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**PRED CENSUS AND SURVEY MEASUREMENT STAFF MEMORANDUM SERIES:
CSM-A.C.E. REVISION II-02R**

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Executive Summary

The Measurement Subgroup was tasked with providing results from matching and coding operations for the A.C.E. Revision II Estimates.

What data were available?

We have three sources of data:

- Production – Data used in the Dual System Estimation released in March, 2001
- Measurement Error Reinterview (MER) – A sample of people in a subsample of the A.C.E. clusters sent to an Evaluation Followup (EFU) interview
- Person Followup/Evaluation Followup Review (PFU/EFU Review) – A subsample of E-sample people in the MER who received a special coding in Summer, 2001.

What are the issues with these data?

There were not enough erroneous enumerations identified in production as summarized by Fay 2002.

- Additional erroneous enumerations were identified by the EFU/MER (Adams and Krejsa, 2001, and Krejsa and Raglin, 2001).
- Feldpausch (2001) and Mule (2001) also identified duplicates within the census outside the A.C.E. search area and their interaction with the A.C.E. production estimates.
- Both the production and MER have coding error (Bean, 2001 and Adams and Krejsa, 2001, respectively).
- The MER did not always code consistently with census residence rules (Adams and Krejsa, 2001).
- The PFU/EFU Review did not completely eliminate coding error and is not a large enough sample to produce accurate subgroup estimates nor does it have a P-sample component.

What data sources will be used for the A.C.E. Revision II Estimates?

We will be using the full MER sample and both the data available from the production and the EFU forms. We will not be including any data from the duplicate searches beyond the A.C.E. search area.

How will the coding be implemented?

In order to complete the coding in the time allotted, we will be supplementing clerical review with an automated review of keyed data from both the PFU and the EFU forms.

- Validation of Keyed Data Prediction – We will first validate the prediction ability of the keyed data by using the PFU/EFU Review (assumed to be the best coding operation).

- Targeting Cases for Clerical Review – We will then code cases with the computer for categories that can be accurately predicted and only send those cases to clerical review where the original code for the person disagrees with the keyed code. This will reduce our clerical workload and ensure the largest sample possible.

We have 12 weeks in which to complete our coding process. Based on the PFU/EFU Review workload we estimate that up to 25,000 cases can be completed in this time period. However, as a contingency, a sampling plan has been developed so that if the entire case load cannot be completed a weight can be applied to the completed cases to represent the cases that were not finished.

What data will be produced from coding?

The following major data items will be produced:

- PFU Code – Based on the PFU form
- EFU Code – Based on the EFU form
- Best Code – The best code given the information available
- Why Code – Assigned for each form; indicates the reason the person was assigned the match code
- Mover Status – Assigned for P-sample people based on the EFU form.

1. Introduction

1.1 Background

The Measurement Subgroup was tasked with providing results from matching operations for the A.C.E. Revision II Estimates. We currently have the following data available¹:

Sample	Size	P and E sample	Data Available	Issues
Production A.C.E.	11,303 clusters	P and E samples available	<ul style="list-style-type: none"> Match codes assigned during production, <i>PFU1</i>, using rules consistent with the census residence rules (coded by clerks, technicians, and analysts) 	<ul style="list-style-type: none"> Not enough identification of erroneous enumerations (Adams and Krejsa, 2001) Some coding error (0.62% gross and 0.20% net in the E-sample, 0.46% gross and 0.41% net in the P-sample– Bean, 2001)
Evaluation	2,259 clusters	P and E samples available	<ul style="list-style-type: none"> Match codes assigned using the Measurement Error Reinterview (MER) coding scheme, <i>EFU1</i> (coded by technicians and analysts) (Krejsa and Raglin, 2001) 	<ul style="list-style-type: none"> Errors made in defining the assignment of certain codes, leading to overidentifying erroneous enumerations (Adams and Krejsa, 2001) Some coding error (no good measure currently)
PFU/EFU Review	17,522 people	E-sample only	<ul style="list-style-type: none"> Match codes assigned during the review using rules consistent with the census residence rules, <i>PFU2 and EFU2</i>, (coded by analysts) Why codes indicating why the person was assigned a given code, <i>EFU2_why and PFU2_why</i> A <i>Best</i> code combining information from PFU2, EFU2, and other information from the questionnaires (Adams and Krejsa, 2001) 	<ul style="list-style-type: none"> Sample too small Overidentification of certain cases as unresolved or conflicting E sample only

We will not be using the full production sample because there is only evaluation followup for 2,259 out of the 11,303 A.C.E. clusters. However, the MER coding did not always follow rules

¹Note – A.C.E. Revision II is for stateside A.C.E. sample only; Puerto Rico is not in scope.

consistent with the census residence rules and there is some residual error from the technicians. The coding in the PFU/EFU Review is the coding we believe to be the most accurate. The final result from the PFU/EFU Review is a *Best* code; the *Best* code combines information from all the sources available, including the EFU.

The small size of the PFU/EFU Review sample results in high variances for estimates based on the *Best* code and does not have P-sample coding. Because the *Best* code requires EFU data, additional clerical work with EFU data is limited to the size of the Measurement Error Reinterview (MER) sample, which falls within 2,259 clusters out of the 11,303 clusters of the A.C.E. Also, resources do not permit recoding all the remaining EFU cases clerically. Instead, we will use a computer coding of the PFU and EFU based upon the response patterns in the questionnaires using keyed data. We will use those results to identify a subset of cases for clerical review.

Simultaneously, P-sample cases will be reviewed to produce comparable *Best* codes for the P-sample using keyed data from the PFU and EFU. For those E-sample cases in the review that were linked to a P-sample person, we currently have no scheme designed to weight the P-sample matches with the review sample weights. The review sample did not include P-sample persons who were not matched to an E sample person. For purposes of estimation, we also anticipate needing review-style results for whole households of reviewed P-sample people to carry out a noninterview adjustment. Using the keyed data allows for the coding of the P-sample people to avoid such issues.

Thus, the final A.C.E. Revision II data comes from the combination of several sources:

- 1) Keyed data coding
- 2) Clerical review of unaccepted keyed codes
- 3) PFU/EFU Review (we will not re-review these cases)
- 4) Production data for cases without followup in the evaluation sample

This document describes the general strategy for analysis:

- by identifying the anticipated use of the keyed data in the A.C.E. Revision II Estimates
- by specifying how the findings from the analysis will be used to target cases for clerical review
- by specifying how targeted cases will be coded by the analysts
- by specifying how the results of the four coding operations produce the final A.C.E. Revision II codes

1.2 Goal in Using the Keyed Data in the A.C.E. Revision II Estimates

We will attempt to include the entire evaluation sample in the A.C.E. Revision II Estimates by using keyed data to predict match and why codes where reasonable and supplementing this with a manageable clerical workload.

1.3 Inputs

- Production Estimation Files
- Evaluation Master Data Variance Files
- Results of the PFU/EFU Review
- PFU Keyed Data
- EFU Keyed Data

1.4 Output

The output files (one for the E sample and one for the P sample) will contain a final match code and a final why code for each E sample and P sample person to be used in the A.C.E. Revision II Estimates, in particular as input to the missing data process. The P sample file will also contain a final mover status. All steps leading up to the final codes (i.e. each coding operation results) and the keyed data will also be include don the files.

2. Using the Keyed Data to Assign Residence Status in the A.C.E. Revision II Estimates

2.1 Major Steps Required to Use the Keyed Data in the A.C.E. Revision II Estimates

- Assign match codes and why codes based on the keyed data.
- Verify the ability of the keyed data (for both PFU and EFU) to predict accurate match codes by comparing the results to the analyst-only codes, *PFU2* and *EFU2*, from the PFU/EFU Review.
- Target specific cases for clerical review. These include cases where:
 - The keyed data code does not agree with the clerical code from the production matching for clerical review.
 - The keyed results do a poor job at predicting *PFU2* and *EFU2* codes within certain groupings.

The plan allows us to use the entire evaluation sample and to minimize the amount of clerical rematching needed. The only additional sampling required would be to subsample if the workloads are too high.

2.2 Assigning Why Codes and Match Codes

For each E-sample record in the PFU/EFU Review, create variables based on keyed data using the rules from the PFU/EFU Review:

- *PFU_key* – Match Code for PFU based on keyed data from the PFU form (if no followup, then *PFU_key*=production code)
- *EFU_key* – Match Code for EFU based on keyed data from the EFU form
- *PFU_why_key* – Why Code² for PFU based on the PFU keyed data (if no followup, then *PFU_why_key*=No followup)
- *EFU_why_key* – Why Code for EFU based on the EFU keyed data
- *Best_key* – Best code using the above variables to determine which form to choose

2.2.1 Coding Differences

There are several differences between the coding performed for the keyed data and that done in the Review.

Cluster-Based Situations – Several clusters had cluster-based situations within them that needed special treatment:

- Clusters 335216, 383935, 946061 – Each of these clusters has a facility that appears to be a group quarters, but is not (either an assisted living facility or an apartment for college students that appear to be a dorm). Since the PFU form was not completed because the interviewer marked that the persons stayed in a GQ, the people are unresolved because there is no other residence information for these people. These people appear in the tables as Group Quarters – Unresolved.
- Clusters 383935 and 946061 – Each of these clusters has a group quarters type facility (like those listed above) but the EFU form was not completed. These people also appear in the tables as Group Quarters – Unresolved.
- Clusters 383935 and 383638 – Each of these clusters has a facility in the P-sample that is a group quarters and should be removed from the P-sample. The code GP was used in both PFU and EFU. These people appear in the EFU P-sample table as Dorm–Removed.

Why Codes Used – Because we cannot see everything that the analyst does, we have created more why codes to help distinguish certain types of cases.

2.2.2 Defining Why Codes

The following tables contain the why codes assigned in the coding of the keyed data, the corresponding why code that would have been assigned in the PFU/EFU Review, a description of the why code, and the logic used for assigning the why code from the keyed data.

Table 2 contains the PFU codes for unlinked E-sample cases.

²Each why code is associated with a particular enumeration status . For example, a why code of “Group Quarters” should generally be an erroneous enumeration

Table 3 contains the PFU codees for unlinked P-sample cases and linked cases.
Table 4 contains the EFU codes for unlinked E-sample cases.
Table 5 contains the EFU codes for unlinked P-sample cases and linked cases.

Note that throughout the following tables, any case that does not have a mention of a geocoding check or a Targeted Extended Search (TES) followup was either located inside the search area or did not need the followup according to the production and MER rules.

Table 2 - PFU Keyed Why Codes – BFU Unlinked E-sample

Review Why Code	Equivalent Keyed Data Why Codes	Definition	Logic for Code Assignment
LH	LH	The person gave no indication of other residence, group quarters, or moving.	Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=No and the case is not coded as a geocoding case
GQ	GQ (with erroneous /nonresident match code) GQ (with unresolved match code)	The person indicated that they lived in a group quarters on Census Day. <ul style="list-style-type: none"> • Those that are unresolved lived in a group-quarters type place, but did not finish the PFU form and were mistakenly identified as living in a GQ. • Those that are erroneous stayed in a group-quarters on Census Day that is not the sample address. 	The case is not coded as a geocoding case and: Unresolved: Question 1= Yes/Respondent is Person and Question 4a=1 and Question 5=1 and cluster=335216, 383935, or 946061 Erroneous: Question 1= Yes/Respondent is Person and Question 4a=1 and Question 5=1
OP	OP	Other Residence – Correct; The person had another residence, but spent most of their cycle at the sample address	Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 7=Census Address and the case is not coded as a geocoding case or Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 7= Blank, Don't Know and Question 8=Days, Weeks, Months, or Years and the appropriate cycle question (9,10,11,12) =Census Address

Table 2 - PFU Keyed Why Codes – BFU Unlinked E-sample

Review Why Code	Equivalent Keyed Data Why Codes	Definition	Logic for Code Assignment
OR	OR	Other Residence –Unresolved: The person either had another residence and did not know the address or cycle or the respondent did not know if the person had another residence.	<p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Don't Know/Refuse</p> <p>or</p> <p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 7=Refuse</p> <p>or</p> <p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 6b=Don't Know/Refuse/Blank</p> <p>or</p> <p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 7= Blank, Don't Know and Question 8= Blank, Don't Know, Refuse</p> <p>or</p> <p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 7= Blank, Don't Know and Question 8=Days, Weeks, Months, or Years and the appropriate cycle is not given</p>
NI	NI	The case is a noninterview; there is no information on the person's Census Day whereabouts.	<p>Question 1= Yes, Respondent is Person Question 4a=Blank and Question 5=Blank and Question 6=Blank and Question 7= Blank</p> <p>or</p> <p>Question 1=Blank</p>
4B	MP	The person did not live at the sample address on Census Day, but did not give a Census Day address.	<p>Question 1=Yes/Respondent is Person and Question 4a = No, Question 4b=Blank, Don't Know, Refuse and Question 5 is not Yes and Question 6a=No</p>

Table 2 - PFU Keyed Why Codes – BFU Unlinked E-sample

Review Why Code	Equivalent Keyed Data Why Codes	Definition	Logic for Code Assignment
KR	KR	There were not enough knowledgeable respondents to complete the case.	Question 1=No, Question 2 has 3 sources that are Blank, Don't Know, Refused
n/a	HO	Hole--There was a hole in the Review flowchart; these people gave no 4b address and no other residence cycle.	Question 1=Yes/Respondent is Person and Question 4a = No, Question 4b=Blank, Don't Know, Refuse and Question 5 is not Yes and Question 6a=Yes and Question 6b=Blank, Don't Know, Refuse and Question 7= Blank and Question 8=Blank
UH	UH	Usual home elsewhere--these people were enumerated in the census on a GQ form and claimed a UHE.	If the census form type = 09, 10, 11, 12, 14, or 16: Form type 09 - D15A - Individual Census questionnaire, short Form type 10 - D15B - Individual Census questionnaire, long Form type 11 - D20A - Individual Census report, short Form type 12 - D20B - Individual Census report, long Form type 14 - D21 - Military Census report Form type 16 - D23 - Shipboard Census report
GO	GO	Geocoding Erroneous – Cases where the PFU form indicated that the housing unit is outside the cluster Geocoding Unresolved – Cases where the PFU form had a geocoding question but it was not answered Geocoding TES Unresolved – Cases where the person was an add in a TES cluster and was outside the cluster	Geocoding Erroneous: Adinit=3 and wpinit=2 and Geocoding Question=No, Outside Block Cluster and either: --tesclus=R or at least one NE in the household --tesclus not equal R,L Geocoding Unresolved: Adinit=3 and wpinit=2 and Geocoding Question=Blank and either: --tesclus=R or at least one NE in the household --tesclus not equal R,L Geocoding TES Unresolved: Geocoding Question = No, Outside Block Cluster and BFU Code=NE and tesclus = W, U, S, R and wpinit=2 and adinit=3

Table 2 - PFU Keyed Why Codes – BFU Unlinked E-sample

Review Why Code	Equivalent Keyed Data Why Codes	Definition	Logic for Code Assignment
n/a	GE	Geocoding, no Followup – These cases were coded GE in before followup based on the housing unit code.	tesclus = N,O,I and BFU Code=NE and wpinit=2 and Initial Housing Unit Match Code=GE
TE	TE	Outside the search area for a TES cluster, had followup	tesper=1 and Final Housing Unit Code=GE and tesclus = W, U, S, R and adinit not equal 3
TE	TENF	Outside the search area for a TES cluster; had no followup	bfuflag not equal 1 or 2 and efufu=1, 2, 3, 4 and tesclus = W, U, S, R and bwpinit='2' and BFU Code=GE: –Final Housing Unit Code=GE, assign then match code of GE –Final Housing Unit Code not equal GE, assign match code of UE (should have gone to followup, but did not)
n/a	NK	No keyed data available for the case	
NF	NF	No form or no followup	
RV Situations–Uncodable with the Computer			
	42	Census Day address given and the address is not Don't Know/Refused	Question 1=Yes/Respondent is Person and Question 4a = No, Question 4b= Not Blank, Don't Know, Refuse and Question 5 is not Yes and Question 6a is not Yes
	72	Other residence address given and the person stays at the other address more often. The address is not Don't Know/Refused.	Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 6b=Filled and Question 7= Other Residence or Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 7= Blank, Don't Know and Question 8=Days, Weeks, Months, or Years and the appropriate cycle question (9,10,11,12) =Other Residence
	K2	May be fictitious but enough information is not given on the form.	Question 1=2 and Question 2 has something other than blank/Don't Know/Refuse in one of the blanks

Table 2 - PFU Keyed Why Codes – BFU Unlinked E-sample

Review Why Code	Equivalent Keyed Data Why Codes	Definition	Logic for Code Assignment
	GOTE	TES Adds with geocoding section printed but not keyed.	Geocoding Question=Blank and BFU Code=NE and tesclus = W, U, S, R and wpinit=2 and adinit=3

Table 3 - PFU Keyed Why Codes – P-sample

Review Why Code	Equivalent Keyed Data Why Codes	Definition	Logic for Code Assignment
LH	LH	The person gave no indication of other residence, group quarters, or moving.	Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=No and the case is not coded as a geocoding case
GQ	GQ (with erroneous /nonresident match code) GQ (with unresolved match code)	The person indicated that they lived in a group quarters on Census Day. <ul style="list-style-type: none"> Those that are unresolved lived in a group-quarters type place, but did not finish the PFU form and were mistakenly identified as living in a GQ. Those that are erroneous stayed in a group-quarters on Census Day that is not the sample address. 	The case is not coded as a geocoding case and: Unresolved: Question 1= Yes/Respondent is Person and Question 4a=1 and Question 5=1 and cluster=335216, 383935, or 946061 Erroneous: Question 1= Yes/Respondent is Person and Question 4a=1 and Question 5=1
OP	OP	Other Residence – Correct; The person had another residence, but spent most of their cycle at the sample address	Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 7=Yes and the case is not coded as a geocoding case

Table 3 - PFU Keyed Why Codes – P-sample

Review Why Code	Equivalent Keyed Data Why Codes	Definition	Logic for Code Assignment
OR	OR	Other Residence –Unresolved: The person either had another residence and did not know the address or cycle or the respondent did not know if the person had another residence.	<p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Don't Know/Refuse</p> <p>or</p> <p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 7=Refuse</p> <p>or</p> <p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 6b=Don't Know/Refuse/Blank</p> <p>or</p> <p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 7= Blank, Don't Know and Question 8= Blank, Don't Know, Refuse</p> <p>or</p> <p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 7= Blank, Don't Know and Question 8=Days, Weeks, Months, or Years and the appropriate cycle is not given</p>
NI	NI	The case is a noninterview; there is no information on the person's Census Day whereabouts.	<p>Question 1= Yes, Respondent is Person Question 4a=Blank and Question 5=Blank and Question 6=Blank and Question 7= Blank</p> <p>or</p> <p>Question 1=Blank</p>

Table 3 - PFU Keyed Why Codes – P-sample

Review Why Code	Equivalent Keyed Data Why Codes	Definition	Logic for Code Assignment
4B	MP	The person did not live at the sample address on Census Day, but did not give a Census Day address.	Question 1=Yes/Respondent is Person and Question 4a = No, Question 4b=Blank, Don't Know, Refuse and Question 5 is not Yes and Question 6a=No
KR	KR	There were not enough knowledgeable respondents to complete the case.	Question 1=No, Question 2 has 3 sources that are Blank, Don't Know, Refused
n/a	HO	Hole--There was a hole in the Review flowchart; these people gave no 4b address and no other residence cycle.	Question 1=Yes/Respondent is Person and Question 4a = No, Question 4b=Blank, Don't Know, Refuse and Question 5 is not Yes and Question 6a=Yes and Question 6b=Blank, Don't Know, Refuse and Question 7= Blank and Question 8=Blank
UH	UH	Usual home elsewhere--these people were enumerated in the census on a GQ form and claimed a UHE.	If the census form type = 09, 10, 11, 12, 14, or 16: Form type 09 - D15A - Individual Census questionnaire, short Form type 10 - D15B - Individual Census questionnaire, long Form type 11 - D20A - Individual Census report, short Form type 12 - D20B - Individual Census report, long Form type 14 - D21 - Military Census report Form type 16 - D23 - Shipboard Census report

Table 3 - PFU Keyed Why Codes – P-sample

Review Why Code	Equivalent Keyed Data Why Codes	Definition	Logic for Code Assignment
GO	GO	<p>Geocoding Erroneous – Cases where the PFU form indicated that the housing unit is outside the cluster</p> <p>Geocoding Unresolved – Cases where the PFU form had a geocoding question but it was not answered</p> <p>Geocoding TES Unresolved – Cases where the person was an add in a TES cluster and was outside the cluster</p>	<p>Geocoding Erroneous: Adinit=3 and wpinit=2 and Geocoding Question=No, Outside Block Cluster and either: --tesclus=R or at least one NE in the household --tesclus not equal R,L</p> <p>Geocoding Unresolved: Adinit=3 and wpinit=2 and Geocoding Question=Blank and either: --tesclus=R or at least one NE in the household --tesclus not equal R,L</p> <p>Geocoding TES Unresolved: Geocoding Question = No, Outside Block Cluster and BFU Code=NE and tesclus = W, U, S, R and wpinit=2 and adinit=3</p>
	GE	Geocoding, no Followup – These cases were coded GE in before followup based on the housing unit code.	tesclus = N,O,I and BFU Code=NE and wpinit=2 and Initial Housing Unit Match Code=GE
	NK	No keyed data available for the case	
NF	NF	No form or no followup	
RV Situations–Uncodable with the Computer			
	42	Census Day address given and the address is not Don't Know/Refused	Question 1=Yes/Respondent is Person and Question 4a = No, Question 4b= Not Blank, Don't Know, Refuse and Question 5 is not Yes and Question 6a is not Yes

Table 3 - PFU Keyed Why Codes – P-sample

Review Why Code	Equivalent Keyed Data Why Codes	Definition	Logic for Code Assignment
	72	Other residence address given and the person stays at the other address more often. The address is not Don't Know/Refused.	<p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 6b=Filled and Question 7= Other Residence or</p> <p>Question 1=Yes/Respondent is Person and Question 4a = Yes and Question 5 is not Yes and Question 6a=Yes and Question 7= Blank, Don't Know and Question 8=Days, Weeks, Months, or Years and the appropriate cycle question (9,10,11,12) =Other Residence</p>
	K2	May be fictitious but enough information is not given on the form.	Question 1=2 and Question 2 has something other than blank/Don't Know/Refuse in one of the blanks

