting it up for sale or rent (no renovations needed, just cleaning)	9
Foreclosure and bank owned	7
Seasonal	7
To be demolished	6
Away for work, military, or vacation	5
Unfinished construction	5
Storage	4
For rent or sale	4
Model Unit	3
Boarded up and no one home (abandoned)	2
Not a HU	2
Newly constructed and bank owned	2
Rented or sold	2
Church owned	2
Misunderstood two month rule	1
Accessibility problems due to gate or guard	1

Data: ACS Panels 201103 – 201105 collected during May – June in CAPI

Total: 155