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Subject: A.C.E. Revision II – Computer Specifications for Defining Full P-  
and E- Sample Post-Strata

This memorandum describes the A.C.E. Revision II post-stratification definitions for the Full P and E Samples. Unlike the Census 2000 A.C.E. production process, the A.C.E. Revision II Full P and E Samples do not have identical post-strata definitions.

This document defines the post-stratification variables PFULLSHORT, PFULLLONG, EFULLSHORT, and EFULLLONG. PFULLSHORT and PFULLLONG are defined for both the Full P and Census Files using the appropriate variables. Similarly, EFULLSHORT and EFULLLONG are defined for both the Full E and Census Files using the appropriate variables. Age and Sex collapsing patterns are also discussed and documented.

The input file for the Full P Sample post-stratification production process is the person-level P Sample File located in ESTIMATION\$DISK:[REVACE.ESTIMATION]PFULLSAM.DAT. Note that several HCEF and HCUF variables have been appended to this file.

The input file for the Full E Sample post-stratification production process is the person-level E Sample File located in ESTIMATION\$DISK:[REVACE.ESTIMATION]EFULLSAM.DAT. Note that several HCEF and HCUF variables have been appended to this file.

## I. A.C.E. Revision II Full P Sample Post-Stratification Plan

Two new post-stratification codes will be on the A.C.E. Revision II Full P Sample file. One will be a Long Code while the other will be a Short Code.

The Long Code (PFULLLONG) includes 7 digits:

- Digit 1: Region
- Digit 2: Race/Hispanic Origin Domain
- Digit 3: Tenure
- Digit 4: MSA/TEA
- Digit 5: Return Rate Indicator
- Digit 6: Age
- Digit 7: Sex

The Short Code (PFULLSHORT) includes 4 digits:

- Digits 1 and 2: Are 01-64, from the Full P Sample post-stratum group assignment. These can be defined from the first two digits of the original A.C.E. production post-stratum code POSTSTR.
- Digit 3: Age
- Digit 4: Sex

**NOTE:** There are two important changes to note from the original A.C.E. production process. Age and Sex are now distinct variables. Also, the 0-17 age group has been split into two categories, 0-9 and 10-17.

A. Definition of Long Code (PFULLLONG)

**Region**

1 <sup>st</sup> digit	Category Description	P Sample and Census Variable Definition
0	Puerto Rico	CST = 72
1	Northeast	CST ∈ {09, 23, 25, 33, 34, 36, 42, 44, 50}
2	Midwest	CST ∈ {17, 18, 19, 20, 26, 27, 29, 31, 38, 39, 46, 55}
3	South	CST ∈ {01, 05, 10, 11, 12, 13, 21, 22, 24, 28, 37, 40, 45, 47, 48, 51, 54}
4	West	CST ∈ {02, 04, 06, 08, 15, 16, 30, 32, 35, 41, 49, 53, 56}
5	Collapse: Northeast Midwest South West	If 1 <sup>st</sup> two digits of POSTSTR ∈ {33-64}

**Race/Hispanic Origin Domain**

2 <sup>nd</sup> digit	Category Description	P Sample and Census Variable Definition
1	American Indian or Alaska Native on Reservations	1 <sup>st</sup> two digits of POSTSTR ∈ {61-62}
2	Off-Reservation American Indian or Alaska Native	1 <sup>st</sup> two digits of POSTSTR ∈ {63-64}
3	Hispanic	1 <sup>st</sup> two digits of POSTSTR ∈ {49-56}
4	Non-Hispanic Black	1 <sup>st</sup> two digits of POSTSTR ∈ {41-48}
5	Native Hawaiian or Pacific Islander	1 <sup>st</sup> two digits of POSTSTR ∈ {57-58}
6	Non-Hispanic Asian	1 <sup>st</sup> two digits of POSTSTR ∈ {59-60}
7	Non-Hispanic White or “Some other race”	1 <sup>st</sup> two digits of POSTSTR ∈ {01-40}