Table 4 - Description of EFU Why Codes – Unlinked E-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the inmover/outmover questions are described above)
OR	AD	Has 'other res', Address is blank/DK/REF	Question 1=Yes , No and Person is not identified as moving in after Census Day and (Question 6b=Yes or Question 7=Yes or Question 8=Yes or Question 9=Yes) and the appropriate cycle questions as indicated Question 12 indicates that the person lives in another address and the other address is Blank/Don't Know/Refused and there is not a state outside the sample
TE	BL	TES case, information blank	tesclus = W, U, S, R and BFU Code = GS, GC, GE, GU and in Section 1, the check box is blank and the block number=blank or tesclus = W, U, S, R and bwpinit=2 and the Initial Housing Unit Match Code=blank or EEand and in Section 1, the check box is blank and the block number=blank
DA	DA	Died, was at CD address	Question 1=4 Deceased and the interviewer checked the box for the date of death after Census Day and the following questions after Question 1 were answered blank, 2, or 3: Group Care Facility, Correction Facility, Long-Term Care Facility, Military Barracks, College Dorm and Staying at Sample Address=1 and Another Residence=No and Another Place=Blank or No
DB	DB	Died before CD	Question 1=Deceased and the interviewer checked the box for died before Census Day
DB	DD	Died, no date	Question 1=Deceased and the interviewer checked either the box for died before Census Day or for after Census Day

Table 4 - Description of EFU Why Codes – Unlinked E-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in-mover/out-mover questions are described above)
OR	DF	Cannot determine cycle OR cycle known, cannot determine place stayed most of the time	<p>Question 1 = Yes or No, the person lived at the sample address according to the move in and move out questions, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Yes, and either:</p> <p>Question 12a=Don't Know, Refuse, Blank and Question 13=Don't Know, Refuse, Blank</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) is Don't Know, Blank, Refuse, and Question 13=Don't Know, Refuse, Blank</p>
DO	DO	Dorm	The person is between ages 16-30, inclusive, and Question 1=Yes, Question 4a=Yes and Question 4b=Staying in a Dorm and the Case is not a Dorm Unresolved
GQ	DQ	Died, in group quarters	Question 1=Deceased, Interviewer box=No, Died after Census Day, and at least one of the following questions is Yes: Group Care Facility, Long Term Medical Care Facility, Correction Facility, Military Barracks, Dorm
DO	DU	Dorm - Unresolved; no 'other residence' information	<p>If the person is between ages 16-30, inclusive, and Question 1=Yes, Question 4a=Yes, and Question 4b=Yes and the following:</p> <p>Cluster=383935</p> <p>or</p> <p>Cluster=946061 and the case is coded UE in MER</p>

Table 4 - Description of EFU Why Codes – Unlinked E-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in-mover/out-mover questions are described above)
GO	GB	Geocoding blank	tesclus=N,I,O and there is at least 1 NE in the housing unit and the wpinit=2 and adinit=3 and the Geocoding Section is blank
GE	GE	Case should not have gone to followup, should have been GE in BFU	Initial Housing Unit Match code=GE and tesclus=N,I,O, and wpinit=2 and BFU code=NE
GO	GO	Geocoding, outside cluster	tesclus=N,I,O and there is at least 1 NE in the housing unit and the wpinit=2 and (adinit=3 or the cluster is a list/enumerate) and the Geocoding Section is No, outside the cluster
GQ	GQ	Group Quarters - other (correction facility)	If Question 1=Yes or No, and Question 5=Correction Facility
KR	KR	No Knowledgeable Respondent	If Question 1=Blank, Don't Know, and Section 2C=Could not Locate Knowledgeable Respondent
LH	LH	Lived Here	If Question 1=Yes or No, the person lived at the sample address according to the move in and move out sections, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, and all applicable questions 6b-9 are No

Table 4 - Description of EFU Why Codes – Unlinked E-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in-mover/out-mover questions are described above)
MI	MI	Moved In after CD	<p>If Question 1=Yes or No and Question 3a=Yes and the person has indicated that they moved into the sample address after Census Day by one of the following:</p> <p>Question 3b has a valid date after April 1, 2000. "April 2000" or "March or April 2000" are not valid dates.</p> <p>OR</p> <p>Question 3b=Don't Know, Blank, Refuse and one of the following: Question 3c=On or After April 1, 2000 Question 3c=Blank, Don't Know, Refuse and Question 3d=On or After April 1, 2000</p>
MI	MICD	Don't know move in date	<p>If Question 1=Yes or No and Question 3a=Yes and Question 3b=Don't Know, Blank, Refuse and Question 3c=Don't Know, Blank, Refuse, and Question 3d=Don't Know, Blank, Refuse</p>
MO	MO	Moved Out before CD	<p>If Question 1= No and the person has indicated that they moved out of the sample address before Census Day by one of the following:</p> <p>Question 2a has a valid date before April 1, 2000. "April 2000" or "March or April 2000" are not valid dates.</p> <p>OR</p> <p>Question 2a=Don't Know, Blank, Refuse and one of the following: Question 2b=Before April 1,2000 or Question 2b=Blank, Don't Know, Refuse and Question 2c= Before April 1,2000</p>

Table 4 - Description of EFU Why Codes – Unlinked E-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in-mover/out-mover questions are described above)
MO	MOCD	Don't know move out date	If Question 1= No and Question 2a= Don't Know, Blank, Refuse and Question 2b=Don't Know, Blank, Refuse, and Question 2c=Don't Know, Blank, Refuse
MS	MS	Military/Shipboard	If Question 1=Yes or No, and Question 5=Military/Shipboard
NH	NH	Nursing Home	If Question 1=Yes or No, and Question 5 =Nursing Home and the case is not a Nursing Home– Unresolved
NH	NHU	Nursing Home - Unresolved	If Question 1=Yes or No, and Question 5 =Nursing Home and the following: Cluster=335216 or 94456 or Cluster=383265 and Question 8=Blank
NI	NI	Noninterview	Question 1 = Don't Know or Blank and Section 2c is blank
NL	NL	Never lived at address	Question 2=No, Question 2a does not have a valid date and Question 2a=Never Lived at the Sample Address

Table 4 - Description of EFU Why Codes – Unlinked E-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in mover/out mover questions are described above)
OR1	OR1	Has 'other res', stayed at Census Add	<p>Question 1 = Yes or No, the person lived at the sample address according the move in and move out questions, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Yes, and either:</p> <p>Question 12a=Don't Know, Refuse, Blank and Question 13 = Sample Address or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Sample Address or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Don't Know, Refuse, Blank and Question 13= Sample Address</p>

Table 4 - Description of EFU Why Codes – Unlinked E-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the inmover/outmover questions are described above)
OR2	OR2	Has 'other res', stayed at Other Res out of state	<p>Question 1 = Yes or No, the person lived at the sample address according the move in and move out questions, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Yes, and either:</p> <p>Question 12a=Don't Know, Refuse, Blank and Question 13 = Other Place and the state is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Other Place and the state is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Don't Know, Refuse, Blank and Question 13=Other Place and the state is the same as the state of the sample address</p>
OR	ORDK	DK if have other res	<p>Question 1 = Yes or No, the person lived at the sample address according the move in and move out questions, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Don't Know</p>
OS	OS	College - Other address at school	<p>The person is between ages 16-30, inclusive, and Question 1=Yes, Question 4a=Yes and Question 4b= Staying at another address at college</p>

Table 4 - Description of EFU Why Codes – Unlinked E-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in-mover/out-mover questions are described above)
TE	TE	TES case, coded based on EFU TES section as UE or GE	<p>If BFU Code = GS,GC,GE,GU or Initial Housing Unit Code = Blank, EE and wpinit=2 and tesclus = U,W,R,S and:</p> <p>TES Section =Could not Locate (UE)</p> <p>or</p> <p>TES Section = Out of Search Area (GE)</p>
TE	TE2	TES case, in one of 7 clusters	<p>Cluster=220384, 331447, 350249, 732784 and no block number is given in the TES Section and there is at least one NE in the household and wpinit=2 and adinit=2 and MER code=GE</p> <p>or</p> <p>Cluster = 340265, 342998, 812768 and wpinit=2 and the Initial Housing Unit Match Code =GE and no block number is given in the TES Section and MER code=GE</p>
UH	UH	Can claim a UHE	<p>If the census form type = 09, 10, 11, 12, 14, or 16:</p> <p>Form type 09 - D15A - Individual Census questionnaire, short</p> <p>Form type 10 - D15B - Individual Census questionnaire, long</p> <p>Form type 11 - D20A - Individual Census report, short</p> <p>Form type 12 - D20B - Individual Census report, long</p> <p>Form type 14 - D21 - Military Census report</p> <p>Form type 16 - D23 - Shipboard Census report</p>
MP	DACO	Inconsistent Dates	The person meets the qualifications for why codes of both MI and MO.
RV Situations–Uncodable with the Computer			

Table 4 - Description of EFU Why Codes – Unlinked E-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in-mover/out-mover questions are described above)
	DAT	Dates need clerical review	<p>Out-mover date could not be used: If Question 1=2 and the move out date in Question 2a was either: unable to be standardized, had a year before 1900 or after 2001, had a blank month in the year 2000, had a blank day in April 2000</p> <p>In-mover date could not be used: If Question 1=1 or 2 and the move in date in Question 3a was either: unable to be standardized, had a year before 1900 or after 2001, had a blank month in the year 2000, had a blank day in April 2000</p>
	DV	Died, needs clerical review	Question 1=Deceased, Interviewer Box=Died after Census Day, None of the following questions are Yes: Group Care Facility, Long Term Medical Care Facility, Correction Facility, Military Barracks, Dorm, and the person did not say that they lived at the sample address and did not have another residence
	GQA	Group Quarters - other, Needs Clerical Review	If Question 1=Yes or No, and Question 5=Some other Place
	K2	Possibly Fictitious	If Question 1=Blank, Don't Know, and Section 2C=Blank

Table 4 - Description of EFU Why Codes – Unlinked E-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in-mover/out-mover questions are described above)
OR	Has 'other res', Clerical review of address	<p>Question 1 = Yes or No, the person lived at the sample address according to the move in and move out questions, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Yes, and either:</p> <p>Question 12a=Don't Know, Refuse, Blank and Question 13 = Other Place and the state is either not filled or is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Other Place and the state is either not filled or is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Don't Know, Refuse, Blank and Question 13=Other Place and the state is either not filled or is the same as the state of the sample address</p>	

Table 5 - Description of EFU Why Codes – P-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in-mover/out-mover questions are described above)
OR	AD	Has 'other res', Address is blank/DK/REF	Question 1=Yes , No and Person is not identified as moving in after Census Day and (Question 6b=Yes or Question 7=Yes or Question 8=Yes or Question 9=Yes) and the appropriate cycle questions as indicated Question 12 indicates that the person lives in another address and the other address is Blank/Don't Know/Refused and there is not a state outside the sample
DA	DA	Died, was at CD address	Question 1=4 Deceased and the interviewer checked the box for the date of death after Census Day and the following questions after Question 1 were answered blank, 2, or 3: Group Care Facility, Correction Facility, Long-Term Care Facility, Military Barracks, College Dorm and Staying at Sample Address=1 and Another Residence=No and Another Place=Blank or No
DB	DB	Died before CD	Question 1=Deceased and the interviewer checked the box for died before Census Day
DB	DD	Died, no date	Question 1=Deceased and the interviewer checked either the box for died before Census Day or for after Census Day

Table 5 - Description of EFU Why Codes – P-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the inmover/outmover questions are described above)
OR	DF	Cannot determine cycle OR cycle known, cannot determine place stayed most of the time	<p>Question 1 = Yes or No, the person lived at the sample address according the move in and move out questions, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Yes, and either:</p> <p>Question 12a=Don't Know, Refuse, Blank and Question 13=Don't Know, Refuse, Blank</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) is Don't Know, Blank, Refuse, and Question 13=Don't Know, Refuse, Blank</p>
DO	DO	Dorm	The person is between ages 16-30, inclusive, and Question 1=Yes, Question 4a=Yes and Question 4b=Staying in a Dorm and the Case is not a Dorm Unresolved
GQ	DQ	Died, in group quarters	Question 1=Deceased, Interviewer box=No, Died after Census Day, and at least one of the following questions is Yes: Group Care Facility, Long Term Medical Care Facility, Correction Facility, Military Barracks, Dorm
DO	DU	Dorm - Unresolved; no 'other residence' information	<p>If the person is between ages 16-30, inclusive, and Question 1=Yes, Question 4a=Yes, and Question 4b=Yes and the following:</p> <p>Cluster=383935</p> <p>or</p> <p>Cluster=946061 and the case is coded UE in MER</p>

Table 5 - Description of EFU Why Codes – P-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the inmover/outmover questions are described above)
GO	GO	Geocoding, outside cluster	There was a P-sample geocoding check in PFU (PGEOFLAG=1) and the Geocoding Section is No, outside the cluster
GQ	GQ	Group Quarters - other (correction facility)	If Question 1=Yes or No, and Question 5=Correction Facility
KR	KR	No Knowledgeable Respondent	If Question 1=Blank, Don't Know, and Section 2C=Could not Locate Knowledgeable Respondent
LH	LH	Lived Here	If Question 1=Yes or No, the person lived at the sample address according to the move in and move out sections, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, and all applicable questions 6b-9 are No
MI	MI	Moved In after CD	<p>If Question 1=Yes or No and Question 3a=Yes and the person has indicated that they moved into the sample address after Census Day by one of the following:</p> <p>Question 3b has a valid date after April 1, 2000. "April 2000" or "March or April 2000" are not valid dates.</p> <p>OR</p> <p>Question 3b=Don't Know, Blank, Refuse and one of the following: Question 3c=On or After April 1, 2000 Question 3c=Blank, Don't Know, Refuse and Question 3d=On or After April 1, 2000</p>
MI	MICD	Don't know move in date	If Question 1=Yes or No and Question 3a=Yes and Question 3b=Don't Know, Blank, Refuse and Question 3c=Don't Know, Blank, Refuse, and Question 3d=Don't Know, Blank, Refuse

Table 5 - Description of EFU Why Codes – P-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in-mover/out-mover questions are described above)
MO	MO	Moved Out before CD	<p>If Question 1= No and the person has indicated that they moved out of the sample address before Census Day by one of the following:</p> <p>Question 2a has a valid date before April 1, 2000. "April 2000" or "March or April 2000" are not valid dates.</p> <p>OR</p> <p>Question 2a=Don't Know, Blank, Refuse and one of the following: Question 2b=Before April 1,2000 or Question 2b=Blank, Don't Know, Refuse and Question 2c= Before April 1,2000</p>
MO	MOCD	Don't know move out date	<p>If Question 1= No and Question 2a= Don't Know, Blank, Refuse and Question 2b=Don't Know, Blank, Refuse, and Question 2c=Don't Know, Blank, Refuse</p>
MS	MS	Military/Shipboard	<p>If Question 1=Yes or No, and Question 5=Military/Shipboard</p>
NH	NH	Nursing Home	<p>If Question 1=Yes or No, and Question 5 =Nursing Home and the case is not a Nursing Home– Unresolved</p>
NH	NHU	Nursing Home - Unresolved	<p>If Question 1=Yes or No, and Question 5 =Nursing Home and the following:</p> <p>Cluster=335216 or 94456</p> <p>or</p> <p>Cluster=383265 and Question 8=Blank</p>
NI	NI	Noninterview	<p>Question 1 = Don't Know or Blank and Section 2c is blank</p>

Table 5 - Description of EFU Why Codes – P-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in-mover/out-mover questions are described above)
NL	NL	Never lived at address	Question 2=No, Question 2a does not have a valid date and Question 2a=Never Lived at the Sample Address
OR1	OR1	Has 'other res', stayed at Census Add	<p>Question 1 = Yes or No, the person lived at the sample address according to the move in and move out questions, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Yes, and either:</p> <p>Question 12a=Don't Know, Refuse, Blank and Question 13 = Sample Address or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Sample Address or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Don't Know, Refuse, Blank and Question 13= Sample Address</p>

Table 5 - Description of EFU Why Codes – P-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the inmover/outmover questions are described above)
OR2	OR2	Has 'other res', stayed at Other Res out of state	<p>Question 1 = Yes or No, the person lived at the sample address according the move in and move out questions, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Yes, and either:</p> <p>Question 12a=Don't Know, Refuse, Blank and Question 13 = Other Place and the state is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Other Place and the state is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Don't Know, Refuse, Blank and Question 13=Other Place and the state is the same as the state of the sample address</p>
OR	ORDK	DK if have other res	<p>Question 1 = Yes or No, the person lived at the sample address according the move in and move out questions, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Don't Know</p>
OS	OS	College - Other address at school	<p>The person is between ages 16-30, inclusive, and Question 1=Yes, Question 4a=Yes and Question 4b= Staying at another address at college</p>

Table 5 - Description of EFU Why Codes – P-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the inmover/outmover questions are described above)
UH	UH	Can claim a UHE	If the census form type = 09, 10, 11, 12, 14, or 16: Form type 09 - D15A - Individual Census questionnaire, short Form type 10 - D15B - Individual Census questionnaire, long Form type 11 - D20A - Individual Census report, short Form type 12 - D20B - Individual Census report, long Form type 14 - D21 - Military Census report Form type 16 - D23 - Shipboard Census report
MP	DACO	Inconsistent Dates	The person meets the qualifications for why codes of both MI and MO.
RV Situations–Uncodable with the Computer			
	DAT	Dates need clerical review	Outmover date could not be used: If Question 1=2 and the move out date in Question 2a was either: unable to be standardized, had a year before 1900 or after 2001, had a blank month in the year 2000, had a blank day in April 2000 Inmover date could not be used: If Question 1=1 or 2 and the move in date in Question 3a was either: unable to be standardized, had a year before 1900 or after 2001, had a blank month in the year 2000, had a blank day in April 2000
	DV	Died, needs clerical review	Question 1=Deceased, Interviewer Box=Died after Census Day, None of the following questions are Yes: Group Care Facility, Long Term Medical Care Facility, Correction Facility, Military Barracks, Dorm, and the person did not say that they lived at the sample address and did not have another residence

Table 5 - Description of EFU Why Codes – P-sample

Review Why Code	EFU Keyed Why Code	Description	Logic for Code Assignment (Note that the in-mover/out-mover questions are described above)
	GQA	Group Quarters - other, Needs Clerical Review	If Question 1=Yes or No, and Question 5=Some other Place
	K2	Possibly Fictitious	If Question 1=Blank, Don't Know, and Section 2C=Blank
	OR	Has 'other res', Clerical review of address	<p>Question 1 = Yes or No, the person lived at the sample address according to the move in and move out questions, the person was not in any type of college residence, Question 5= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Yes, and either:</p> <p>Question 12a=Don't Know, Refuse, Blank and Question 13 = Other Place and the state is either not filled or is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Other Place and the state is either not filled or is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Don't Know, Refuse, Blank and Question 13=Other Place and the state is either not filled or is the same as the state of the sample address</p>

2.3 Verification of the Keyed Data Match Code Prediction

We will use the PFU/EFU Review to validate the keyed algorithm. We are attempting to answer the following question, “If the keyed data predicts the PFU1, how often is that prediction correct, based on the PFU/EFU Review?”. We attempt to answer a similar question for EFU1. In order to do so, we use the following steps:

- Compare the *PFU_key* code to the code assigned based on the PFU form during the PFU/EFU Review (*PFU2*). Examine the ability of *PFU_key* to predict *PFU2*. *PFU2* has negligible clerical error because the analysts assigned the *PFU2* code. We will only expect differences due to keying error and due to notes or other sources that can be used during the clerical coding but cannot be used in the assignment of keyed codes.
- Examine the ability of *PFU_key* and *PFU1* jointly to predict *PFU2*.
 - We calculate a residual error. It identifies how many weighted cases would not be assigned the appropriate match code based on the keyed data. Why code categories that have higher residual errors will not be accepted. Please see Table 6 for the results.
- Compare the *EFU_key* code to the code assigned based on the EFU form during the PFU/EFU Review (*EFU2*). Examine the ability of *EFU_key* to predict *EFU2*. Also examine the ability of *EFU_key* and *EFU1* jointly to predict *EFU2*. Identify combinations of *EFU_key* and *EFU1* that predict *EFU2* too poorly to be acceptable.
 - We calculate a residual error. It identifies how many weighted cases would not be assigned the appropriate match code based on the keyed data. Why code categories that have higher residual errors will not be accepted. Please see Table 9 for the results.
- Compare the *Best_key* code to the code assigned during the PFU/EFU Review (*Best*). Examine the ability of *Best_key* to predict *Best*.

2.4 Results from the PFU Keyed Data

2.4.1 Comparing the PFU1 Code with the PFU2 Code

Using the strategy outlined above, we have analyzed the PFU Keyed Data and determined its use in the A.C.E. Revision II Estimates.

Table 6 shows the unlinked Review Data (E-sample data)

- The purpose of this table is to investigate the ability of the keyed data coding to accurately determine the true enumeration status. This is done by comparing the keyed data code to the clerical code.
- The data is tabulated by “why code” group. A “why code” details why a case was given the corresponding enumeration status based on what information from the form was used (i.e. what boxes were checked off in the items).

- The second column in the table is the weighted percent agreement between the key code enumeration status and the original production clerical code (PFU1). The third column is the weighted percent agreement between the key code enumeration status and the Review code (PFU2). The agreement in the third column is calculated only for those cases that agreed with the original production code. (Any case that disagrees with the original production code is automatically sent for clerical review.)
- The last column is the error in using the keyed data to code the cases. It is calculated as follows: $\text{Column 4} * \text{Column 2} * (1 - \text{Column 3})$. It represents the residual error remaining from accepting the keyed code for cases that agree with the production code. The error does not fully translate into a change in the number of correctly enumerated people (e.g., an error of 186,986 for the Lived Here–Correct row does not mean that 186,986 new erroneous enumerations will be produced; it means that 186,986 people coded Lived Here–Correct by the algorithm should not be coded as a correct enumeration).
- Rows with an * at the end have been determined to be unacceptable. This means that the residual error is too high or that we do not feel that the keyed data is accurately predicting the right enumeration status. Thus, all cases (not just the ones that disagree) must be sent for clerical review. In the case of “Other Residence - Unresolved” the category has been broken down into 2 subgroups which follow it in the table. The key code is unacceptable for one of the subgroups.
- Rows with ** have been determined to be the right enumeration status, regardless of the clerical code for the case. These are special cases which may have been difficult for the clerks to code. Therefore, the keyed data code will override all clerical codes for these cases.

Determining Categories to Accept the Keyed Why Code

For each why code category created based on the keyed data, the Measurement Subgroup examined the residual error term for the category.

- Lived Here: We accepted this category because the residual error, although largest overall, is small compared to the workload payoff.
- Other Residence–Unresolved: We divided this category into two parts: unresolved because the respondent did not know whether the person had another residence and unresolved because the respondent did not know the address or cycle of the other residence. We accepted the first category and will send all of the second category to clerical. The majority of the residual error is from the second category, but most of the cases fall into the first category.
- Geocoding – Unresolved, Geocoding – Geocoding Unresolved, TES–Erroneous: We did not accept these categories. Although the residual error is small, the coding is complex and in

order to ensure that we adequately capture all of the geocoding error within the sample, we want to send these cases to clerical review.

- All other categories were accepted based on the residual errors.

Some keyed codes are accepted over any clerical match codes:

- Usual Home Elsewhere: Since the determination of this code is made based on the census form from which the person was data captured, it is easier to code these cases using the computer and keyed data.
- TES – No Followup in PFU and Should not have gone to PFU, hufin=GE – These cases can also be computer-coded and do not need clerical review.

Implications for the P-sample

We will adhere to all why code decisions made based on the PFU2 data for the E-sample when we code the P-sample. There is a much smaller sample base upon which to make decisions for the P-sample; therefore, we will use the above decisions to accept the P-sample keyed codes.

Table 6 – E-sample Agreement with PFU2 (Unlinked cases in the PFU/EFU Review)

Why Code and Enumeration Status from Keyed Data	Weighted Percent Agree with PFU1	Weighted Percent of PFU2 Agree with PFU1	Weighted Number of People (Unweighted)	Residual Error If Category Accepted
Lived Here - Correct	99.3	99.4	29,005,537 (2,539)	186,986
Group Quarters - Erroneous	95.0	94.9	541,806 (300)	26,517
Group Quarters - Unresolved	69.1	99.1	230,799 (135)	1,456
Other Residence - Unresolved	87.7	97.3	2,906,151 (2,193)	69,455 *
Don't Know if had "another residence" / Refused	91.9	98.8	2,534,613 (2,039)	27,952
Other Unresolved	59.45	80.85	371,538 (154)	42,298*
Other Residence Specified -Correct	95.6	93.5	650,470 (81)	40,203
Noninterview - Unresolved	83.4	95.7	874,751 (515)	31,260
4B Address is Missing - Unresolved	86.1	89.9	204,385 (113)	17,773
No Knowledgeable Respondent - Unresolved	79.2	94.9	216,685 (166)	8,776
4B Missing and Other Residence No Cycle - Unresolved	100.0	100.0	13,493 (8)	0
Can claim a UHE - Correct	38.2	95.7	80,283 (28)	0**
Geocoding - Erroneous	88.8	96.7	222,599 (145)	6,577
Geocoding - Unresolved	62.3	68.4	32,983 (35)	6,505*
Geocoding - Geocoding Unresolved	74.3	85.7	110,340 (102)	11,696*

Table 6 – E-sample Agreement with PFU2 (Unlinked cases in the PFU/EFU Review)

Why Code and Enumeration Status from Keyed Data	Weighted Percent Agree with PFU1	Weighted Percent of PFU2 Agree with PFU1	Weighted Number of People (Unweighted)	Residual Error If Category Accepted
TES - Erroneous	0.00	-	24,507 (1)	0*
TES - no followup in PFU, followup in EFU - Erroneous	100.0	100.0	421,737 (204)	0**
Should not have gone to PFU, hufin=GE - Erroneous	n/a	n/a	n/a (n/a)	0**

* - Category Key Code not Accepted
** - Category Key Code Determined to be Correct, Will Override all Clerical Coding

2.4.2 Application of Decisions

Tables 7 and 8 apply these decisions to the entire followup universe. Estimated clerical workloads are calculated in the last column. Any case that disagrees is flagged for clerical review. If a case was included in the PFU/EFU Review (with the exception of certain conflicting cases) it does not need further clerical coding and is not included in the workload estimates.

- In the E-sample an estimated 2,907 cases need clerical review.
- In the P-sample an estimated 3,837 cases need clerical review. All linked cases (i.e. Possible Matches and Matches) are included in the P-sample table along with the unlinked P-sample cases.

Table 7– E-sample Comparison with PFU1 and Estimated Clerical Workload Contribution from PFU Only–BFU Unlinked People

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with PFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
Lived Here - Correct		99.3	28,645,646 (27,229)	188,831 (230)	164,558 (153)	24,273 (77)
Group Quarters - Erroneous		90.7	570,729 (395)	52,860 (66)	26,384 (32)	26,476 (34)
Group Quarters - Unresolved		68.5	232,839 (136)	73,417 (36)	71,377 (35)	2,039 (1)
Other Residence - Unresolved	*	89.5	2,841,575 (3,080)	n/a	n/a	2,743,523 (886)
Don't Know/Refused		94.41	2,463,167 (2,806)	137,586 (109)	58,190 (32)	79,396 (77)
Other Unresolved	*	57.37	378,408 (274)	n/a	n/a	129,484 (120)
Other Residence Specified -Correct		95.8	681,538 (464)	28,501 (15)	28,072 (14)	428 (1)
Noninterview - Unresolved		80.2	906,120 (768)	178,967 (157)	55,936 (34)	123,031 (123)
4B Address is Missing - Unresolved		80.1	219,971 (150)	43,865 (38)	27,752 (14)	16,113 (24)
No Knowledgeable Respondent - Unresolved		63.1	270,862 (316)	100,035 (87)	38,630 (26)	61,404 (61)
4B Missing and Other Residence No Cycle - Unresolved		100.0	13,634 (11)	0 (0)	0 (0)	0 (0)

Table 7– E-sample Comparison with PFU1 and Estimated Clerical Workload Contribution from PFU Only–BFU Unlinked People

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with PFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
Can claim a UHE - Correct	Key Code Overrides Clerical	33.7	74,611 (49)	49,477 (30)	48,153 (24)	0 (0)
Geocoding - Erroneous		91.1	217,960 (420)	19,299 (29)	1,288 (8)	18,011 (21)
Geocoding - Unresolved	*	44.7	49,058 (72)	n/a	n/a	36,632 (37)
Geocoding - Geocoding Unresolved	*	83.9	97,824 (155)	n/a	n/a	92,635 (53)
TES - Erroneous	*	0.0	14,982 (12)	n/a	n/a	13,440 (11)
TES - no followup in PFU, followup in EFU - Erroneous		0.0	0 (244)	0 (1)	0 (0)	0 (1)
Should not have gone to PFU, hufin=GE - Erroneous		99.0	475,955 (584)	4,870 (5)	4,870 (5)	0 (0)
Categories that Cannot Be Computer Coded						
TES Clusters with Blank Geocoding Sections		n/a	43,376 (82)	n/a	n/a	15,198 (43)
Possibly Fictitious	*	n/a	1,265,665 (1,492)	n/a	n/a	258,064 (519)

Table 7– E-sample Comparison with PFU1 and Estimated Clerical Workload Contribution from PFU Only–BFU Unlinked People

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with PFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
Mover Address Given	*	n/a	1,654,110 (1,283)	n/a	n/a	437,768 (532)
Other Residence Address Given	*	n/a	909,037 (670)	n/a	n/a	122,918 (194)
Unable to Code	*	n/a	171,765 (91)	n/a	n/a	24,728 (18)
No keyed data	*	n/a	(1,037)	n/a	n/a	(422)
Total Projected Clerical Workload						(2,907)

Table 8 – P-sample Comparison with PFU1 and Estimated Clerical Workload from PFU Only (Linked and Non-Linked Cases)

Why Code and Residence Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with PFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements in the PFU/EFU Review	Projected Clerical Workload
Lived Here -- Resident		99.0	10,540,943 (9,521)	107,896 (134)	13,793 (6)	94,103 (128)
Group Quarters -- Non-Resident		88.7	422,696 (257)	47,887 (46)	2,330 (2)	45,557 (44)
Group Quarters -- Unresolved		0.00	2,363 (2)	2,363 (2)	0 (0)	2,363 (2)
Other Residence -- Unresolved	*	83.90	1,193,849 (1,218)	n/a	n/a	971,543 (1,108)
Don't Know/Refused		92.7	962,646 (954)	70,462 (60)	1,168 (2)	69,294 (58)
Other Unresolved	*	n/a	231,202 (264)	n/a	n/a	210,737 (254)
Other Residence, Specified -- Resident		96.4	393,076 (270)	14,097 (12)	0 (0)	14,097 (12)
Noninterview -- Unresolved		74.7	543,094 (455)	137,531 (130)	1,381 (1)	136,150 (129)
4B Address is Missing -- Unresolved		66.7	65,889 (77)	21,932 (22)	0 (0)	21,932 (22)
No Knowledgeable Respondent -- Unresolved		70.2	96,878 (95)	28,862 (29)	0 (0)	28,862 (29)
4B Missing and Other Residence No Cycle -- Unresolved		100.0	21,675 (7)	0 (0)	0 (0)	0 (0)

Table 8 – P-sample Comparison with PFU1 and Estimated Clerical Workload from PFU Only (Linked and Non-Linked Cases)

Why Code and Residence Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with PFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements in the PFU/EFU Review	Projected Clerical Workload
Can Claim a UHE -- Resident	Key Code Overrides Clerical	100.0	439 (1)	0 (0)	0 (0)	0 (0)
Geocoding -- Non-Resident		98.8	175,599 (61)	2,122 (17)	0 (0)	2,122 (17)
Geocoding -- Unresolved	*	17.4	21,410 (123)	17,692 (109)	0 (0)	21,410 (123)
Categories that Cannot Be Computer Coded						
Possible Matches	*	n/a	1,861,201 (1,464)	n/a	n/a	(511)
Possibly Fictitious	*	n/a	469,586 (555)	n/a	n/a	462,159 (548)
Mover Address Given	*	n/a	805,207 (852)	n/a	n/a	792,433 (845)
Other Residence Address Given	*	n/a	602,164 (483)	n/a	n/a	587,564 (469)
Unable to Code	*	n/a	75,234 (148)	n/a	n/a	73,801 (47)
No Keyed Data	*	n/a	477,524 (599)	n/a	n/a	477,524 (599)
Total Projected Clerical Workload						(3,837)

2.5 Reviewing the EFU Keyed Data

EFU Rejects – We do not have a MER code for those cases where the EFU form was rejected during the MER coding³ (the code defaulted to production). In the PFU/EFU Review, 88.14% of rejected cases had an EFU2 code of unresolved (Adams and Krejsa, 2001). Since the primary reasons to reject a form, as delineated in the instructions to the matchers, would have lead to an unresolved code this result is expected. Therefore, we will consider unresolved to be the EFU1 code for the comparison to the keyed data. Any rejected cases where the EFU_KEY is not unresolved will be sent to clerical.

2.5.1 Comparing the EFU1 code to EFU2 Code

Table 9 shows the Review Data (E-sample data - including matches to the P-sample)

- The purpose of this table is to investigate the ability of the keyed data coding to accurately determine the true enumeration status. This is done by comparing the keyed data code to the clerical code.
- The data is tabulated by “why code” group. A “why code” details why a case was given the corresponding enumeration status based on what information from the form was used (i.e. what boxes were checked off in the items).
- The third column in the table is the weighted percent agreement between the key code enumeration status and the original Measurement Error Reinterview (MER) clerical code (EFU1). The fourth column is the weighted percent agreement between the key code enumeration status and the Review code (EFU2). The agreement in the fourth column is calculated only for those cases that agreed with the original MER code. (Any case that disagrees with the original MER code is automatically sent for clerical review.)
- The last column is the error in using the keyed data to code the cases. It is calculated as follows: $\text{Column 5} * \text{Column 3} * (1 - \text{Column 4})$. It represents the residual error remaining from accepting the keyed code for cases that agree with the production code. The error does not fully translate into a change in the number of correctly enumerated people (e.g., an error of 326,219 for the Lived Here–Correct row does not mean that 326,219 new erroneous enumerations will be produced; it means that 326,219 people coded Lived Here–Correct by the algorithm should not be coded as a correct enumeration)
- Rows with an * in column 2 have been determined to be unacceptable. This means that the keyed data is not accurately predicting the right enumeration status or that the residual error is too high. Thus, all cases (not just the ones that disagree) must be sent for clerical review. In

³See Measurement Error Reinterview Matching Tools, Page A-1 for more information on rejecting the EFU form.

the case of “Other Residence - Unresolved” the category has been broken down into 2 subgroups which follow it in the table. The key code is unacceptable for one of the subgroups.

- Rows with ** have been determined to be the right enumeration status, regardless of the clerical code for the case. These are special cases which may have been difficult for the clerks to code. Therefore, the keyed data code will override all clerical codes for these cases.

Determining Categories to Accept the Keyed Why Code

For each why code category created based on the keyed data, the Measurement Subgroup examined the residual error term for the category.

- Lived Here: We accepted this category because the residual error, although largest overall, is small compared to the workload payoff.
- Nursing Home - Erroneous E: We did not accept this category because the EFU2 agreement rate was too low.
- Nursing Home - Erroneous P: We did not accept this category because there were not enough cases to base a decision on.
- Military/Shipboard - Erroneous: We did not accept this category because there were not enough cases to base a decision on.
- Other Residence–Unresolved: We divided this category into several parts and then determined which cases should go for clerical review.
 - ▶ Cases which were unresolved because the respondent did not know or refused to tell us whether the person had another residence for the purpose of working away from home, or when the job item, joint custody item, vacation home item, or other type of other residence item was left blank we accepted the category. When the respondent did not know or refused to answer the joint custody item, vacation home item, or other type of ‘other residence’ item, or the joint custody item was left blank we did not accept the category.
 - ▶ We also separated out those who had an ‘other residence’ but could not tell us the address of the other residence when we determined the person had stayed there most of the time. This category was not accepted.
 - ▶ Cases in which the respondent did not know the cycle were not accepted for unlinked E-sample cases but was accepted for linked cases.
- Noninterview - Unresolved E and P: These categories were not accepted because the agreement rate with EFU2 was too low.
- Moved out - Unresolved: Both categories are not accepted because the agreement rate with EFU2 was too low.
- Moved in - Unresolved: All categories except for one were not accepted because the EFU2 agreement rate was too low.
- Never Lived Here - Unresolved E and P: Categories were not accepted because the EFU2 agreement rate was too low.

- Died: all categories involving dead people are not accepted because the number of cases is too small to make a decision about and because coding of these cases was somewhat difficult.
- Geocoding – Erroneous, Geocoding – Unresolved, TES–Erroneous, TES– Unresolved: We did not accept these categories. Although the residual error is small, the coding is complex and in order to ensure that we adequately capture all of the geocoding error within the sample, we want to send these cases to clerical.
- All other categories were accepted based on the residual errors.

Some keyed codes are accepted over any clerical match codes:

- Usual Home Elsewhere: Since the determination of this code is made based on the census form from which the person was data captured, it is easier to code these cases using the computer and keyed data.

Implications for the P-sample

We will adhere to all why code decisions made based on the PFU2 data for the E-sample when we code the P-sample. There is a much smaller sample base upon which to make decisions for the P-sample; therefore, we will use the above decisions to accept the P-sample keyed codes.

Table 9 – Agreement with EFU2 (E-sample cases with keyed data - including cases linked to P-sample)

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Percent of EFU2 Agree with EFU1	Weighted Number of People (Unweighted)	Residual Error If Category Accepted
Lived Here -- Resident		99.52	99.85	212,140,730 (9,757)	326,219.00**
Group Quarters -- Erroneous		63.07	98.36	116,857 (54)	1,209.22
Nursing Home -- Erroneous E	*	65.33	73.18	162,419 (47)	28,457.32
Nursing Home -- Erroneous P (linked cases)	*	18.08	100.00	516,266 (29)	0.00
Nursing Home -- Unresolved		0.00	.	10,195 (21)	.
Dorm -- Erroneous		78.74	99.51	555,619 (149)	2,136.72
Dorm -- Removed GQ from P		0.00	.	2,039 (1)	.
Dorm -- Unresolved		26.15	100.00	207,113 (104)	0.00
Military/Shipboard -- Erroneous		22.34	99.40	108,427 (25)	144.53
Other Residence -- Unresolved		72.43	95.82	15,233,267 (1,456)	461,812.30
Other Residence – Don’t Know Job OR – Unresolved		49.61	100.00	8,420.00	0.00

Table 9 – Agreement with EFU2 (E-sample cases with keyed data - including cases linked to P-sample)

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Percent of EFU2 Agree with EFU1	Weighted Number of People (Unweighted)	Residual Error If Category Accepted
Other Residence – Don’t Know Joint Custody OR – Unresolved	*	83.65	96.52	2,076,841.00	60,415.00
Other Residence – Don’t Know Vacation Home OR – Unresolved	*	64.23	91.32	3,696,569.00	206,043.00
Other Residence – Don’t Know Other OR – Unresolved	*	64.75	82.39	988,148.00	112,670.00
Other Residence – Blank Job OR – Unresolved		78.22	98.67	7,951,673.00	82,684.00
Other Residence – Blank Joint Custody OR – Unresolved	*	0.00	0.00	139,529.00	n/a
Other Residence – Blank Vacation Home OR – Unresolved		1.45	100.00	94,499.00	0.00
Other Residence – Blank Other OR – Unresolved		20.28	100.00	277,586.00	0.00
Other Residence, Address=DK/Refuse/Blank -- Unresolved E	*	18.43	86.84	48,285 (30)	1,171.42
Other Residence, Address=DK/Refuse/Blank -- Unresolved P	*	0.06	100.00	182,396 (13)	0.00
Other Residence, No Cycle Given -- Unresolved E	*	33.62	25.83	148,654 (47)	37,068.09
Other Residence, No Cycle Given -- Unresolved P		10.34	100.00	852,197 (39)	0.00

Table 9 – Agreement with EFU2 (E-sample cases with keyed data - including cases linked to P-sample)

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Percent of EFU2 Agree with EFU1	Weighted Number of People (Unweighted)	Residual Error If Category Accepted
Other Residence, Specified -- Correct		96.63	99.43	6,056,972 (346)	33,571.78
Other Residence, Specified -- Erroneous		68.35	92.97	313,829 (93)	15,083.04
Noninterview -- Unresolved E	*	66.16	84.29	443,910 (163)	46,127.88
Noninterview -- Unresolved P	*	72.12	94.60	816,510 (29)	31,791.07
No Knowledgeable Respondent -- Unresolved		94.70	96.32	1,115,524 (196)	38,855.99
Moved out Before Census Day -- Unresolved	*	49.24	84.15	2,348,060 (819)	183,288.20
Moved out, DK Move Date -- Unresolved	*	79.38	96.12	710,452 (168)	21,878.24
Moved in After Census Day--Unresolved E	*	23.00	73.51	605,199 (407)	36,877.11
Moved in After Census Day--Unresolved P	*	37.40	63.93	495,812 (47)	66,882.81
Moved in, DK Move Date -- Unresolved E		12.60	100.00	399,795 (71)	0.00
Moved in, DK Move Date -- Unresolved P	*	24.63	83.04	1,601,056	66,890.13

Table 9 – Agreement with EFU2 (E-sample cases with keyed data - including cases linked to P-sample)

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Percent of EFU2 Agree with EFU1	Weighted Number of People (Unweighted)	Residual Error If Category Accepted
				(56)	
Never Lived Here -- Unresolved E	*	24.31	83.28	1,219,016 (620)	49,547.76
Never Lived Here -- Unresolved P	*	25.47	49.74	1,276,120 (48)	163,369.10
Died after CD, at Sample Address -- Correct E	*	97.33	96.77	87,271 (10)	2,746.40
Died after CD, at Sample Address -- Correct P	*	87.18	70.60	248,072 (8)	63,582.13
Died before CD -- Erroneous	*	67.99	91.02	133,664 (37)	8,165.36
Died, no Date Given -- Unresolved	*	70.99	100.00	3,999 (3)	0.00
Died after CD, in a GQ -- Erroneous	*	91.14	100.00	39,057 (21)	0.00
Can Claim a UHE -- Correct		37.94	100.00	81,775 (15)	0.00
Geocoding -- Erroneous E	*	72.42	89.56	206,998 (240)	15,654.42
TES Case, Coded Based on EFU Form -- Erroneous	*	87.49	36.21	10,989 (8)	6,133.62

Table 9 – Agreement with EFU2 (E-sample cases with keyed data - including cases linked to P-sample)

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Percent of EFU2 Agree with EFU1	Weighted Number of People (Unweighted)	Residual Error If Category Accepted
TES Case, Clusters had Keying Error -- Erroneous	*	98.41	79.22	218,857 (158)	44,759.33
Geocoding Section Blank -- Unresolved	*	38.82	89.91	35,108 (22)	1,374.63
TES Section Blank -- Unresolved	*	12.20	0.00	818,345 (221)	99,828.72
Inconsistent Mover Dates -- Review		0.00	.	12,293 (10)	.
Dates Unable to be Standardized -- Review		0.00	.	1,685,372 (268)	.
Died after CD, Not Codable -- Review		0.00	.	484,332 (45)	.
Group Quarters, Write-In Given -- Review		0.00	.	588,710 (71)	.
Possibly Fictitious -- Review		0.00	.	2,145,388 (710)	.
Other Residence, Address Given -- Review		0.00	.	277,246 (87)	.
College Student, School Address Given -- Review		0.00	.	379,152 (110)	.

2.5.2 Application of Decisions

Tables 10 and 11 apply these decisions to the entire followup universe. Estimated clerical workloads are calculated in the last column. Any case that disagrees is flagged for clerical review. If a case was included in the PFU/EFU Review it does not need further clerical coding and is not included in the workload estimates. However, some conflicting cases in the PFU/EFU Review need to be re-reviewed and are included in the workload estimates.

- In the E-sample an estimated 6,742 cases need clerical review.
- In the P-sample an estimated 8,220 cases need clerical review. All linked cases (i.e. Matches) are included in the P-sample table along with the unlinked cases.

Table 10 – E-sample Comparison with EFU1 and Estimated Clerical Workload Contribution from EFU Only–BFU Unlinked People

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
Lived Here -- Resident		97.29	24,739,611 (23,474)	671,684 (667)	469,658 (304)	202,026 (363)
Group Quarters -- Erroneous		88.55	65,463 (55)	7,499 (9)	2,002 (3)	5,497 (6)
Nursing Home -- Erroneous	*	64.17	165,776 (82)	n/a	(47)	(35)
Nursing Home -- Unresolved		15.52	9,792 (26)	8,273 (24)	0 (0)	8,273 (24)
Nursing Home -- Unresolved		0.00	13,860 (35)	13,860 (35)	10,195 (21)	3,665 (14)
Dorm -- Erroneous		93.38	282,732 (161)	18,719 (14)	10,867 (7)	7,852 (7)
Dorm -- Unresolved		26.15	207,113 (104)	152,951 (75)	152,951 (75)	0 (0)
Military/Shipboard -- Erroneous		43.52	27,206 (18)	15,367 (5)	15,147 (4)	220 (1)
Other Residence -- Unresolved		79.41	3,928,902 (3,931)	808,950 (713)	296,857 (218)	512,093 (495)
Other Residence – Don't Know Job OR – Unresolved		62.67	23,434 (16)	8,748.00 (6)	0 (0)	8,748 (6)

Table 10 – E-sample Comparison with EFU1 and Estimated Clerical Workload Contribution from EFU Only–BFU Unlinked People

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
Other Residence – Don’t Know Joint Custody OR – Unresolved	*	80.75	909,578 (922)	n/a	(217)	(705)
Other Residence – Don’t Know Vacation Home OR – Unresolved	*	76.93	665,745 (552)	n/a	(135)	(417)
Other Residence – Don’t Know Other OR – Unresolved	*	59.83	218,459 (210)	n/a	(58)	(152)
Other Residence – Blank Job OR – Unresolved		84.86	2,024,882 (2,153)	306,571 (308)	88,504 (82)	218,067 (226)
Other Residence – Blank Joint Custody OR – Unresolved	*	4.11	26,524 (20)	n/a	(6)	(14)
Other Residence – Blank Vacation Home OR – Unresolved		5.28	29,835 (31)	17,659 (26)	12,176 (6)	5,483 (20)
Other Residence – Blank Other OR – Unresolved		22.65	30,444 (27)	23,547 (22)	10,745 (4)	12,802 (18)
Other Residence, Specified -- Correct		92.75	981,408 (730)	71,149 (51)	38,523 (27)	32,626 (24)
Other Residence, Specified -- Erroneous		79.49	147,429 (96)	30,232 (17)	1,328 (1)	28,904 (16)

Table 10 – E-sample Comparison with EFU1 and Estimated Clerical Workload Contribution from EFU Only–BFU Unlinked People

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
Other Residence, Address=DK/Refuse/Blank -- Unresolved		32.56	75,688 (61)	51,041 (39)	38,522 (24)	12,520 (15)
Other Residence, No Cycle Given -- Unresolved	*	25.90	184,875 (143)	n/a	(47)	(96)
Noninterview -- Unresolved	*	62.95	451,785 (435)	n/a	(163)	(272)
No Knowledgeable Respondent -- Unresolved		89.56	520,648 (591)	54,365 (57)	30,133 (27)	24,232 (30)
Moved out Before Census Day -- Unresolved	*	32.40	1,362,000 (1,099)	n/a	(732)	(367)
Moved out, DK Move Date -- Unresolved	*	62.84	456,928 (358)	n/a	(151)	(207)
Moved in After Census Day-- Unresolved	*	25.81	577,507 (568)	n/a	(407)	(161)
Moved in, DK Move Date -- Unresolved		45.61	365,857 (376)	199,003 (197)	53,287 (36)	145,715 (161)
Never Lived Here -- Unresolved	*	29.58	1,317,679 (1,146)	n/a	(620)	(526)
Died after CD, at Sample Address -- Correct		90.71	123,115 (80)	11,443 (6)	2,330 (1)	9,114 (5)

Table 10 – E-sample Comparison with EFU1 and Estimated Clerical Workload Contribution from EFU Only–BFU Unlinked People

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
Died before CD -- Erroneous		84.61	103,655 (44)	15,954 (7)	2,980 (1)	12,974 (6)
Died, no Date Given -- Unresolved		91.48	9,983 (7)	851 (3)	383 (1)	468 (2)
Died after CD, in a GQ -- Erroneous		69.30	41,510 (25)	12,743 (13)	3,461 (6)	9,281 (7)
Can Claim a UHE -- Correct		32.76	31,392 (21)	21,109 (12)	18,962 (8)	2,147 (4)
Geocoding -- Erroneous	*	83.84	177,621 (395)	n/a	(240)	(155)
TES Case, Coded Based on EFU Form -- Erroneous	*	82.71	11,362 (19)	n/a	(8)	(11)
TES Case, Clusters had Keying Error -- Erroneous	*	98.78	219,267 (385)	n/a	(158)	(227)
TES Case, Unknown Geography -- Unresolved	*	100.00	588 (5)	n/a	(0)	(5)
Should have been GE in BFU -- Erroneous		0.00	0 (235)	0 (1)	0 (0)	0 (0)
Geocoding Section Blank -- Unresolved	*	42.95	62,857 (68)	n/a	(22)	(46)
TES Section Blank -- Unresolved	*	12.12	827,332	n/a	(221)	(386)

Table 10 – E-sample Comparison with EFU1 and Estimated Clerical Workload Contribution from EFU Only–BFU Unlinked People

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
			(607)			
Inconsistent Mover Dates -- Review		0.00	18,080 (15)	18,080 (15)	11,619 (10)	6461 (5)
Dates Unable to be Standardized -- Review		0.00	664,874 (566)	664,874 (566)	302,123 (217)	362,752 (349)
Died after CD, Not Codable -- Review		0.00	117,523 (114)	117,523 (114)	36,016 (30)	81,506 (84)
Group Quarters, Write-In Given -- Review		0.00	203,438 (233)	203,438 (233)	66,660 (52)	136,778 (181)
Possibly Fictitious -- Review		0.00	1,237,658 (1,495)	1,237,658 (1,495)	726,267 (665)	511,392 (830)
Other Residence, Address Given -- Review		0.00	95,568 (79)	95,568 (79)	66,773 (52)	28,795 (27)
College Students, School Address Given -- Review		0.00	188,297 (118)	188,297 (118)	164,366 (85)	23,931 (34)
					Clerical Review:	6,742

Table 11 – P-sample Comparison with EFU1 and Estimated Clerical Workload Contribution from EFU Only– P-sample People (includes Matches)

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
Lived Here -- Resident		99.50	218,049,858 (33,406)	1,081,466 (551)	235,954 (33)	845,512 (518)
Group Quarters -- Nonresident		73.17	54,427 (40)	14,604 (11)	0 (1)	14,604 (10)
Nursing Home -- Nonresident		20.03	569,978 (102)	455,830 (59)	369,220 (15)	86,610 (44)
Dorm -- Nonresident		81.83	437,848 (109)	79,567 (13)	60,843 (2)	18,724 (11)
Dorm -- Removed GQ from P		93.72	37,632 (153)	2,363 (27)	0 (1)	2,363 (26)
Military/Shipboard -- Nonresident		20.10	95,511 (31)	76,312 (10)	46,117 (3)	30,196 (7)
Other Residence -- Unresolved		74.14	15,006,552 (3,701)	3,881,013 (855)	1,828,992 (124)	2,052,021 (731)
Other Residence – Don’t Know Job OR – Unresolved		99.05	23,332 (14)	220 (3)	0 (1)	220 (2)
Other Residence – Don’t Know Joint Custody OR – Unresolved	*	83.12	2,385,240 (656)	n/a	(50)	(606)
Other Residence – Don’t Know Vacation Home OR – Unresolved	*	64.91	3,404,200 (613)	n/a	(107)	(506)
Other Residence – Don’t Know	*	59.87	845,175	n/a	(27)	(182)

Table 11 – P-sample Comparison with EFU1 and Estimated Clerical Workload Contribution from EFU Only– P-sample People (includes Matches)

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
Other OR – Unresolved			(209)			
Other Residence – Blank Job OR – Unresolved		79.81	7,930,893 (2,130)	1,601,257 (383)	685,126 (57)	916,136 (326)
Other Residence – Blank Joint Custody OR – Unresolved	*	0.00	68,583 (18)	n/a	(2)	(16)
Other Residence – Blank Vacation Home OR – Unresolved		43.30	145,678 (26)	82,601 (18)	34,837 (1)	47,765 (17)
Other Residence – Blank Other OR – Unresolved		5.65	203,449 (35)	191,945 (32)	116,111 (6)	75,834 (26)
Other Residence, Specified -- Resident		96.82	5,952,270 (841)	189,130 (44)	96,251 (10)	92,880 (34)
Other Residence, Specified -- Nonresident		41.22	203,386 (102)	119,558 (14)	91,388 (4)	28,169 (10)
Other Residence, Address=DK/Refuse/Blank -- Unresolved		11.09	168,001 (66)	149,364 (42)	109,287 (12)	40,077 (30)
Other Residence, No Cycle Given -- Unresolved		14.18	1,029,905 (177)	883,865 (145)	591,758 (36)	292,107 (109)
Noninterview -- Unresolved	*	65.36	1,106,902 (339)	n/a	(29)	(310)
No Knowledgeable Respondent --		98.65	926,064	12,537	0	12,537

Table 11 – P-sample Comparison with EFU1 and Estimated Clerical Workload Contribution from EFU Only– P-sample People (includes Matches)

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
Unresolved			(470)	(33)	(0)	(33)
Moved out Before Census Day -- Unresolved	*	69.46	1,577,790 (639)	n/a	(87)	(552)
Moved out, DK Move Date -- Unresolved	*	78.63	499,727 (274)	n/a	(17)	(257)
Moved in After Census Day-- Unresolved	*	36.25	886,388 (993)	n/a	(47)	(946)
Moved in, DK Move Date -- Unresolved	*	37.01	2,069,385 (463)	n/a	(56)	(407)
Never Lived Here -- Unresolved	*	30.89	2,472,941 (918)	n/a	(48)	(870)
Died after CD, at Sample Address -- Resident	*	86.01	351,028 (56)	n/a	(8)	(48)
Died before CD -- Nonresident		5.78	96,380 (37)	90,805 (36)	37,339 (2)	53,467 (34)
Died, no Date Given -- Unresolved		55.49	19,138 (4)	8,518 (2)	0 (0)	8,518 (2)
Died after CD, in a GQ -- Nonresident		72.92	36,648 (10)	9,926 (2)	0 (0)	9,926 (8)
Can Claim a UHE -- Resident		41.43	35,981 (28)	21,075 (7)	9,772 (1)	11,302 (6)

Table 11 – P-sample Comparison with EFU1 and Estimated Clerical Workload Contribution from EFU Only– P-sample People (includes Matches)

Why Code and Enumeration Status from Keyed Data	Category Not Accepted	Weighted Percent Agree with EFU1	Weighted Number of People	Weighted Number of Disagreements	Weighted Number of Disagreements that were in the PFU/EFU Review	Projected Clerical Workload (=Disagreements - Review Cases*)
Geocoding -- Nonresident	*	37.09	10,731 (37)	n/a	(0)	(37)
Geocoding Section Blank -- Unresolved	*	38.77	9,153 (50)	n/a	(0)	(50)
Inconsistent Mover Dates -- Review		0.00	16,365 (8)	16,365 (8)	0 (0)	16,365 (8)
Dates Unable to be Standardized -- Review		0.00	1,253,184 (407)	1,253,184 (407)	596,538 (51)	656,646 (356)
Died after CD, Not Codable -- Review		0.00	490,457 (97)	490,457 (97)	248,312 (15)	242,145 (82)
Group Quarters, Write-In Given -- Review		0.00	511,706 (114)	511,706 (114)	244,757 (19)	266,949 (95)
Possibly Fictitious -- Review		0.00	1,432,602 (750)	1,432,602 (750)	578,680 (45)	853,922 (705)
Other Residence, Address Given -- Review		0.00	246,974 (105)	246,974 (105)	121,288 (35)	125,685 (70)
College Student, School Address Given -- Review		0.00	408,743 (158)	408,743 (158)	175,609 (25)	233,135 (133)
Clerical Total:						8,220

2.6 Possibly Matched People

The keyed data for the cases followed up as possible matches is problematic and cannot be used. We will not clerically review a subset of these cases that became matched residents in both PFU and EFU and the EFU form was not rejected (953 cases, from Table 12). Since possible matches are primarily sent to followup to determine match status, we do not need to again review these cases. The balance of possible matches would need to be clerically reviewed.

Production Result	MER/EFU Result	EFU Reject?	# of Cases
MR	MR	N	953
MR	MR	Y	152
Other	Other	n/a	359
Total			1,464

3. Using the Keyed Data to Assign Mover Status from the EFU Form

3.1 Defining Keyed Data Mover Codes

Each P-sample person who went to EFU will be assigned a mover status. If the MER mover status and keyed mover status do not agree, then the case will be sent for clerical review. The mover status will be assigned as follows using the keyed data, see Attachment A for the EFU questions:

DAT - If the move out date or the move in date was not standardizable (either the date cannot be parsed or the date has a "00" for the month or the month is "04" and the day is "00") and the case is not an NI, NA, or DD then the case is given a mover status of DAT.

NI - The case is a noninterview (that is, the form is blank or the interview is incomplete). We cannot assign a mover status to the case.

- Question 1=Don't Know or Blank

DD - The person in question died after Census Day. We cannot code a mover status unless we examine the information outside the skip pattern for that case.

- Question 1=Deceased and the Interviewer Box=Died after Census Day or Blank

NA - The person should not have been listed at the sample address.

- Died before Census Day – Question 1=Deceased and the Interviewer Box=Before Census Day
- Moved out before Census Day:
 - Question 1=No and Question 2a has a date before Census Day
 - Question 1=No, Question 2a=Blank, Don't Know, Refuse, Question 2b=Before April 1, 2000
 - Question 1=No, Question 2a=Blank, Don't Know, Refuse, Question 2b=Don't Know, Refuse, Blank, and Question 2c=Before April 1, 2000
- Never Lived at the Sample Address – Question 1=No, Question 2a=Never Lived at the Sample Address
- Moved in after A.C.E. Interview Day
 - Question 1=Yes or No, Question 3a=Yes, Question 3b gives a date after the A.C.E. Interview Day
 - Question 1=Yes or No, Question 3a=Yes, Question 3b=Don't Know, Refuse, or Blank, Question 3d =After Census Day

DK - The date of the move is unknown

- Outmover Date Unknown
 - Question 1 <> No and at least one of Questions 2a-2c has a filled item
 - Question 1= No, Question 2a=Don't Know, Refuse, Blank, Question 2b=Before A.C.E. Interview Day, Don't Know, Refuse, Blank, Question 2c=Don't Know, Refuse, Blank
 - Question 1=No, Question 2a=Don't Know, Refuse, Blank, Question 2b=Don't Know, Refuse, Blank, Question 2c=After April 1, 2000
- Inmover Date Unknown – Question 1=Yes or No and Question 3a=Yes and one of the following:
 - Question 3b=Don't Know, Refuse, Blank, Question 3c=Before A.C.E. Interview Day, Don't Know, Refuse, Blank, Question 3d=Don't Know, Refuse, Blank
 - Question 3b=Don't Know, Refuse, Blank, Question 3c=Don't Know, Refuse, Blank, Question 3d=After April 1, 2000

O - The person moved out after Census Day, before A.C.E. Interview Day:

- Question 1 = No and Question 2a has a moved out date after Census Day and before A.C.E. Interview Day
- Question 1 = No and Question 2a = Don't Know, Refuse, Blank, and Question 2b=Before A.C.E. Interview Day, and Question 2c=After April 1, 2000

I - The person moved in after Census Day, before/on A.C.E. Interview Day

- Question 1 = Yes or No, Question 3a=Yes, and Question 3b has a moved in date after Census Day and before A.C.E. Interview Day
- Question 1 = Yes or No, Question 3a = Yes, and Question 3b = Don't Know, Refuse, Blank, and Question 3c=Before/On A.C.E. Interview Day, and Question 3d=After April 1, 2000

N - The person did not move with the time period between Census Day and A.C.E. Interview Day

- The person did not meet any of the conditions outlined above.

Note that if someone is an inmover and an outmover, that they will be coded with a why indicating date inconsistency (DACO) and be sent for a clerical review. Also, any cases that are assigned a mover status of anything but N, O, or I will typically go for a clerical review because those mover statuses will disagree with the MER codes. The exceptions to this include those cases that are coded a DK and are not a resident (there is currently one case that falls into this category) and NA that either have never lived at the address (why code=NL) or died before Census Day (why code=DB).

3.2 Mover Status Results

Table 13 - Mover Status for Production Nonmovers Sent to EFU

		Nonmover	Outmover	Inmover	Bad Date	Dead People	Don't Know	Not Applicable	Noninterview
MER Status	Nonmover	232,220,000 (34,031)	1,037,631 (298)	146,334 (148)	1,012,069 (223)	761,233 (114)	2,459,747 (623)	3,917,057 (1,296)	3,066,229 (1,228)
	Outmover	114,931 (32)	652,265 (211)	19,421 (5)	23,399 (16)	--	32,131 (6)	25,580 (14)	10,818 (10)
	Inmover	9,975 (30)	16,157 (9)	340,204 (593)	23,959 (37)	--	4,103 (10)	13,113 (22)	0 (1)
	Unresolved	--	--	--	3,599 (1)	--	2,264 (3)	3,236 (3)	2,094 (4)

Table 14 - Mover Status for Production Outmovers Sent to EFU

		Nonmover	Outmover	Inmover	Bad Date	Dead People	Don't Know	Not Applicable	Noninterview
MER Status	Nonmover	1,545,270 (648)	98,057 (34)	4,152 (2)	9,892 (7)	17,828 (4)	16,996 (8)	23,272 (23)	13,148 (7)
	Outmover	771,833 (411)	3,128,943 (1,427)	18,123 (25)	131,238 (96)	92,393 (35)	145,013 (116)	708,538 (412)	238,997 (213)
	Inmover	--	7,411 (7)	17,900 (38)	1,016 (2)	--	1,896 (2)	204 (2)	4,752 (1)
	Unresolved	--	--	--	--	--	--	12,366 (4)	650 (5)

Table 15 - Mover Status for Production Unresolved Sent to EFU

		Nonmover	Outmover	Inmover	Bad Date	Dead People	Don't Know	Not Applicable	Noninterview
MER Status	Nonmover	1,536,847 (962)	13,550 (25)	0 (1)	21,869 (8)	13,689 (7)	29,954 (13)	13,274 (19)	16,732 (14)
	Outmover	0 (1)	--	14,133 (25)	--	--	--	5,133 (3)	--
	Inmover	15,172 (11)	282,923 (251)	--	5,653 (10)	--	1,736 (2)	5,557 (3)	--
	Unresolved	641,557 (380)	176,463 (172)	10,866 (7)	27,253 (19)	21,232 (9)	46,005 (41)	121,602(114)	112,483 (91)

4. Production Inmovers

Production inmovers were included as part of the EFU. They are coded similar to the nonmovers and outmovers with some exceptions.

4.1 Keyed Mover Status Coding

Production inmovers' mover statuses are coded using the same codes as defined in Section 3.1. In Table 16 below, 3,247 unweighted (1,836 + 1,364 + 47 - unweighted numbers in parenthesis) production inmovers sent to EFU have a mover status from the keyed data that is equal to the mover status assigned in the MER. We expected to find some deviation due to suspected clerical error and due to keying error.

Table 16–Mover Status for Production Inmovers Sent to EFU with Keyed Data
Weighted Counts (unweighted counts in parenthesis)

		Mover Status from the Keyed Data								
		Inmover	Nonmover	Outmover	Bad Date	Dead People	Don't Know	Not Applicable	Non-interview	Weird
MER Status	Inmover	2,767,001 (1,836)	325,788 (234)	74,160 (44)	121,584 (79)	10,836 (5)	139,075 (86)	561,852 (360)	246,011 (243)	13,829 (11)
	Nonmover	47,804 (48)	2,126,103 (1,364)	12,505 (13)	28,411 (24)	4,409 (4)	28,323 (20)	87,167 (68)	167,565 (117)	4,692 (4)
	Outmover	715 (1)	34,411 (11)	67,662 (47)	12,136 (9)	0	1,508 (1)	15,902 (7)	5,910 (6)	0
	Unresolved	0	104 (1)	0	0	0	0	9,071 (4)	0	0 (1)

4.2 Residence Status Coding

A residence status code for production in-movers was assigned based on the mover status on the EFU form.

All cases with keyed mover status codes of WH and DD were sent for clerical review automatically. No residence status coding was attempted for these cases. Cases coded BD, DK, NA, and NI received limited residence status coding. Cases converted to Nonmovers or Outmovers (N or O) were assigned residence status codes based on their April 1st residence. Cases that remained In-movers (I) were assigned residence status codes based on their A.C.E. Interview Day residence. The following table details how the codes were assigned. Questions used come from Section 5 - In-movers Core Section of the EFU questionnaire. See Attachment A for the questions.

Table 17 - Description of In-mover Why Codes

Keyed Mover Status	EFU Keyed Why Code	Description	Logic for Code Assignment
DD	DD	Died, needs clerical review	Question 1=Deceased, Interviewer Box=Died after Census Day or blank
WH	WH	Weird case, needs clerical review	Question 1= Doesn't live here now and Question 2a is blank or Group Quarter question for A.C.E. day=67
BD	DAT	Dates need clerical review	<p>Outmover date could not be used: If Question 1=2 and the move out date in Question 2a was either: unable to be standardized, had a year before 1900 or after 2001, had a blank month in the year 2000, had a blank day in April 2000</p> <p>In-mover date could not be used: If Question 1=1 or 2 and the move in date in Question 3a was either: unable to be standardized, had a year before 1900 or after 2001, had a blank month in the year 2000, had a blank day in April 2000</p>
DK	CY	Mover status is unknown, but person could be cycling; needs clerical review	<p>Mover status is unknown because respondent didn't know dates of moves; Person does not live at the residence now but we don't know when moved out (2b=1/DK/REF/blank 2c=DK/Ref/blank) AND Moved into the address in 2000 but doesn't know when</p>

Table 17 - Description of Inmover Why Codes

Keyed Mover Status	EFU Keyed Why Code	Description	Logic for Code Assignment
DK	DKGQ	Mover status is unknown but person could be in a group quarters; needs clerical review	If question 4a=yes and 4b=yes; OR if question 15a=yes and 15b=yes; OR if question 5 = 1,2,3,4,5; OR if question 16 = 1,2,3,4,5
DK	DK	Don't Know Mover status; needs clerical review	All other types of cases in which mover status could not be determined
NI	K2	Possibly Fictitious; needs clerical review	If Question 1=Blank, Don't Know, and Section 2C=Blank
NI	GB	Geocoding section is blank	Housing Unit Geocoding section, item 1 is blank
NI	UH	Can claim a UHE	If the census form type = 09, 10, 11, 12, 14, or 16: Form type 09 - D15A - Individual Census questionnaire, short Form type 10 - D15B - Individual Census questionnaire, long Form type 11 - D20A - Individual Census report, short Form type 12 - D20B - Individual Census report, long Form type 14 - D21 - Military Census report Form type 16 - D23 - Shipboard Census report
NI	KR	No Knowledgeable Respondent	If Question 1=Blank, Don't Know, and Section 2C=Could not Locate Knowledgeable Respondent
NI	NI	Noninterview	Question 1 is blank and Section 2C= blank
NA	MI	Should never have been listed; Moved in after A.C.E. Interview Day	
NA	MO	Should never have been listed; Moved out before Census Day	
NA	NL	Should never have been listed; Never lived here	
NA	IO	Should never have been listed; Moved in and out of unit	
I, O,N	NOTE ABOUT CODING Questions 6b-14 are used to code other residence for both inmovers and nonmover/outmovers Questions 4a-4c are used to code college students for inmovers Questions 15a-15c are used to code college students for nonmover/outmovers Question 5 is used to code group quarters for inmovers Question 16 is used to code group quarters for nonmover/outmovers		

Table 17 - Description of Inmover Why Codes

Keyed Mover Status	EFU Keyed Why Code	Description	Logic for Code Assignment
I, O ,N	AD	Has 'other res', Address is blank/DK/REF	Question 1=Yes , No and Person is not identified as moving in after Census Day and (Question 6b=Yes or Question 7=Yes or Question 8=Yes or Question 9=Yes) and the appropriate cycle questions as indicated Question 12 indicates that the person lives in another address and the other address is Blank/Don't Know/Refused and there is not a state outside the sample
I, O ,N	LH	Lived Here	If Question 1=Yes or No, the person lived at the sample address according to the move in and move out sections, the person was not in any type of college residence, Question 5/16= No, Don't Know, Refuse or Blank, and all applicable questions 6b-9 are No
I, O ,N	DO	Dorm	The person is between ages 16-30, inclusive, and Question 1=Yes, Question 4a/15a=Yes and Question 4b/15b=Staying in a Dorm and the Case is not a Dorm Unresolved
I, O ,N	GQ	Group Quarters	If Question 1=Yes or No, and Question 5/16 = Correction Facility
I, O ,N	MS	Military/Shipboard	If Question 1=Yes or No, and Question 5/16=Military/Shipboard
I, O ,N	NH	Nursing Home	If Question 1=Yes or No, and Question 5/16 =Nursing Home and the case is not a Nursing Home- Unresolved
I, O ,N	CY	Person could be cycling; needs clerical review	person has moved in and out of residence via questions 1-3d
I, O ,N	NHU	Nursing Home - Unresolved	If Question 1=Yes or No, and Question 5/16 =Nursing Home and the following: Cluster=335216 or Cluster=383265 and Question 8=Blank
I, O ,N	OR1	Has 'other res', stayed at Census Address	Question 1 = Yes or No, the person lived at the sample address according the move in and move out questions, the person was not in any type of college residence, Question 5/16= No, Don't Know, Refuse or Blank, at least one of the

Table 17 - Description of Inmover Why Codes

Keyed Mover Status	EFU Keyed Why Code	Description	Logic for Code Assignment
			<p>applicable questions from Questions 6b-9 is Yes, and either:</p> <p>Question 12a=Don't Know, Refuse, Blank and Question 13 = Sample Address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Sample Address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Don't Know, Refuse, Blank and Question 13= Sample Address</p>
I, O ,N	OR2	Has 'other res', stayed at Other Res out of state	<p>Question 1 = Yes or No, the person lived at the sample address according the move in and move out questions, the person was not in any type of college residence, Question 5/16= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Yes, and either:</p> <p>Question 12a=Don't Know, Refuse, Blank and Question 13 = Other Place and the state is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Other Place and the state is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Don't Know, Refuse, Blank and Question 13=Other Place and the state is the same as the state of the sample address</p>

Table 17 - Description of Inmover Why Codes

Keyed Mover Status	EFU Keyed Why Code	Description	Logic for Code Assignment
I, O, N	DF	Has other residence; doesn't know which place stayed most of the time	Question 1 = Yes or No, the person lived at the sample address according the move in and move out questions, the person was not in any type of college residence, Question 5/16= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Yes, and 12a = any answer and the corresponding cycle question (12b, 12c,12d, or 13) is DK/REF/blank
I, O, N	ORDK	DK if have other res	Question 1 = Yes or No, the person lived at the sample address according the move in and move out questions, the person was not in any type of college residence, Question 5/16= No, Don't Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Don't Know
I, O, N	OS	College - Other address at school	The person is between ages 16-30, inclusive, and Question 1=Yes, Question 4a/15a=Yes and Question 4b/15b= Staying at another address at college
I, O, N	UH	Can claim a UHE	If the census form type = 09, 10, 11, 12, 14, or 16: Form type 09 - D15A - Individual Census questionnaire, short Form type 10 - D15B - Individual Census questionnaire, long Form type 11 - D20A - Individual Census report, short Form type 12 - D20B - Individual Census report, long Form type 14 - D21 - Military Census report Form type 16 - D23 - Shipboard Census report
RV Situations–Unable to code with the Computer			
I, O, N	GQA	Group Quarters - other, Needs Clerical Review	If Question 1=Yes or No, and Question 5/16=Some other Place
I, O, N	IO2	Person is both an inmover and an outmover; needs clerical review	Based on questions 1-3d
I, O, N	OR	Has 'other res', Clerical review of address	Question 1 = Yes or No, the person lived at the sample address according the move in and move out questions, the person was not in any type of college residence, Question 5/16= No, Don't

Table 17 - Description of Inmover Why Codes

Keyed Mover Status	EFU Keyed Why Code	Description	Logic for Code Assignment
			<p>Know, Refuse or Blank, at least one of the applicable questions from Questions 6b-9 is Yes, and either:</p> <p>Question 12a=Don't Know, Refuse, Blank and Question 13 = Other Place and the state is either not filled or is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Other Place and the state is either not filled or is the same as the state of the sample address</p> <p>or</p> <p>Question 12a= Filled with one of answers 1-5, the appropriate cycle question (Questions 12b-12d) = Don't Know, Refuse, Blank and Question 13=Other Place and the state is either not filled or is the same as the state of the sample address</p>

5. Determining Cases for Clerical Review

We will target certain types of cases for clerical review. After assigning keyed codes to all P- and E- sample people with keyed data, we will use the data and the tables above to determine which cases need clerical review and which cases will get the code assigned from the keyed data.

5.1 E-sample Clerical Cases

Step 1: Flag cases eligible for clerical review (initial flag)

- No PFU keyed data or EFU keyed data and has not been reviewed by an analyst during a special check (cen_cler=1)
- PFU has write-in information (i.e. address) that needs clerical review (cen_cler = 2)
- EFU has write-in information that needs clerical review (cen_cler = 3)
- In the PFU/EFU Review and coded as conflicting (cen_cler = 4)
- PFU keyed code category was not accepted by Measurement Subgroup (cen_cler = 5)
- EFU keyed code category was not accepted by Measurement Subgroup (cen_cler = 6)

- PFU category was accepted but the keyed enumeration status does not agree with the production (PFU1) code (cen_cler = 7)
- EFU category was accepted but the keyed enumeration status does not agree with the MER (EFU1) code (cen_cler = 8)
- Production (PFU1) or MER (EFU1) coded the person a duplicate, but not both (cen_cler=12)

Step 2: Determine ineligible cases (may override above)

- In the PFU/EFU Review and was not conflicting (If cen_cler ≠ 4 or 12, then cen_cler = 15)
- MER code was a KE (cen_cler = blank,)
- Census form was a UHE (cen_cler = blank)

Step 3: Flag cases for clerical review

- If cen_cler is not blank or 15 then clerical review is required
- If cen_cler = 15 then clerical review is NOT required
- For all cases that still have cen_cler = Blank, except the MER KE cases:
 - If both the PFU category and EFU category were accepted by the Measurement Subgroup, both the PFU and EFU keyed codes equal the corresponding production code, and the PFU keyed code = EFU keyed code, then clerical review is NOT required
 - If both the PFU category and EFU category were accepted by the Measurement Subgroup, both the PFU and EFU keyed codes equal the corresponding production code, but the PFU keyed code ≠ EFU keyed code, the case needs clerical review except in the following circumstances:
 - If either why code is noninterview (unresolved) then clerical review is NOT required and the enumeration status assigned is the non-unresolved code.
 - If the EFU why code is Other Residence Unresolved – job item is blank, then clerical review is NOT required and the enumeration status assigned is the PFU keyed code.
 - If the PFU why code is Other Residence Unresolved (all of them), clerical review is NOT required and the enumeration status assigned is the EFU keyed code.
- If cen_cler = Blank and it is an MER KE cases then clerical review is NOT required

5.2 P-sample Clerical Cases- Production Nonmovers and Outmovers

Step 1: Flag cases eligible for clerical review (initial flag)

- No PFU keyed data or EFU keyed data and has not been reviewed by an analyst during a special check (ace_cler=1)
- PFU has write-in information (i.e. address) that needs clerical review (ace_cler = 2)
- EFU has write-in information that needs clerical review (ace_cler = 3)

- In the PFU/EFU Review and coded as conflicting (ace_cler = 4)
- PFU keyed code category was not accepted by Measurement Subgroup (ace_cler = 5)
- EFU keyed code category was not accepted by Measurement Subgroup (ace_cler = 6)
- PFU category was accepted but the keyed residence status does not agree with the production (PFU1) code (ace_cler = 7)
- EFU category was accepted but the keyed residence status does not agree with the MER (EFU1) code (ace_cler = 8)
- Keyed mover status is BD, DD, NA (except if the why code is NL or DB), DK with a match code of NR (ace_cler=10)
- Keyed mover status (for all those not mentioned above) disagrees with the MER mover status (ace_cler=10)
- Production (PFU1) or MER (EFU1) coded the person a duplicate, but not both (ace_cler=12)
- If the case is a possible match where the EFU form was not rejected in MER and both the production code and the MER code are “MR” (ace_cler=13)

Step 2: Determine ineligible cases (may override above)

- In the PFU/EFU Review and was not conflicting (If cen_cler ≠ 4 or 10 or 12, then cen_cler = 15)
- MER code was a KP (cen_cler = blank,)
- Census form was a UHE (cen_cler = blank)

Step 3: Flag cases for clerical review

- If cen_cler is not blank or 15 then clerical review is required
- If cen_cler = 15 then clerical review is NOT required
- For all cases that still have cen_cler = Blank, except the MER KE cases:
 - If there was no PFU form, the EFU category were accepted by the Measurement Subgroup, and the EFU keyed codes equals the MER code, then clerical review is NOT required; if the EFU keyed code does not equal the MER code, then clerical review is required.
 - If there was no EFU form, the PFU category were accepted by the Measurement Subgroup, and the PFU keyed codes equals the production code, then clerical review is NOT required; if the PFU keyed code does not equal the MER code, then clerical review is required.
 - If both the PFU category and EFU category were accepted by the Measurement Subgroup, both the PFU and EFU keyed codes equal the corresponding production code, and the PFU keyed code = EFU keyed code, then clerical review is NOT required
 - If both the PFU category and EFU category were accepted by the Measurement Subgroup, both the PFU and EFU keyed codes equal the corresponding production code, but the

PFU keyed code \neq EFU keyed code, the case needs clerical review except in the following circumstances:

- If either why code is noninterview (unresolved) then clerical review is NOT required and the residence status assigned is the non-unresolved code.
- If the EFU why code is Other Residence Unresolved – job item is blank or vacation home item is blank, then clerical review is NOT required and the residence status assigned is the PFU keyed code.
- If the PFU why code is Other Residence Unresolved (all of them), clerical review is NOT required and the residence status assigned is the EFU keyed code.
- If cen_cler = Blank and it is an MER KE cases then clerical review is NOT required
- For all cases that still have ace_cler = Blank, perform the following logic:
 - If the PFU keyed code \neq EFU keyed code, then check the why codes:
 - If either why code is noninterview or the EFU why code is Other Residence Unresolved – Job is blank (ace_cler= Blank). For these cases, the match code assigned to case will be the nonunresolved code.
 - Otherwise, the case does need clerical review (ace_cler=16)
- If the case still has ace_cler = Blank or ace_cler=15 (in the PFU/EFU Review) or ace_cler=13 (possible match not needing review) then the case should be flagged as not needing clerical review. All other cases need clerical review.
- Note that there are some cases that had PFU but no EFU (some whole household nonmatches were not sent to followup in the MER due to programming error). For these cases, we treat them as if the EFU is accepted and both their match code and mover status agrees.

5.3 P-sample Clerical Cases- Inmovers

The only production inmovers not being sent to clerical review are those who are either MER inmovers and stayed keyed inmovers and their keyed residence status agrees with the assigned residence status in MER or were MER nonmovers and stayed keyed nonmovers and their keyed residence status agrees with the assigned residence status in MER. All other production inmovers that had an EFU interview will be sent to clerical review.

Production inmovers who did not have an EFU interview (4,819 out of 9,671 production inmovers) will remain inmovers in A.C.E. Revision II because there is no EFU data to use.

5.4 Clerical Workload Totals

Table 18. Clerical Workload Totals

Type of Case	# of Cases
Unlinked E-sample person	9,880
P-sample Nonmovers and Outmovers	11,630
Inmovers	2,478
Total	23,988

5.5 Subsampling for Workload Purposes

We have been allotted twelve weeks of the analysts' time for this A.C.E. Revision II recoding operation. Given prior experience, we anticipate that about 25,000 cases can be handled in this time frame. In the event that the entire workload cannot be completed, a contingency sampling plan was developed and embedded in the analysts' workflow. If the entire workload is finished, this sampling plan will not be used and if it is not finished, the sampling plan will be triggered. See DSSD A.C.E. Revision II ESTIMATES MEMORANDUM SERIES #PP-4, "A.C.E. Revision II – Contingency Sample Design for Clerical Recoding" for details.

5.6 Assigning Best Codes for Keyed Cases

For cases not needing clerical review we assigned the choose code (which form was picked between PFU and EFU, also takes on the values of Both and Conflicting) and best code (the match code of the form that was chosen).

If the case was **not** in the PFU/EFU Review:

- ▶ if the pfu key and efu key codes are blank then set choosek to blank
- ▶ if the pfu key code and efu key code have the same enumeration or residence status then set choosek to B (both)
- ▶ if the efu key code is unresolved or 'RV' (needs clerical review) then set choosek to P (PFU)
- ▶ if the pfu key code is unresolved or 'RV' then set choosek to E (EFU)
- ▶ if the pfu key code='NK' (no keyed data) and the efu key code isn't blank, then set choosek to E

Based on the choosek value, set bestk and bestky as follows:

- ▶ if choosek=B then bestk=efuk and bestky=efuky
- ▶ if choosek=P then bestk=pfuk and bestky=pfuky
- ▶ if choosek=E then bestk=efuk and bestky=efuky

If the case was in the PFU/EFU Review then set choosek = choose2 (the choose code from the PFU/EFU Review)

Based on the choosek value, set bestk and bestky as follows:

- ▶ if choosek=B then bestk=efu2 and bestky=efu2y
- ▶ if choosek=P then bestk=pfu2 and bestky=pfu2y
- ▶ if choosek=E then bestk=efu2 and bestky=efu2y

Special cases:

- if the cases has insufficient information for matching and followup (match code of KE or KP) in both PFU1 and EFU1 then choosek=B, bestk=KE or KP, and bestky=KE or KP
- if the case has a keyed why code of UH, then choosek=B, bestk=CE or NR, and bestky=UH
- if the case was a duplicate (match code of DE or DP) in both PFU1 and EFU1 then choosek=B, bestk=DE or DP, and bestky=DE or DP

6. Clerical Procedures

The following procedures were used for the clerical review. Flow charts were also used to assist the analysts coding. These flowcharts can be found in Attachment B.

6.1 Information Needed

For each person, we will gather the following information separately from the PFU and EFU forms:

Data to be Determined	Definition
Analyst Number	Analyst identification number
Mover Status (P-sample only)	mover status for the P-sample based on the EFU form
Match Code for each form	Match code based only on information in the given form
Why Code for each form	Information about why the person has the enumeration/residence status that they do.
Same Respondent	Did the same respondent give information for the PFU and EFU form?
Best Interview	The interview which most accurately describes the situation at hand (PFU, EFU, Both, conflicting).
Smooshed Code	If applicable, a combined code reflecting information from both forms.
Notes	Notes about unusual cases, especially when the cases don't follow any of the coding tables laid out below.

6.2 Independence

Each analyst will work a cluster—examining both the PFU and EFU forms for the cluster and assigning the codes above. However, each form (PFU and EFU) for a household will be examined and the code assigned without regard to the other form; all other information normally available to an analyst may be used (e.g., TES Maps, Census Images, Trace Files, Initial Housing Unit Matching Results, MAF Browse, Internet).

6.3 Major Differences from Previous Reviews (AFU and MER)

- Analysts only—Only analysts will work this operation (no technicians).
- No EFU Reject Concept—We will be coding each form and deciding which form (or both) is more reliable. This will give us a better handle on the unresolved rate in EFU and allow us to have more information to evaluate the PFU interview.
- Independent EFU Coding—The EFU will be coded without regard to the information on the PFU form. When choosing the best form, however, the analysts will have the opportunity to indicate that a combined code is a better code.

6.4 Overall Matching Rules

- Read all notes on the form and make sure that the match code reflects both the check boxes and notes. As always, notes override check boxes.
- Use Production Match Codes –We will use production code definitions (i.e. NR, NU, EE etc) for all match coding (Childers 2001).
- Inmover Coding - Use the MER match codes.
- EFU coding—Use production rules.
- If a Census Day address is not provided for an inmover or outmover situation, code unresolved.
- If a Census Day address is not provided for a deceased person who lived in another residence, code unresolved.
- If there are don't know/refuse answers to other residency questions, then code unresolved.
- If there are don't know/refuse answers to GQ questions, but there are answers to the other residence questions, ignore the don't know/refuse answers to the GQ questions and code resolved.
- **Duplicates** - Code a person a duplicate only if the form provides information to lead you believe the person is a duplicate. Do not code the person a duplicate if you look at the household in MaRCS or surrounding households and find a missed duplicate. These duplicates will be determined from the MES.

6.5 Why Codes

Purpose: Quantify the reasons for correct or erroneous information. A 'why code' tells us WHY an analyst assigned the enumeration/residence status based on information obtained from the followup form.

Table 20 – Why Code Categories

Category	Code	Definition
No followup/ Noninterview	NF	No Followup (for PFU cases that were not sent to followup)
	NI	Noninterview (includes DK/Ref on Moving Date–EFU or Did you live here?–PFU)
	KR	Not enough knowledgeable respondents
	FE	Fictitious
	KE	Insufficient Information for Matching and Followup
	DE	Duplicate - based on the information from the form only
Easy person	LH	Lived Here on Census Day, no other residences, no staying in GQ, no moving, no special type of address
Died Before/ Born After Census Day	DB	Died Before Census Day
	BA	Born after Census Day
	DC	Died On Census Day
	BO	Born On Census Day
Movers	MO	Moved Out Before Census Day
	MI	Moved In After Census Day
	NL	Never Lived Here
	MP	Moved, no date given and cannot determine if moved in or out
	MX	Apartment mixup
Other Residences	OV	Other Residence–Visiting Friends/Family
	OW	Other Residence, Work
	OS	Other Residence, School, non-dorm
	OH	Other Residence-Vacation Home
	OM	Multiple Other Residences

Table 20 – Why Code Categories

Category	Code	Definition
	OR	Other Residence–Unresolved; Has another residence, but address not given; Has another residence, but cannot determine cycle; Has another residence, knows cycle, but cannot determine where stayed most of the time
	ORDK	Other Residence–Unresolved; Don't Know if has "other residence"
	OP	Other Residence–PFU, no notes
Group Quarters-type Situations	NH	Nursing Home
	AL	Assisted Living
	RC	Retirement Community
	DO	Dorm/sorority house/frat house
	MS	Military/Shipboard–no UHE
	UH	UHE for Military/Shipboard
	GQ	Other Group Quarters/ PFU GQ , no notes
Geocoding Issues	GO	Geocoding Section–Outside Cluster
	TE	TES–Outside Cluster/Surrounding Ring
	OC	“Outside Cluster” note for non-TES housing units

6.6 Assignment of Best Interviews:

6.6.1 Values of Choose

Table 21 – Valid Values of Choose Code

Value	Definition
B	Both – Both forms have the same match code
P	PFU – The PFU form is the best form
E	EFU – The EFU form is the best form
C	Conflicting – The cases are conflicting and we cannot determine a clear cut best code

6.6.2 Best Code Assignment

We will assign the best code as follows:

1. If there is no EFU form, pick the PFU form.
2. If there is no PFU form and the EFU form is resolved, pick the EFU form.
3. If there is no PFU form and the EFU form is unresolved, then we should choose the unresolved when it gives us more information about the case. For instance, if we determine, via the EFU, that the person had another residence but we cannot determine where that other residence is, then the EFU form is indicating that the person should not be counted as a whole correct enumeration in that cluster. We would choose the unresolved form. For more information, please see the following table:

Table 22 – Choosing Unresolved EFU Forms When There is No PFU Form

EFU Why Code	Description	Best Code
DB	Died, no date	EFU - UE/NU
OR (any type)	Has another residence, but address not given; Has another residence, but cannot determine cycle Has another residence, knows cycle, cannot determine where stayed most of the time	EFU -UE/NU
ORDK	DK/REF/blank to Other Residence item(s)	Production
DO	Dorm - unresolved, no “other residence” information	Production
KR	Not Enough Knowledgeable Respondents	Production
MI	Moved in after Census Day, no address given	EFU - UE/NU
	Don’t know when moved in	If respondent is a proxy - Production If respondent is non-proxy - EFU
MO	Moved out before Census Day, no address given	EFU - UE/NU
	Don’t know when moved out	If respondent is a proxy - Production If respondent is non-proxy = EFU
NI	Noninterview	Production
NL	Never Lived Here	EFU - UE/NU
NH	Nursing Home - Unresolved, no “other residence” information	Production

GO	Only if Blank Geocoding Section	Production
MP	Inconsistent move in/move out dates; Can't determine if they moved in or moved out	If respondent is a proxy - Production If respondent is a non-proxy - Production

4. If either form is not complete, choose the other form to be the best interview. If both forms are not complete, either choose both forms and code unresolved or combine the information from the two forms to get a resolved code (see below for more information).
5. If both forms have the same residence/enumeration status, pick both forms.
6. If either form is unresolved, choose the other form.
A valid exception to choosing the unresolved form over the resolved form occurs, in general, if the unresolved form contains more information than the resolved form. In these cases you would consider picking the unresolved form. For these cases, you should go to Step 8. Such situations include the following:

Table 23 – Choosing an Unresolved Form when a PFU Exists

Why Code (for unresolved case)	Description
DB	Died, no date
OR	Has another residence, but address not given Has another residence, but cannot determine cycle Has another residence, knows cycle, cannot determine where stayed most of the time
MI	Moved in after Census Day and don't know address on Census Day Don't know when moved in
MO	Moved out before Census Day and don't know address on Census Day Don't know when moved out
NL	Never Lived Here
MP	Inconsistent move in/move out dates Can't determine if they moved in or moved out

7. If either form is fictitious, choose the other form except in the following situations:
 - If the non-fictitious form is unresolved because there were not enough knowledgeable respondents to code that form as fictitious, pick the fictitious form.
 - If it is obvious that the respondent for the non-fictitious form was uncooperative and/or lying about the true status of the person, pick the fictitious form.

8. Other Residence/Group Quarters/Mover Situations (one form CE, other form not CE). If one form is clean and the other has other information, then the form with the most information should be taken using the proxy rules below. A form is defined to be “clean” if there is no information about movers, group quarters, and other residences.
 - Exception – If a case has group quarters information and the other form does not have group quarters information or information pertaining to the group quarters situation, choose the form with group quarters information. (This is to avoid conflicting cases with one side giving group quarters information and the other side giving other residence information).
 - Example – PFU says that the person is in a group quarters on Census Day. EFU says that the person was not in a group quarters on Census Day, but had a vacation home and stayed most of the time in the cluster. In this case, we would choose the PFU form (Group Quarter erroneous).
 - Example – PFU says that the person is in a group quarters. EFU indicates that the person has another residence for school, stays most of the time at the other residence, but does not give an address. The PFU form would then be coded erroneous and the EFU form would be coded unresolved. These cases are conflicting since the EFU person could be counted within the cluster.

Table 24 – Proxy Rules for Choosing Between the PFU and EFU forms, Both Forms are Resolved

PFU Respondent	EFU Respondent	Rule
Non-Proxy	Proxy	Take PFU (unless note that respondent is uncooperative and may be lying)
Proxy	Non-proxy	Take EFU (unless note that respondent is uncooperative and may be lying)
Non-Proxy	Non-Proxy	<p>If PFU is clean (e.g., correct with no notes or other residence situations) and EFU has more information, Best=EFU If EFU is clean (e.g., correct with no notes or other residence situations) and PFU has more information, Best=PFU If both forms have “non-clean” interviews (e.g., other residence or moving information) and the enumeration status is not the same, then Best= conflicting</p> <p>Type of non-proxy should be disregarded (e.g., Mom is not a better respondent than Dad)</p>
Proxy	Proxy	<p>If PFU is clean (e.g., correct with no notes or other residence situations) and EFU has more information, Best=EFU If EFU is clean (e.g., correct with no notes or other residence situations) and PFU has more information, Best=PFU If both forms have “non-clean” interviews (e.g., other residence or moving information) and the code is not the same, then Best= conflicting</p> <p>Always be reviewing the respondent—if one proxy respondent is better than the other, take the “better” respondent (e.g., friend vs. apartment manager)</p>

Table 25 – Proxy Rules for Choosing Between the Unresolved and Resolved Forms

PFU Respondent	EFU Respondent	Rule
Non-Proxy	Proxy	Take PFU (unless note that respondent is uncooperative and may be lying)
Proxy	Non-proxy	Take EFU (unless note that respondent is uncooperative and may be lying)
Non-Proxy	Non-Proxy	<p>If PFU is clean (e.g., correct with no notes or other residence situations) and EFU has more information, Best=EFU If EFU is clean (e.g., correct with no notes or other residence situations) and PFU has more information, Best=PFU If both forms have “non-clean” interviews :</p> <ul style="list-style-type: none"> – If the unresolved situations are as follows then take the other form: <ul style="list-style-type: none"> – Don’t Know the Other Residence Cycle – Can’t determine where they stay most of the time – Can’t determine when they moved in or out – Inconsistent Mover Dates – Otherwise check for addresses on both forms to determine if the case can be resolved by combining forms or choosing the form with the address – Otherwise, code conflicting <p>Type of non-proxy should be disregarded (e.g., Mom is not a better respondent than Dad)</p>
Proxy	Proxy	<p>If PFU is clean (e.g., correct with no notes or other residence situations) and EFU has more information, Best=EFU If EFU is clean (e.g., correct with no notes or other residence situations) and PFU has more information, Best=PFU If both forms have “non-clean” interviews:</p> <ul style="list-style-type: none"> – If the unresolved situations are as follows then take the other form: <ul style="list-style-type: none"> – Don’t Know the Other Residence Cycle – Can’t determine where they stay most of the time – Can’t determine when they moved in or out – Inconsistent Mover Dates – Otherwise check for addresses on both forms to determine if the case can be resolved by combining forms or choosing the form with the address – Otherwise, code conflicting <p>Always be reviewing the respondent—if one proxy respondent is better than the other, take the “better” respondent (e.g., friend vs. apartment manager)</p>

9. Combining Cases - Creating a Smooshed Code

Rarely, a PFU and an EFU form may have complimentary information that could lead to a better code together, rather than choosing either of the forms. In this case, analysts are allowed to combine forms. If so, the analysts should leave a note explaining the situation.

- Example – The PFU form indicates that the person may not have lived at the sample address on Census Day and gives you an alternative address. This form would be unresolved because the respondent was not sure if the person lived at the sample address on Census Day. The EFU form says that the person moved out before Census Day, but does not give an address. This form would be unresolved because there is no address given for the Census Day residence. However, if the date from the EFU form is combined with the address from the PFU form, the case can be resolved. In this situation, the PFU code would be UE, the EFU code would be UE, and the Choose code would be S with a Choose match code of CE or EE.

10. Geocoding Cases

Since the PFU and EFU had different rules for determining when to use a geocoding check, the following table outlines how to choose between the two forms.

Table 26 – Choosing the Best Form With Geocoding/TES Sections					
Type of HU	PFU Geocoding Section	Production TES	EFU Geocoding Section	EFU TES	Best Interview
Add, non-TES cluster	Y	N	Y	N	If geocoding status is different, then conflicting.
GE in TES cluster/blank relist	N	Y	N	Y	If geocoding status is different, then conflicting.
EE housing unit code	N	N	N	Y	If outside cluster, take EFU.
Add, TES cluster	Y	N	N	Y	If the enumeration status of the person changes, then conflicting. However, if PFU=GE (outside the cluster) and EFU=CE (in first ring), take EFU.
No section/form, but note, will still code CE		No section/form, but note to code GE			Conflicting
No section/form, but note to code GE		No section/form, but note, will still code CE			Conflicting

11. Assigning Notes to a Case

In any of the following situation, the analysts should leave a note on the case to explain the situation. These notes are meant to describe cases to Headquarters that may appear to not follow the above rules when analyzed:

- Breaking proxy rules – If a proxy is determined to be a better source than a non-proxy
- Breaking best code rules – If a case has why codes as described above but does not have the same outcome as above
- Conflicting cases – Describe any conflicting cases
- Combined cases – Cases where the data from the PFU and the EFU are combined to produce a better code.

6.7 Clerical Mover Status Assignment for P-sample EFU cases

The mover status from the MER form as identified by the computer is on the coding sheet to assist the analyst.

If the person moved in between Census Day and A.C.E. Interview Day or on A.C.E. Interview Day, then assign a mover status of I

If the person is an in-mover and the residence status on A.C.E. Interview Day cannot be determined, then code the person an IU.

Otherwise, assign the code the appropriate in-mover code for the person's A.C.E. Interview Day residence status (residence on A.C.E. Interview Day = IR, nonresident on A.C.E. Interview Day=IN, duplicate of an in-mover=ID)

If the person moved out between Census Day and A.C.E. Interview Day or on Census Day, then assign a mover status of O even if the match code is an NU.

For example: If the person moved out on July 5 and the A.C.E. Interview Day is August 12 but no mover address is given, then assign a NU, MO with a mover status of O.

If the person moved out before Census Day and/or moved in after A.C.E. Interview Day, then assign a mover status of NA (Not applicable—the person will be removed from the P-sample).

If mover information for a person was given (i.e. that the person moved in or out of the housing unit or both) but given the response to the other residence questions it appears that the moving information actually corresponds to a person cycling (moving back and forth) between residences, then assign a mover status of N.

If the mover section indicates that the person did not move between Census Day and A.C.E. Interview Day, then assign a mover status of N.

- These people could be:
- Lived Here

- Other residences, resolved or unresolved
- Group Quarters situations

Other situations:

If the match code is FP, NL with a why code of NU, DP then assign a mover status of NA.

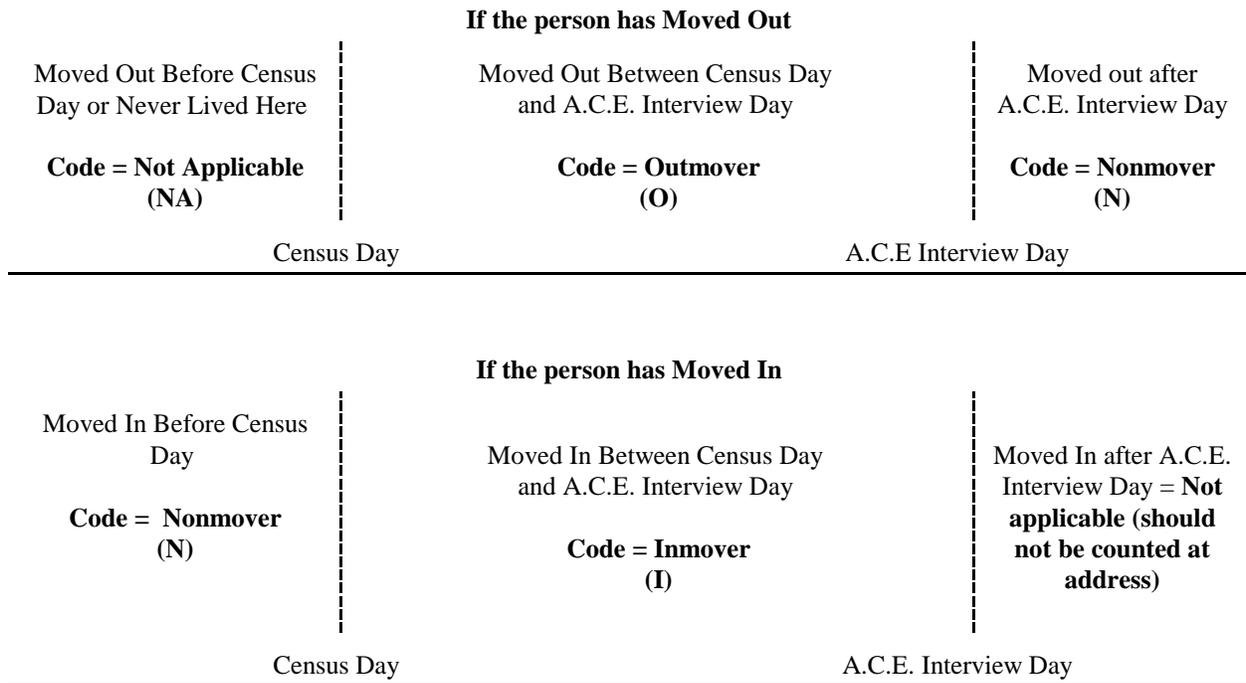
If the household is a noninterview (NI) then assign a mover status of NI.

If the respondent said that the person moved but did not know when or did not know if the respondent moved, then assign a mover status of DK (Don't Know).

If the dates are inconsistent (e.g., moved out before moved in) or too vague to code (e.g. moved August 2000 and the A.C.E. interview day is August 12, 2000), then assign a mover status of BD (Bad Dates).

- Both DK and BD codes are equivalent to Unresolved (U) from MER.

The graphic below demonstrates how to code a person as a mover depending on whether they moved in or out of the housing unit and when that move took place. Time is representing moving across the page along the horizontal line and vertical dashed lines show the significant dates. The two tables should also be used together if someone has both moved in and out of a housing unit to determine a final mover status.



6.8 Expected Results for Best Code

Tables 27 and 28 may be used by the analysts to determine if the form picked matches what is expected. If it doesn't, the analyst can either change their code or provide an explanation in notes as to why the different code is appropriate. These tables may also be used as edits to check for unexpected codes.

For simplification in Table 27, a match code of MR or M is equivalent to a CE, MU is equivalent to an UE, and MN is equivalent to an EE. For simplification in Table 28, a match code of MR is equivalent to an NR, MU is equivalent to NU, and MN is equivalent to NN. For example, if an analyst coded a PFU E-sample case NF and the EFU case LH/MR the expected best code can be found on the row for PFU=NF and EFU=LH/CE.

Table 27 – E-sample Best Code

PFU - Whycode/Match Code	EFU - Whycode/Match Code	Best Code - Form Picked
<u>Cases with no form</u>		
NF	NF	PFU
Any code	NF	PFU
NF	NI/UE, KR/UE, GQ/UE, ORDK/UE	PFU
NF	FE*, KE, DE	EFU
NF	NL/UE, DB/UE, BA/UE, OR/UE - all types of other residences	EFU
NF	LH/CE, OR1/CE - all types of other residences, UH/CE, BO/CE, DC/CE	EFU
NF	MO/EE, MI/EE, OR2/EE - all types of other residences, GQ/EE, DB/EE, BA/EE,	EFU
NF	MI/UE or MO/UE	EFU (with proxy rules)
NF	MP/UE	Proxy rules
NF	Geocoding	See geocoding rules in step 9, Section 6.6
NF	P	EFU
<u>Fictitious Cases</u>		
FE	FE	Both
FE	NI/UE or KR/UE or EFU respondent not reliable	PFU

Table 27 – E-sample Best Code

PFU - Whycode/Match Code	EFU - Whycode/Match Code	Best Code - Form Picked
NI/UE or KR/UE or PFU respondent is not reliable	FE	EFU
FE*	Any other code	EFU
Any other code	FE*	PFU
<u>Insufficient Information for Matching or Duplicates</u>		
KE or DE	KE or DE	Both
KE or DE	UH/CE	Use the duplicate rules in section 6.4
KE or DE	Any other EE code	Both
KE or DE	Any other code	PFU
<u>Usual Home Elsewhere</u>		
UH/CE	Any CE code	Both
UH/CE	Any other code	PFU
Any CE code	UH/CE	Both
Any other code	UH/CE	EFU
<u>Unresolved Enumerations</u>		
NI/UE, KR/UE, ORDK/UE	NI/UE, KR/UE, ORDK/UE, DB/UE, BA/UE, GQ/UE, NL/UE, MI/UE, MO/UE, MP/UE, OR/UE	Both
NI/UE, KR/UE, ORDK/UE	Any CE or EE code	EFU
DB/UE, BA/UE, GQ/UE, NL/UE, MI/UE, MO/UE, MP/UE, OR/UE	NI/UE, KR/UE, ORDK/UE, DB/UE, BA/UE, GQ/UE, NL/UE, MI/UE, MO/UE, MP/UE, OR/UE	Both
DB/UE, BA/UE, NL/UE	Any CE or EE code	PFU
Any CE or EE code	DB/UE, BA/UE, NL/UE	EFU
Any CE or EE code	NI/UE, KR/UE, ORDK/UE	PFU
MI/UE, MO/UE, MP/UE, OR/UE	Any CE or EE code	May be PFU, use proxy rules in Table 25

Table 27 – E-sample Best Code

PFU - Whycode/Match Code	EFU - Whycode/Match Code	Best Code - Form Picked
Any CE or EE code	MI/UE, MO/UE, MP/UE, OR/UE	May be EFU, use proxy rules in Table 25
<u>Correct Enumerations</u>		
LH/CE, OR1/CE	LH/CE, OR1/CE	Both
LH/CE, OR1/CE	MO/EE, MI/EE, OR2/EE, GQ/EE	See proxy rules in Table 24
LH/CE, OR1/CE	Geocoding	See geocoding rules in step 9, Section 6.6
<u>Erroneous Enumerations</u>		
OR2/EE	NL/EE, MO/EE, MI/EE, OR2/EE, GQ/EE	Both
OR2/EE	LH/CE, OR1/CE	See proxy rules in Table 24
OR2/EE	Geocoding	See geocoding rules in step 9, Section 6.6
<u>Geocoding and TES cases</u>		
Geocoding	Geocoding	See geocoding rules in step 9, Section 6.6
Any other code	Geocoding	See geocoding rules in step 9, Section 6.6
Geocoding	Any other code	See geocoding rules in step 9, Section 6.6
<u>Possible Matches</u>		
P	P	Both
P	Any other code	EFU
Any other code	P	PFU
<u>Group Quarters (any Group Quarters code) Unresolved</u>		

Table 27 – E-sample Best Code

PFU - Whycode/Match Code	EFU - Whycode/Match Code	Best Code - Form Picked
GQ/UE	Resolved	EFU
Resolved	GQ/UE	PFU

*There are valid exceptions to how to choose FE cases. However, most (if not all) of these cases have been reviewed by analysts (either in the review or as part of post-MER reviews) and already have best codes chosen.

Table 28 – P-sample Best Code

PFU - Whycode/Match Code	EFU - Whycode/Match Code	Best Code - Form Picked
<u>Cases with no form</u>		
NF	NF	PFU
Any code	NF	PFU
NF	NI/NU, KR/NU, GQ/NU, ORDK/NU	PFU
NF	FP, KP, DP	EFU
NF	NL/NU, DB/NU, BA/NU, OR/NU - all types of other residences	EFU
NF	LH/NR, OR1/NR - all types of other residences, UH/NR, BO/NR, DC/NR	EFU
NF	MO/NN, MI/NN, OR2/NN - all types of other residences, GQ/NN, DB/NN, BA/NN,	EFU
NF	MI/NU or MO/NU	EFU (with proxy rules)
NF	MP/NU	See step 3, Section 6.6.2
NF	Geocoding	See geocoding rules in step 9, Section 6.6
NF	P	See step 3, Section 6.6.2
<u>Fictitious Cases</u>		
FP	FP	Both
FP	NI/NU or KR/NU or EFU respondent not reliable	PFU
NI/NU or KR/NU or PFU respondent is not reliable	FP	EFU
FP	Any other code	EFU
Any other code	FP	PFU

Insufficient Information for Matching or Duplicates

Table 28 – P-sample Best Code

PFU - Whycode/Match Code	EFU - Whycode/Match Code	Best Code - Form Picked
KP or DP	KP or DP	Both
KP or DP	UH/NR	See duplicate rules, Section 6.4
KP or DP	Any other NN code	Both
KP or DP	Any other code	PFU
<u>Usual Home Elsewhere</u>		
UH/NR	Any NR code	Both
UH/NR	Any other code	PFU
Any NR code	UH/NR	Both
Any other code	UH/NR	EFU
<u>Unresolved Enumerations</u>		
NI/NU, KR/NU, ORDK/NU	NI/NU, KR/NU, ORDK/NU, DB/NU, BA/NU, GQ/NU, NL/NU, MI/NU, MO/NU, MP/NU, OR/NU	Both
NI/NU, KR/NU, ORDK/NU	Any NR or NN code	EFU
DB/NU, BA/NU, GQ/NU, NL/NU, MI/NU, MO/NU, MP/NU, OR/NU	NI/NU, KR/NU, ORDK/NU, DB/NU, BA/NU, GQ/NU, NL/NU, MI/NU, MO/NU, MP/NU, OR/NU	Both
DB/NU, BA/NU, GQ/NU, NL/NU	Any NR or NN code	PFU
Any NR or NN code	DB/NU, BA/NU, NL/NU	EFU
Any NR or NN code	NI/NU, KR/NU, ORDK/NU	PFU
MI/NU, MO/NU, MP/NU, OR/NU	Any NR or NN code	May be PFU, use proxy rules, Table 25
Any NR or NN code	MI/NU, MO/NU, MP/NU, OR/NU	May be EFU, use proxy rules, Table 25
<u>Correct Enumerations</u>		
LH/NR, OR1/NR	LH/NR, OR1/NR	Both

Table 28 – P-sample Best Code

PFU - Whycode/Match Code	EFU - Whycode/Match Code	Best Code - Form Picked
LH/NR, OR1/NR	MO/NN, MI/NN, OR2/NN, GQ/NN	See proxy rules, Table 24
LH/NR, OR1/NR	Geocoding	See geocoding rules in step 9, Section 6.6
<u>Erroneous Enumerations</u>		
OR2/NN	NL/NN, MO/NN, MI/NN, OR2/NN, GQ/ NN	Both
OR2/NN	LH/NR, OR1/NR	See proxy rules, Table 24
OR2/NN	Geocoding	See geocoding rules in step 9, Section 6.6
<u>Geocoding and TES cases</u>		
Geocoding	Geocoding	See geocoding rules in step 9, Section 6.6
Any other code	Geocoding	See geocoding rules in step 9, Section 6.6
Geocoding	Any other code	See geocoding rules in step 9, Section 6.6
<u>Possible Matches</u>		
P	P	Both
P	Any other code	EFU
Any other code	P	PFU
<u>Group Quarters (any Group Quarters code) Unresolved</u>		
GQ/UE	Resolved	EFU
Resolved	GQ/UE	PFU

6.9 Clerical Review Validation

During the clerical review, Eli and Tammy will monitor the data. All conflicting cases' notes will be reviewed for validity. Exceptions to the above rules without explanation will be reviewed as time permits. Due to the type of data that are provided (spreadsheets), data will not be provided weekly to avoid version control and reconciliation problems. A draft data file was provided on August 1st. An earlier delivery was provided informally.

7. Post Processing of the Data

At the conclusion of the clerical coding operation, the Measurement Subgroup will process the final data from the clerical review.

7.1 Standardize and Set Operational codes

7.1.1 Standardize Keyed Data variables

Reset PFUK (PFU Keyed code) to NF if there was no EFU and no PFU. This resetting did not always happen as planned.

Standardize EFUKY (EFU Keyed Why code) to ORDK when the original variable was set to JBP3 (job place don't know/refused), JBPb (job place blank), Vcb (vacation home blank), VC3 (vacation home don't know/refused), OT3 (other place don't know/refused), OTb (other place blank), JC3 (joint custody don't know/refused), JCb (joint custody blank).

7.1.2 Reset PFU/EFU Review variables

For cases in the PFU/EFU Review, reset Choose2 to P (PFU) if efu4b is blank, pfu4b is blank, pfu2 is blank, NF, or NT, efu2 is unresolved, and efu why code is 'other residence- unresolved'. Set Best2_Why to ORDK.

Also reset the keyed variables for cases in the PFU/EFU Review that did not go to A.C.E. Revision II clerical review.

Based on the choose2 value, set best2 and best2y as follows:

- if choose2=B then best2=efu2 and best2y=efu2y
- if choose2=P then best2=pfu2 and best2y=pfu2y
- if choose2=E then best2=efu2 and best2y=efu2y
- if choose2=C (conflicting) then best2=N (conflicting) and best2y=N

7.1.3 Create BestC and BestCY for A.C.E. Revision II Clerical Cases

ChooseC is the value entered as the "Best Interview" by the analysts during the Clerical operation. Based on the choosec value, set bestc (best code from Clerical) and bestcy (best why

code from Clerical) as follows:

- if choosec=B then bestc=efuc and bestcy=efucy
- if choosec=P then bestc=pfuc and bestcy=pfucy
- if choosec=E then bestc=efuc and bestcy=efucy
- if choosec=C then bestc=N and bestcy=N

7.2 Create Best_Final and Best_Final_Why

1. If the case did not receive clerical review and was not part of the PFU/EFU Review and has keyed data available, then set the following values using the keyed data:

- PFUF = PFUK
- PFUFY = PFUKY
- EFUF1 = EFUK
- EFUFY = EFUKY
- ChooseF = ChooseK
- BestF = BestK
- BestFY = BestKY
- Source = 1 (Keyed Data)

Exception: If the before followup match code was P (possible match) then

- BestF = pfu1
- BestFY = P
- Source = P

2. If the case did not receive clerical review and was part of the PFU/EFU Review, then set the following values using the PFU/EFU Review data:

- PFUF = PFU2
- PFUFY = PFU2Y
- EFUF = EFU2
- EFUFY = EFU2Y
- ChooseF = Choose2
- BestF = Best2
- BestFY = Best2Y
- Source = 2 (PFU/EFU Review Data)

3. If the case did receive clerical review, then set the following values using the clerical review data:

- PFUF = PFUC
- PFUFY = PFUCY
- EFUF = EFUC
- EFUFY = EFUCY
- ChooseF = ChooseC
- BestF = BestC
- BestFY = BestCY

- Source = 3 (Clerical Review)

If choosec=P and pfuc=blank then

- PFUF = PFU1
- PFUFY = NF
- BestF = PFU1
- BestFY = NF

4. If the case did not receive clerical review and was not part of the PFU/EFU Review and no keyed data is available, then set the following values:

- PFUF = PFU1
- EFUF = EFU1
- ChooseF = Choose1
- BestF = BFU match code
- Source = 4 (Production Data)

Exception: If the BFU match code is DE, KE, FE, DP, KP, or FP then

BestF = BFU match code

BestFY = BFU match code

5. If BestF=NF then reset the values as follows:

PFUF=PFU1

PFUFY = NF

BestF =PFU1

BestFY = NF

If PFUF =NF then reset the values as follows:

PFUF=PFU1

PFUFY = NF

6. If the case is not in the Revision sample, then set BestF=ZZ and BestFY=ZZ.

7.3 Match Status (P-sample only)

Because the focus of the clerical coding and keyed data coding was on residence and enumeration status, few matches were made in the A.C.E. Revision II coding. Essentially, the match code MR was treated equivalent to an NR (except in the case of possible matches).

After the keyed coding was completed, we found that 1.1 million match status changes based on the results of MER would have been ignored if we left the match codes as they were. The following table shows this research.

Table 29 - Match Status Changes in the MER⁴	
	Weighted
No Status Change	257,496,943
Residence Status Change Only	2,409,895
Match Status Change – Not Caught by Keyed Data Review	1,109,029
Match Status Change Only	499,254
Match and Residence Status Change	609,774
Match Status Change – Caught by Keyed Data Review	2,604,139
Match Status Change	13,025
Match and Residence Status Change	2,591,114
Conversions to Inmover	489,114
Total	264,109,121

To reflect the match status change, results of earlier matching operations (MES and MER) are incorporated into the final code. The match code was incorporated by looking at the match status in each operation: matched to an E-sample person or to a non E-sample person within the cluster (indicated by M in the following table), matched to a person in the surrounding block (SB), or not matched (NM). The match status was selected as outlined in the following table.

Table 30 - Selection of Match Status			
Production	MES	MER	Selected
NM	NM	NM	NM
NM	NM	M	M
NM	NM	SB	SB
NM	M	NM	M
NM	M	M	M (links from MER)
NM	SB	NM	SB
NM	SB	SB	SB (links from MER)
M	NM	NM	NM

⁴This table does not include allowance for duplicate rearrangement – therefore, the match status change total would be smaller.

Table 30 Con't - Selection of Match Status

M	NM	M	NM
M	M	NM	NM
M	M	M	M (links from MER)
M	M	SB	SB
SB	NM	SB	NM
SB	SB	NM	NM
SB	SB	SB	SB (links from MER)

Some people were excluded from the match status update:

If the final code was a GP, DP, KP, FP, or conflicting

If the person was determined to be an inmover.

If the person was a duplicate in production, MER, or MES

For everyone else, the selected match status was appended to the residence status.

7.4 Creating Final Mover Status and Corresponding Match Codes (P-sample only)

7.4.1 Assigning a Final Mover Status

Both the A.C.E. and the A.C.E. Revision II(ReA.C.E.) estimators require that each P-sample case have one of the following mover statuses: nonmover, outmover, or inmover. A mover, whether outmover or inmover, is a person who has one residence and leaves one housing unit for another. In contrast, a person who alternates living between two residences is a nonmover who cycles between two housing units. A person who cycles is a nonmover but may or may not be a resident of the housing unit in question on Census Day.

The mover status for the original A.C.E. was assigned during the personal interview (PI) and no changes were allowed during the matching operations before or after followup. During the MER coding, changes in mover status were allowed and may have been based on data collected during the PI, production followup (PFU), or the Evaluation Followup (EFU). However, the structure of the EFU questionnaire appears to cause respondents to have a tendency not to report moving. The revised coding for ReA.C.E. permits changing any of the mover status codes, but does not focus on coding mover status.

Usually the PI and the MER mover status agree. The cases where they disagree is of concern, particularly when the change is from mover to nonmover. The tendency of the EFU questionnaire to cause movers to report themselves as nonmovers has to be balanced against the fact that errors in mover status in the PI could not be corrected during the original A.C.E. even when recognized.

After the clerical coding was completed there were three mover statuses for each P-sample person: a production mover status, a MER mover status, and A.C.E. Revision II mover status. The A.C.E. Revision II mover status comes from either the keyed data or the clerical review of the EFU form and updates the MER mover status code. The attached table proposes how to choose between the PI mover status and the A.C.E. Revision II mover status. The SETMOVER variable captures the decision criterion (C=CAPI, E=EFU, P=PFU, D=Duplicate, S=Link outside Search Area, and X =None of the Above) and the final mover status column indicates the code picked.

Table 31. Criteria for Selecting Mover Status

PI	MER	Type of Case	Decision Criterion	Weighted # (*)	Setmover	Final
Nonmover	Nonmover	All	None. They agree	254,278,223		Nonmover
Outmover	Outmover	All	None. They agree	6,487,392		Outmover
Inmover	Inmover	All	None. They agree	4,663,370		Inmover
Nonmover	Inmover	All	Inmover. No known problems with EFU reporting of moving	1,528,595		Inmover
Nonmover	Outmover	All	Outmover. No known problems with EFU reporting of moving	915,518		Outmover
Outmover	Inmover	All	Inmover. No known problems with EFU reporting of moving	78,374		Inmover
Outmover	Nonmover	<u>In order of priority:</u>				
		Other residence in PI or MER	Nonmover. Indicates cycling between residences rather than moving	172,228	C for PI, E for EFU	Nonmover
		One response a proxy	Mover status from non-proxy. Household member is better informed	872,236	P	Status from non-proxy interview
		None of the above	MER status of Nonmover	894,404	X	Nonmover
Inmover	Outmover	All	MER status of Outmover. No known problems with EFU reporting of moving	148,762		Outmover
Inmover	Nonmover	<u>In order of priority:</u>				
		Duplicate of Nonmover	MER status of Nonmover duplicate	258,510	D	Nonmover
		Other residence in PI or MER	Nonmover. Indicates cycling between residences rather than moving. Includes Group Quarters as other residences, which may result in nonmover nonresidents	481,670	C for PI, E for EFU	Nonmover
		One response a proxy	Mover status from non-proxy. Household member is better informed	323,768	P	Status from non-proxy interview
		With link outside search area	PI status of Inmover. Assume in this case that enumeration outside the search area indicates not in sample block on Census Day	163,542	S	Inmover
		None of the above	MER status of Nonmover	1,352,314	X	Nonmover

(*) The numbers will change when A.C.E. Revision II coding replaces MER coding.

7.4.2 Match Codes for people who changed Mover Status

Procedures for assigning match codes for people who changed mover status (i.e. in-mover to non-mover/out-mover or non-mover/out-mover to in-mover) changed throughout the operation.

At the start of the operation, a match code was assigned to the person based on the result of the mover status. So, if a production non-mover became an in-mover based on the EFU form, that person received an in-mover match code.

- If the person is an in-mover and the analysts could not determine the residence status on A.C.E. Interview Day, then the person was coded an IU.
- Otherwise, the analyst assigned the appropriate in-mover code for the person's A.C.E. Interview Day residence status (residence on A.C.E. Interview Day = IR, nonresident on A.C.E. Interview Day=IN, duplicate of an in-mover=ID)

For missing data purposes, these procedures were changed about one month into the clerical operation.

- If a person changed from a non-mover to an in-mover based on the EFU form, the analysts assigned a mover status of I and a non-mover/out-mover match code. For example, if a production non-mover changed to an in-mover, instead of assigning an IU match code, an NL match code would be assigned instead (if they have a census day address outside the cluster), and NR code (if they have a census day (CD) address inside the cluster), or an NU match code (if they don't have a CD address).
- The same thing applied for in-mover to non-mover conversions. The analysts assigned an N in the mover status category, but used the in-mover match codes to code the residence status.

In August, 2002 additional discussions took place and final match code types were determined. These codes were changed via the computer as much as possible.

- Non-movers and Out-movers to In-movers: Use production type codes (NL, NU, etc.)
- In-mover to In-movers or Unresolved: Use in-mover type codes (IU, IR etc.)
- In-movers to Non-movers or Out-movers: Use production type code (M, NR, etc.)
- Non-movers and Out-movers to Non-mover, Out-mover, or Unresolved: Use production type codes (M, NR, etc.)
- Unresolved to any code: Use production type codes (M, NR, etc.)

7.5 Conflicting Cases Clerical Review

To aid the missing data procedures, a method for resolving conflicting cases was developed. The analysts drew on their many years of experience and assigned codes to as many of the conflicting cases as possible.

The conflicting cases fall into three basic categories, and the treatment for estimation may need to be different in each category:

1. Disagreement about geocoding. One interviewer says the housing unit is in the sample block, and the other interviewer reports the housing unit is not in the sample block.
2. Disagreement about which of the person's two residences should be considered the Census Day residence. The responses usually vary as to where the person spends most of their time.
3. Disagreement about whether the person was at the address on Census Day. The responses usually differ about when the person moved in or moved out.

After 77.5 percent of the cases were completed, there were 543 conflicting cases broken down into the following categories (both P-sample and E-sample combined):

- 295 Geocoding Issues
- 85 Other Residence Issues ("I spent more time at the sample address" vs. "I spent more time at my second home")
- 93 Mover Issues ("I moved before April 1" vs "I moved after April 1")
- 70 Others

Of the 295 geocoding cases, 124 were from one cluster with PFU indicating a geocoding error and EFU not. It is a TES-eligible, but not selected for TES cluster. All of those cases get zeroed out in the weighting. Interestingly, the analyst who worked the case left a note saying that they looked on Internet maps and all seemed to agree with PFU that these cases were outside the cluster.

For the remaining geocoding conflicting cases, and any additional that occurred in the remaining workload, the analysts determined (if possible) whether the housing unit was in or out of the cluster. The analysts could use anything available--Final Housing Unit, initial Housing Unit, listing, TES (any of the TES operations), PFU, EFU, notes on any of the forms, MAF browser, etc. The internet could be used as a tool, but not as THE source to make a decision. If it could not be determined whether or not the case was in or out of the cluster, the analyst provided a gut-level probability.

For the remaining conflicting cases, and any additional cases that occurred in the remaining workload, the analysts re-reviewed the case. A couple of analysts discussed the cases and came to a consensus on what the best code for the case was. Analysts could use, the internet, final housing unit results or anything else that was helpful. If the analysts couldn't agree on a code, they assigned a gut-level probability.

See "Results of the A.C.E. Revision II Measurement Coding" for the results of the conflicting review.

7.6 Assigning Weights

We assigned sampling weights to each person to be used in the A.C.E. Revision II Estimates. Rather than creating a final weight for the person to be used later, we provided sampling weights for various sampling operations:

- Evaluation Cluster Weight – This weight reflects all stages of A.C.E. sampling

(excluding TES) and the cluster subsample for evaluations (see Mule 2001b for production sampling and Keathley, 2001 for information on the evaluation cluster sampling)

- MER Weight – This weight reflects the P-sample subsampling for matches (selected at a rate of 1-in-7) and for whole household nonmatches (selected at a rate of 1-in-5) (see Krejsa, 2000 for information MER sampling).
- We assign these weights using the variables REWGT and RPWGT from the E-sample MDVF and P-sample MDVF respectively. (See Raglin 2000 for assigning these variables.)

7.7 Determining Revised ACE Sample Status

A flag (REACE) will be created for the P-sample and E-sample to reflect whether a person is included in the A.C.E. Revision II sample.

7.7.1 P-sample REACE flag

An entire household is considered in A.C.E. Revision II or not based on whether at least one person in the household was selected for followup in EFU with certainty, sub-sampled for EFU, or not selected for EFU.

- REACE flag is set to 1 if the person was sent for evaluation followup (as a certainty case or selected as part of the sub-sample)
- REACE flag is set to 2 if the person was not sent for evaluation followup
- REACE flag is set to 3 and is not included in A.C.E. Revision II if no one in the household was sent for followup (i.e. not selected as part of the sub-sample)

7.7.2 E-sample REACE flag

E-sample people are included in A.C.E. Revision II or not based on their EFU status.

- If the person was sent for followup the REACE flag=1
- If the person was not eligible for followup then REACE flag=2
- If the person was eligible for followup but not selected (i.e. not selected as part of the sub-sample) then REACE=3 and is not included in A.C.E. Revision II

7.7.3 Differences between the P-sample REACE Flag and E-sample REACE flag

- Duplicates and Insufficient Information for Matching and Followup – Due to the way that these people were flagged for EFU, in the P-sample these people can be either a 1 or a 2. However, in the E-sample, these people are always a 2.
- Inmovers– Inmovers are always in the A.C.E. Revision II sample. If the inmover was sent to EFU, then REACE=1. Otherwise, REACE=2.

8. Measurement Output File Layouts

At the conclusion of the clerical coding operation, the Measurement Subgroup prepared a final output file for use by the rest of the A.C.E. Revision II Teams.

Each variable listed in the below layout will be filled. In the layout are references to which source file or section number from this document where information about the variable can be found.

Table 32 – E-Sample Output File Layout		
Variable	Description	Source (or Documentation Section within this Document)
Identification Information		
Cluster	Information to uniquely identify a person record	E-sample Master Data Variance File (EMDVF)
CID		
SEQ		
Per		
PFUSEQ	Sequence Number assigned to the PFU form – unique to a form within a cluster	Production Matching Output
EFUSEQ	Sequence Number assigned to the EFU form – unique to a form within a cluster	Evaluation Cross-Reference File
Interview Information		
PFUProxy	Proxy Flag for PFU Interview 0=Not Proxy (defined as anyone listed on the form, P-sample or E-sample completed the interview) 1=Proxy	PFU Keyed Data
EFUProxy	Proxy Flag for EFU Interview 0=Not Proxy (defined as anyone listed on the form, P-sample or E-sample completed the interview) 1=Proxy	EFU Keyed data; if no keyed data for the person, then was taken from the EMDVF
Original Codes		
CAGE	Unimputed age from Census	Census File
BBFUMAT	Production BFU Match Code	EMDVF
PFU1	Code used in production DSE	EMDVF
BFUFLAG	Followup flag from production	EMDVF

Table 32 – E-Sample Output File Layout

Variable	Description	Source (or Documentation Section within this Document)
EFU1	Code generated from MER (or, if not in MER, then code generated from production)	EMDVF
EFUFU	Followup flag from MER	EMDVF
EFUREJ	Reject flag from MER Y=Case rejected blank, N=Case accepted	EMDVF
PFU/EFU Review Codes – If applicable (will be assigned to E-sample people in the PFU/EFU Review; will be assigned to linked P-sample people in the Review)		
PFU2	PFU Code Assigned during PFU/EFU Review	PFU/EFU Review Data
PFU2Y	PFU Why Code Assigned during PFU/EFU Review	PFU/EFU Review Data
EFU2	EFU Code Assigned during PFU/EFU Review	PFU/EFU Review Data
EFU2Y	EFU Why Code Assigned during PFU/EFU Review	PFU/EFU Review Data
Choose2	Form chosen as best during the PFU/EFU Review	PFU/EFU Review Data
Best2	Code from the Best form during the PFU/EFU Review	PFU/EFU Review Data
Best2y	Why Code from the Best form during the PFU/EFU Review	Section 7.1.2
Keyed_Data_Codes		
PFUk	PFU Code Assigned using keyed data	Section 2.2
PFUky	PFU Why Code Assigned using keyed data	Section 2.2
NoPFU	No PFU keyed data available 0=No Keyed Data Available and should be 1=Keyed Data Available or no FU	documentation not available (created when keyed data was merged onto file)
EFUk	EFU Code Assigned using keyed data	Section 2.2
EFUky	EFU Why Code Assigned using keyed data	Section 2.2

Table 32 – E-Sample Output File Layout

Variable	Description	Source (or Documentation Section within this Document)
NoEFU	No EFU keyed data available 0=No Keyed Data Available and should be 1=Keyed Data Available or no FU	documentation not available (created when keyed data was merged onto file)
Choosek	Form chosen as best using keyed data	Section 5.6
BestK	Code from the Best form using keyed data	Section 5.6
Bestky	Why Code from the Best form using keyed data	Section 5.6
Targeting Flags		
PFUdis	PFU1 code agrees with keyed code within why code group 0=agree 1=disagree	Section 5.1
EFUdis	EFU1 code agrees with keyed code within why code group 0=agree 1=disagree	Section 5.1
PFUacc	PFU keyed code not acceptable due to inability of keyed data to predict code 0=acceptable 1=not acceptable	Section 2.4
EFUacc	EFU keyed code not acceptable due to inability of keyed data to predict code 0=acceptable 1=not acceptable	Section 2.5
PreRev	Analysts have already reviewed case and determined to need clerical ⁵ 0=not reviewed or not eligible 1=reviewed and eligible	Documentation not available. Variable created when cases were identified for special review.
Review	Case was in the PFU/EFU Review 0=Not in PFU/EFU Review 1=In PFU/EFU Review	Documentation not available. Variable created when PFU/EFU Review data was merged onto file.

⁵ A subset of cases without keyed data were sent to the analysts for early review and determined not to have data on the form so we have confirmed the case's unresolved code.

Table 32 – E-Sample Output File Layout

Variable	Description	Source (or Documentation Section within this Document)
ClerIncl	No clerical needed due to UHE or KE 0=clerical needed 1=no clerical needed	Documentation not available. Cases flagged when match code=KE or is defined as a UHE case based on the Census Form.
ClerCase	Case flagged for Clerical Review 0=No clerical review needed 1=Clerical Review needed	Section 5.1
Clerical Codes		
PFUc	PFU Code Assigned during clerical review	Clerical Review Output Data
PFUcy	PFU Why Code Assigned during clerical review	Clerical Review Output Data
EFUc	EFU Code Assigned during clerical review	Clerical Review Output Data
EFUcy	EFU Why Code Assigned during clerical review	Clerical Review Output Data
Choosec	Form chosen as best during the clerical review	Clerical Review Output Data
Bestc	Code from the Best form during the clerical review	Clerical Review Output Data
Bestcy	Why Code from the Best form during the clerical review	Clerical Review Output Data
Final Codes for A.C.E. Revision II Estimates		
PFUF	PFU Code Assigned for A.C.E. Revision II Estimates	Section 7.2
PFUFY	PFU Why Code Assigned for A.C.E. Revision II Estimates	Section 7.2
EFUF	EFU Code Assigned for A.C.E. Revision II Estimates	Section 7.2
EFUFY	EFU Why Code Assigned for A.C.E. Revision II Estimates	Section 7.2
ChooseF	Form chosen as best for A.C.E. Revision II Estimates B=Both P=Production E=EFU N=Conflicting	Section 7.2

Table 32 – E-Sample Output File Layout

Variable	Description	Source (or Documentation Section within this Document)
BestF	Code from the Best form for A.C.E. Revision II Estimates Valid Values=All production match codes and a code (“N”) to indicate conflicting cases	Section 7.2
BestFY	Why Code from the Best form for A.C.E. Revision II Estimates	Section 7.2
Source	Source of Information for A.C.E. Revision II Estimates 1=Keyed Code 2=PFU/EFU Review 3=Clerical Review 4=Production	Section 7.2
Weights		
MERSAMP	Indicator for MER Sampling blank=Not in MER or Selected with Certainty M=Selected in 1-in-7 sample of matches for EFU N=Selected in 1-in-5 sample of nonmatches for EFU	EMDVF
REWGT	EFU E-sample weight without TES weighting	EMDVF
REACE	Indicator for A.C.E. Revision II Sample 1 - In EFU, In A.C.E. Revision II 2 - Not in EFU, In A.C.E. Revision II 3 - Not in EFU, Not in A.C.E. Revision II	Section 7.7
FHIMSN	HIMSN for the Bestf Code	EMDVF
FHIWMSN	HIWMSN for the Bestf Code	EMDVF
FHIPER	HIPER for the Bestf Code	EMDVF
Keyed Data from PFU and EFU will also be on the file		PFU and EFU Keyed Data Files

Table 33 – P-Sample Output File Layout

Variable	Description	Source (or Documentation Section within this Document)
Identification Information		
Cluster	Information to uniquely identify a person record	P-sample Master Data Variance File (PMDVF)
MSN		
WMSN		
Per		
PFUSEQ	Sequence Number assigned to the PFU form – unique to a form within a cluster	Production Matching Output
EFUSEQ	Sequence Number assigned to the EFU form – unique to a form within a cluster	Evaluation Cross-Reference File
Interview Information		
PIProxy	Proxy Flag for PI Interview 0=Not Proxy 1=Proxy	CAPI data file
PFUProxy	Proxy Flag for PFU Interview 0=Not Proxy (defined as anyone listed on the form, P-sample or E-sample completed the interview) 1=Proxy	PFU Keyed Data
EFUProxy	Proxy Flag for EFU Interview 0=Not Proxy (defined as anyone listed on the form, P-sample or E-sample completed the interview) 1=Proxy	EFU Keyed data; if no keyed data for the person, then PMDVF
Original Codes		
BBFUMAT	Production BFU Code	PMDVF
AGE	Unimputed Age	PMDVF
PFU1	Code used in production DSE	PMDVF
BFUFlag	Followup flag from production	PMDVF
BACESTAT	Production A.C.E. Status from the PI I - Inmover N - Nonmover O - Outmover R - Removed U - Unresolved	PMDVF

Table 33 – P-Sample Output File Layout

Variable	Description	Source (or Documentation Section within this Document)
EFU1	Code generated from MER (or, if not in MER, then code generated from production)	PMDVF
EFUFU	Followup flag from MER	PMDVF
EFURej	Reject flag from MER Y=Case accepted N=Case rejected	PMDVF
RACESTAT	MER A.C.E. Status - from the EFU or PI I - Inmover N - Nonmover O - Outmover R - Removed U - Unresolved	PMDVF
PFU/EFU Review Codes – If applicable (will be assigned to E-sample people in the PFU/EFU Review; will be assigned to linked P-sample people in the Review)		
PFU2	PFU Code Assigned during PFU/EFU Review	PFU/EFU Review Data
PFU2Y	PFU Why Code Assigned during PFU/EFU Review	PFU/EFU Review Data
EFU2	EFU Code Assigned during PFU/EFU Review	PFU/EFU Review Data
EFU2Y	EFU Why Code Assigned during PFU/EFU Review	PFU/EFU Review Data
Choose2	Form chosen as best during the PFU/EFU Review	PFU/EFU Review Data
Best2	Code from the Best form during the PFU/EFU Review	PFU/EFU Review Data
Best2Y	Why Code from the Best form during the PFU/EFU Review	Section 7.1.2
Keyed_Data_Codes		
PFUk	PFU Code Assigned using keyed data	Section 2.2
PFUky	PFU Why Code Assigned using keyed data	Section 2.2
NopFU	No PFU keyed data available 0=No Keyed Data Available and should be 1=Keyed Data Available or no FU	Documentation not available. Variable created when keyed data merged onto file.

Table 33 – P-Sample Output File Layout

Variable	Description	Source (or Documentation Section within this Document)
EFUk	EFU Code Assigned using keyed data	Section 2.2
EFUky	EFU Why Code Assigned using keyed data	Section 2.2
NoEFU	No EFU keyed data available 0=No Keyed Data Available and should be 1=Keyed Data Available or no FU	Documentation not available. Variable created when keyed data merged onto file.
Choosek	Form chosen as best using keyed data	Section 5.6
BestK	Code from the Best form using keyed data	Section 5.6
BestKY	Why Code from the Best form using keyed data	Section 5.6
KACESTAT	Keyed A.C.E. Status - - EFU Form I - Inmover N - Nonmover O - Outmover NA - Not Applicable DK - Don't Know BD - Bad Date XP - Not coded WE - Weird NI - Noninterview	Section 3
Targeting Flags		
PFUdis	PFU1 code agrees with keyed code within why code group 0=agree 1=disagree	Section 5.2
EFUdis	EFU1 code agrees with keyed code within why code group 0=agree 1=disagree	Section 5.2 and 5.3
PFUacc	PFU keyed code not acceptable due to inability of keyed data to predict code 0=acceptable 1=not acceptable	Section 2
EFUacc	EFU keyed code not acceptable due to inability of keyed data to predict code 0=acceptable 1=not acceptable	Section 2

Table 33 – P-Sample Output File Layout

Variable	Description	Source (or Documentation Section within this Document)
PreRev	Analysts have already reviewed case and determined to need clerical ⁶ 0=not reviewed or not eligible 1=reviewed and eligible	Documentation not available
Review	Case was in the PFU/EFU Review 0=Not in PFU/EFU Review 1=In PFU/EFU Review	Documentation not available. Variable created when PFU/EFU Review data file was merged
ClerInel	No clerical needed due to UHE or KE 0=clerical needed 1=no clerical needed	Documentation not available. Variable created if match code=KE or census form allowed for a UHE.
ClerCase	Case flagged for Clerical Review 0=No clerical review needed 1=Clerical Review needed	Section 5.2 and 5.3
Clerical Codes		
PFUCI	PFU Code Assigned during clerical review	Clerical Review Output Data
PFUcy	PFU Why Code Assigned during clerical review	Clerical Review Output Data
EFUc	EFU Code Assigned during clerical review	Clerical Review Output Data
EFUcy	EFU Why Code Assigned during clerical review	Clerical Review Output Data
CACESTAT	Clerical A.C.E. Status – EFU Form I - Inmover N - Nonmover O - Outmover NA - Not Applicable DK - Don't Know BD - Bad Date XP - Not Coded WE - Weird NI - Noninterview	Section 6
Choosec	Form chosen as best during the clerical review	Clerical Review Output Data
Bestc	Code from the Best form during the clerical review	Clerical Review Output Data

⁶ A subset of cases without keyed data were sent to the analysts for early review and determined not to have data on the form so we have confirmed the case's unresolved code.

Table 33 – P-Sample Output File Layout

Variable	Description	Source (or Documentation Section within this Document)
Bestcy	Why Code from the Best form during the clerical review	Clerical Review Output Data
Final Codes for A.C.E. Revision II Estimates		
PFUF	PFU Code Assigned for A.C.E. Revision II Estimates	Section 7.2
PFUFY	PFU Why Code Assigned for A.C.E. Revision II Estimates	Section 7.2
EFUF	EFU Code Assigned for A.C.E. Revision II Estimates	Section 7.2
EFUFY	EFU Why Code Assigned for A.C.E. Revision II Estimates	Section 7.2
PLINK	Is there a link outside the search area from Summer 2001 P-sample links? 0 - No 1 - Yes	Section 7.4
SETMOVER	Flag to indicate why mover status set D - Duplicate C - Other Res/GQ in PI E - Other Res/GQ in EFU P - One proxy, one not S- Link outside search area from Summer 2001 work X - None of the above	Section 7.4
FACESTAT	Final A.C.E. Mover Status I - Inmover N - Nonmover O - Outmover	Section 7.4
ChooseF	Form chosen as best for A.C.E. Revision II Estimates B=Both P=Production E=EFU N=Conflicting	Section 7.2
BestF	Code from the Best form for A.C.E. Revision II Estimates Valid Values=All production match codes and a code (“N”) to indicate conflicting cases	Section 7.2
BestF2	BestF code with match status updated	Section 7.3

Table 33 – P-Sample Output File Layout

Variable	Description	Source (or Documentation Section within this Document)
BestFY	Why Code from the Best form for A.C.E. Revision II Estimates	Section 7.2
Source	Source of Information for A.C.E. Revision II Estimates 1=Keyed Code 2=PFU/EFU Review 3=Clerical Review	Section 7.2
Weights		
Weight		PMDVF
MERSAMP	Indicator for MER Sampling blank=Not in MER or Selected with Certainty M=Selected in 1-in-7 sample of matches for EFU N=Selected in 1-in-5 sample of nonmatches for EFU	PMDVF
MATSOUR	Source of the Match Status R - MER S - MES P - Production	Section 7.3
REACE	Indicator for A.C.E. Revision II Sample 1 - In EFU, In A.C.E. Revision II 2 - Not in EFU, In A.C.E. Revision II 3 - Not in EFU, Not in A.C.E. Revision II	Section 7.7
FHICID	HICID for the bestf2 code	PMDVF
FHISEQ	HISEQ for the bestf2 code	PMDVF
FHIPER	HIPER for the bestf2 code	PMDVF
Keyed Data from PFU and EFU are also on the file		Keyed Data files

9. References

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PFU and EFU Questionnaires

PFU Questions

- Question 1: Do you know or have you heard of (followup person)?
- Question 2: Do you know someone else who might know (followup person)? (Note 3 other sources that may be contacted).
- Question 4a: Did (you/followup person) live at (followup address) on Saturday April 1, 2000?
- Question 4b: (If Question 4a is NO) At what address did (you/followup person) live on Saturday, April 1, 2000?
- Question 5: The Census bureau does a special count at all places where groups of people stay. Examples include college dorms, nursing homes, prisons, and emergency shelters. On Saturday April 1, 2000, (were you/was followup person) staying elsewhere at any of these types of places?
- Question 6: Some people have more than one place to live. Examples include a second residence for work, a friend's or relative's home or vacation home. On Saturday, April 1, 2000, did (you/followup person) have a residence other than at (followup address)?
If yes - What is that address?
- Question 7: As of Saturday, April 1, 2000 did (you/followup person) spend most of the time at (followup address) or at the other residence?
- Question 8: Which of the following categories most accurately describes the amount of time (you/followup person) stay(s) at the other residence?
- Question 9: During a typical week, did (you/followup person) spend more days at (followup address) or at the other residence?
- Question 10: During a typical month, did (you/followup person) spend more weeks at (followup address) or at the other residence?
- Question 11: During a typical year, did (you/followup person) spend more months at (followup address) or at the other residence?
- Question 12: (Were you/Was followup person) staying at (followup address) or the other residence on Saturday, April 1, 2000?

PFU Geocoding Question

Answer by observation: Record whether this address is in this block cluster.

EFU Questions

Nonmover/Outmover Questions

- Question 1: I'd like to ask you some questions about (your/followup person's) current residence. Is (followup address) (your/followup person's) usual residence now - that is, where (you/he/she) live(s) and sleep(s) most of the time?
- Question 2a: I'd like you to use this calendar to help you answer the next few questions. We're going to be talking about the time since the beginning of the year 2000. When did (you/followup person) move out of (followup address)?
- Question 2b: Did (you/followup person) move out before or after (day the A.C.E. Persons Interview was conducted)? It is highlighted on the calendar.
- Question 2c: Did (you/followup person) move out before or after Saturday, April 1, 2000?
- Question 3a: I'd like you to use this calendar to help you answer the next few questions. We're going to be talking about the time since the beginning of the year 2000. Now I'm going to ask you about when (you/followup person) moved IN to (followup address). Did (you/followup person) move in to (followup address) since the beginning of the year 2000?
- Question 3b: When did (you/followup person) move in?
- Question 3c: Did (you/followup person) move in before or after (the day the A.C.E. Person Interview was conducted)? It is highlighted on the calendar.
- Question 3d: Did (you/followup person) move in before or after Saturday, April 1, 2000?
- Question 4a: (Were you/Was followup person) attending college in the spring of 2000?
- Question 4b: On Saturday, April 1, 2000 (were you/was followup person) staying in a dorm, staying at (followup address), or staying at another address but not a dorm?
- Question 4c: At the address (you were/followup person was) staying on Saturday, April 1, 2000, did (you/followup person) stay with (your/his/her) parent or guardian?
- Question 5: Now I have a few questions about (your/followup persons) living situation on Saturday, April 1, 2000. I'd like to ask you to take a look at the card, which lists several types of places where groups of people live.
On the night of Saturday, April 1, 2000, (were you/ was followup person) staying in:
A group care facility?

A correction facility?
A long-term medical care facility?
Military barracks or ship?
Some other place where groups of people stay?

Question 6a: We were just talking about Saturday, April 1, 2000. Now I'd like you think about (your/followup person's) situation in March and April of 2000. Please refer to the calendar to help you remember.

During March or April, did (you/followup person) have a job or business that involved living away from home while (you were/followup person was) working?

Question 6b: Did (you/followup person) have a place where (you/he/she) stayed regularly while working away from home?

Question 7: During March or April, (were you/was followup person) involved in a joint custody arrangement or did (you/he/she) live part time at another residence?

Question 8: During March or April, did (you/followup person) have a vacation home?

Question 9: Apart from (this place/any of these places) did (you/followup person) stay for an extended time, during March or April, with friends or relatives or live part-time at another residence?

Question 12a: How much time did (you/followup person) spend at (PLACE) during March and April:

A few nights each week
Entire weeks or each month
A month or more
Some other period of time?

Question 12b: During a typical week in March and April, did (you/followup person) spend more night at (followup address) or at (PLACE)?
If other place - What is the address of that place?

Question 12c: During March and April, did (you/followup person) spend more time at (followup address) or at (PLACE)?
If other place - What is the address of that place?

Question 12d: During the year 2000, did (you/followup person) spend more time at (followup address) or at (PLACE)?
If other place - What is the address of that place?

Question 13: Which place (were you/was followup person) staying on the night of Saturday,

April 1, 2000 - At (followup address) or the other place?
If other place - What is the address of that place?

Inmover Questions

Question 1: I'd like to ask you some questions about (your/followup person's) current residence. Is (followup address) (your/followup person's) usual residence now - that is, where (you/he/she) live(s) and sleep(s) most of the time?

Question 2a: I'd like you to use this calendar to help you answer the next few questions. We're going to be talking about the time since the beginning of the year 2000. When did (you/followup person) move out of (followup address)?

Question 2b: Did (you/followup person) move out before or after (day the A.C.E. Person Interview was conducted)? It is highlighted on the calendar.

Question 2c: Did (you/followup person) move out before or after Saturday, April 1, 2000?

Question 3a: I'd like you to use this calendar to help you answer the next few questions. We're going to be talking about the time since the beginning of the year 2000. Now I'm going to ask you about when (you/followup person) moved IN to (followup address). Did (you/followup person) move in to (followup address) since the beginning of the year 2000?

Question 3b: When did (you/followup person) move in?

Question 3c: Did (you/followup person) move in before or after (the day the A.C.E. Person Interview was conducted)? It is highlighted on the calendar.

Question 3d: Did (you/followup person) move in before or after Saturday, April 1, 2000?

Question 4a: (Were you/Was followup person) attending college in the summer of 2000?

Question 4b: On (day the A.C.E. Person Interview was conducted) (were you/was followup person) staying in a dorm, staying at (followup address), or staying at another address but not a dorm?

Question 4c: At the address (you were/followup person was) staying on (day the A.C.E. Person Interview was conducted) did (you/followup person) stay with (your/his/her) parent or guardian?

Question 5: Now I have a few questions about (your/followup persons) living situation on (day

the A.C.E. Person Interview was conducted). I'd like to ask you to take a look at the card, which lists several types of places where groups of people live.

On the night of (date of the A.C.E. Person Interview), (were you/ was followup person) staying in:

A group care facility?

A correction facility?

A long-term medical care facility?

Military barracks or ship?

Some other place where groups of people stay?

Question 6a: We were just talking about (day A.C.E. Person Interview was conducted). Now I'd like you think about (your/followup person's) situation in (month of and one month before A.C.E. Person Interview) of 2000. Please refer to the calendar to help you remember.

During (same months mentioned above), did (you/followup person) have a job or business that involved living away from home while (you were/followup person was) working?

Question 6b: Did (you/followup person) have a place where (you/he/she) stayed regularly while working away from home?

Question 7: During (same months mentioned above), (were you/was followup person) involved in a joint custody arrangement or did (you/he/she) live part time at another residence?

Question 8: During (same months mentioned above), did (you/followup person) have a vacation home?

Question 9: Apart from (this place/any of these places) did (you/followup person) stay for an extended time, during (same months mentioned above), with friends or relatives or live part-time at another residence?

Question 12a: How much time did (you/followup person) spend at (PLACE) during (same months mentioned above):

A few nights each week

Entire weeks or each month

A month or more

Some other period of time?

Question 12b: During a typical week in (same months mentioned above), did (you/followup person) spend more night at (followup address) or at (PLACE)?

If other place - What is the address of that place?

- Question 12c: During (same months mentioned above), did (you/followup person) spend more time at (followup address) or at (PLACE)?
If other place - What is the address of that place?
- Question 12d: During the year 2000, did (you/followup person) spend more time at (followup address) or at (PLACE)?
If other place - What is the address of that place?
- Question 13: Which place (were you/was followup person) staying on the night of (A.C.E. Person Interview) - At (followup address) or the other place?
If other place - What is the address of that place?
- Question 14: And which place was (your/followup person's) usual residence, where (you/he/she) lived and slept most of the time? - (followup address) or the other place?
- Question 15a: Now I'd like you to think about where (you were/followup person was) staying last spring. (Were you/Was followup person) attending college in the spring of 2000?
- Question 15b: On Saturday, April 1, 2000 (were you/was followup person) staying in a dorm, staying at (followup address), or staying at another address but not a dorm?
- Question 15c: At the address (you were/followup person was) staying on Saturday, April 1, 2000, did (you/followup person) stay with (your/his/her) parents or guardian?
- Question 16: On the night of Saturday, April 1, 2000 (were you/was followup person) staying in...
A group care facility?
A correction facility?
A long-term medical care facility?
Military barracks or ship?
Some other place where groups of people stay?
- Question 17: What was (your/followup person's) address on Saturday, April 1, 2000?
- Question 18: What are the names of the cross streets, roads, highways, or other landmarks closest to that address?
- Question 19: What are the names of two neighbors living near that address?
- Question 20: Was there anyone (you/followup person) lived with on Saturday, April 1, 2000, who does NOT live with (you/followup person) now?

Question 21: What are their names and ages?

EFU Geocoding Question

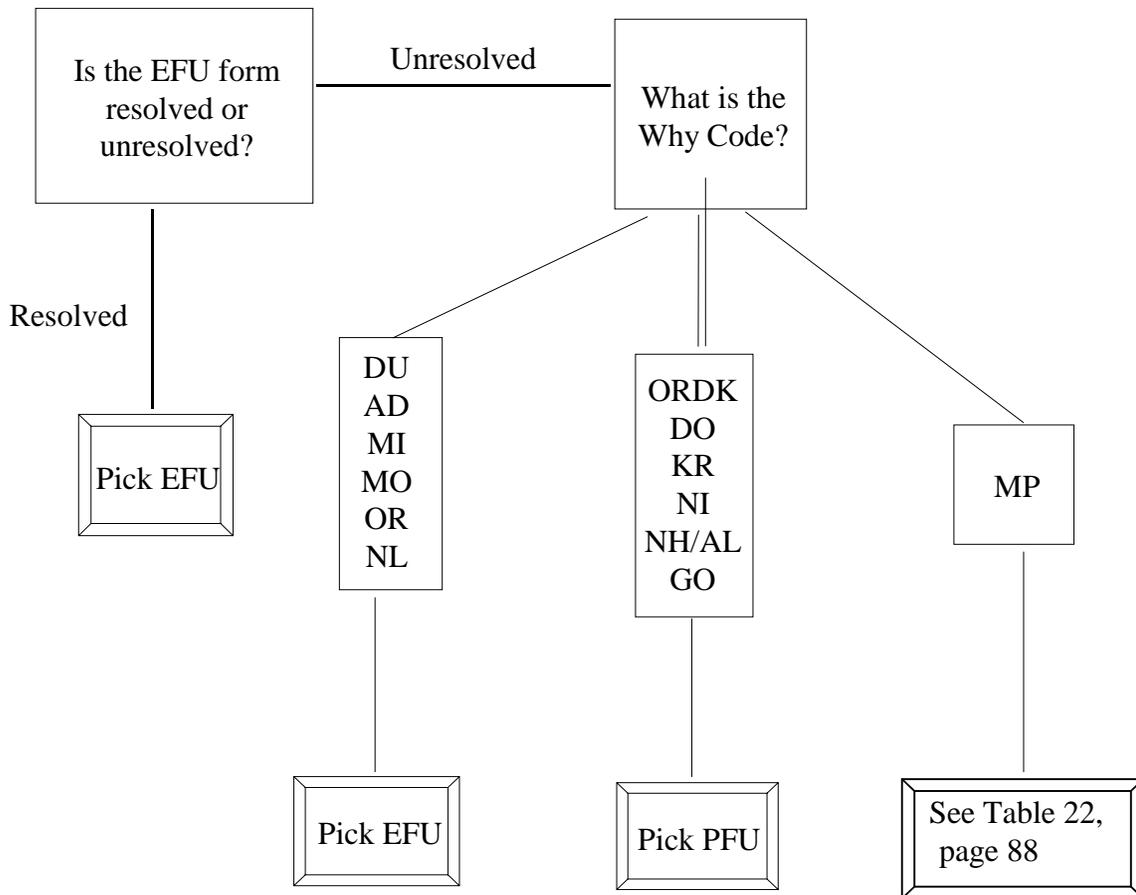
Answer by observation: Record whether this address is in this block cluster.

EFU TES Question

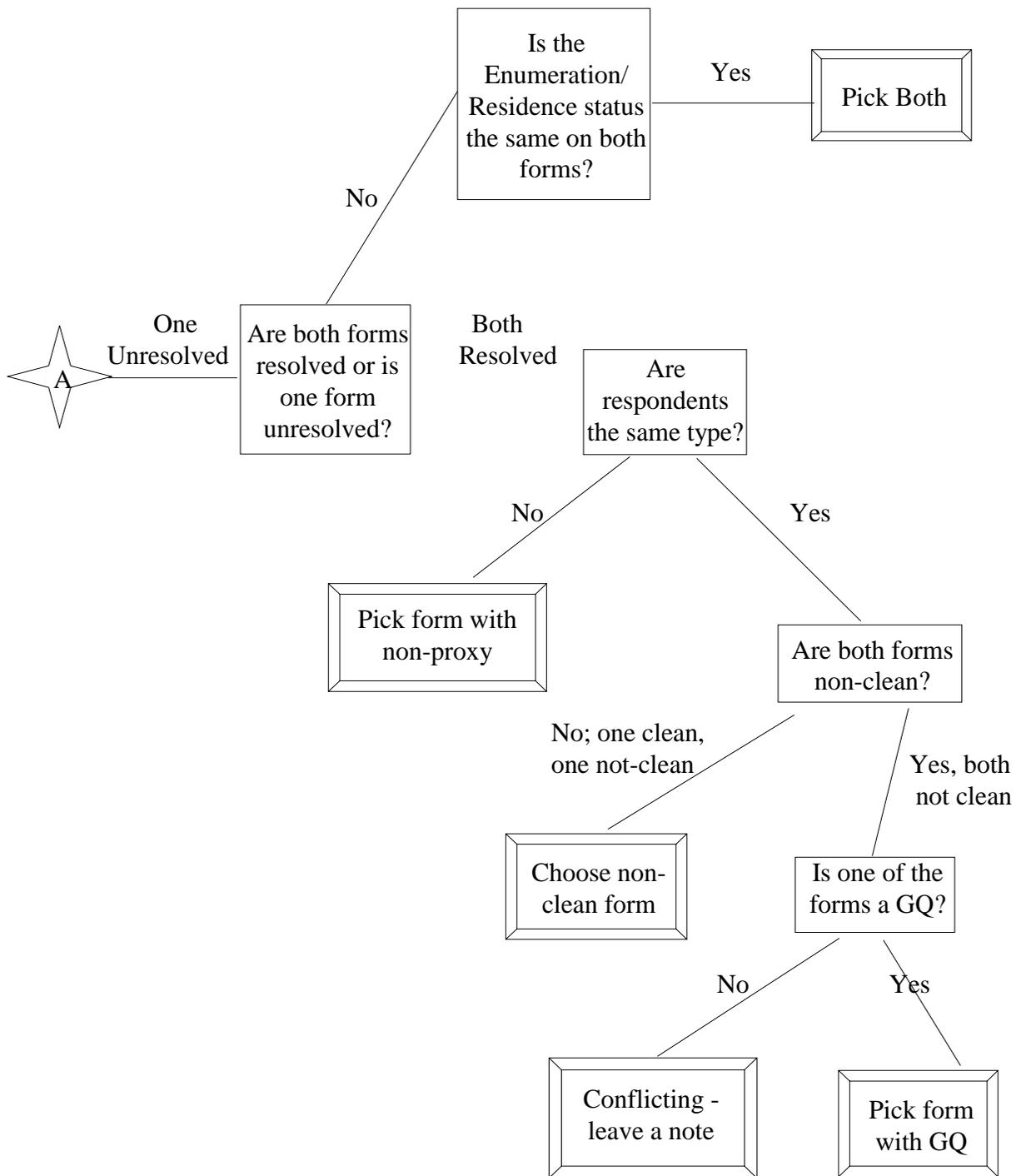
In what block did you locate (followup address)?

Flowchart for the A.C.E. Revision II Clerical Review

If there is no PFU form use this chart to determine which form to pick



If you have both a PFU and EFU form use the chart on the next two pages to determine which form to pick



One form unresolved