### Tenure

3 <sup>rd</sup> digit	Category Description	P Sample Variable Definition	Census Variable Definition
1	Owner	TENURE2=1	STENURE ∈ {1,2}
2	Non-Owner	TENURE2=2	STENURE=∈ {3,4}

### Metropolitan Statistical Area/Type of Enumeration Area

4 <sup>th</sup> digit	Category Description	P Sample and Census Variable Definition
0	Puerto Rico	1 <sup>st</sup> two digits of POSTSTR ∈ {71-82}
1	Large MSA MO/MB	1 <sup>st</sup> two digits of POSTSTR ∈ {01-08, 33-34}
2	Medium MSA MO/MB	1 <sup>st</sup> two digits of POSTSTR ∈ {09-16, 35-36}
3	Small MSA and Non-MSA MO/MB	1 <sup>st</sup> two digits of POSTSTR ∈ {17-24, 37-38}
4	All Other TEAs	1 <sup>st</sup> two digits of POSTSTR ∈ {25-32, 39-40}
5	Collapse: Large MSA MO/MB Medium MSA MO/MB	1 <sup>st</sup> two digits of POSTSTR ∈ {41-42, 45-46, 49-50, 53-54}
6	Collapse: Small MSA and Non-MSA MO/MB All Other TEAs	1 <sup>st</sup> two digits of POSTSTR ∈ {43-44, 47-48, 51-52, 55-56}
7	Collapse: Large MSA MO/MB Medium MSA MO/MB Small MSA and Non-MSA MO/MB All Other TEAs	1 <sup>st</sup> two digits of POSTSTR ∈ {57-64}

### Return Rate Indicator

5 <sup>th</sup> digit	Category Description	P Sample and Census Variable Definition
1	High	1 <sup>st</sup> two digits of POSTSTR ∈ {01-04, 09-12, 17-20, 25-28, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55}
0	Low	1 <sup>st</sup> two digits of POSTSTR ∈ {05-08, 13-16, 21-24, 29-32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56}
2	Collapse: High Low	1 <sup>st</sup> two digits of POSTSTR ∈ {57-64}

### Age

6 <sup>th</sup> digit	Category Description	P Sample Variable Definition	Census Variable Definition
1	0-9	$000 \leq \text{NEWAGE} \leq 009$	$000 \leq \text{QAGE} \leq 009$
2	10-17	$010 \leq \text{NEWAGE} \leq 017$	$010 \leq \text{QAGE} \leq 017$
3	18-29	$018 \leq \text{NEWAGE} \leq 029$	$018 \leq \text{QAGE} \leq 029$
4	30-49	$030 \leq \text{NEWAGE} \leq 049$	$030 \leq \text{QAGE} \leq 049$
5	50+	$\text{NEWAGE} \geq 050$	$\text{QAGE} \geq 050$
6	Collapse: 0-9 10-17	$000 \leq \text{NEWAGE} \leq 017$	$000 \leq \text{QAGE} \leq 017$
7	Collapse: 18-29 30-49 50+	$\text{NEWAGE} \geq 018$	$\text{QAGE} \geq 018$
8	Collapse: 0-9 10-17 18-29	$000 \leq \text{NEWAGE} \leq 029$	$000 \leq \text{QAGE} \leq 029$
9	Collapse: 30-49 50+	$\text{NEWAGE} \geq 030$	$\text{QAGE} \geq 030$
0	Collapse: 0-9 10-17 18-29 30-49 50+	$\text{NEWAGE} \geq 000$	$\text{QAGE} \geq 000$

### Sex

7 <sup>th</sup> digit	Category Description	P Sample Variable Definition	Census Variable Definition
1	Male	$\text{SEX} = 1$	$\text{QSEX} = 1$
2	Female	$\text{SEX} = 2$	$\text{QSEX} = 2$
0	Collapse: Male Female		

B. Definition of Short Code (PFULLSHORT)

1<sup>st</sup> and 2<sup>nd</sup> digits of POSTSTR (identified as follows):

Race/Hispanic Origin Domain Number*	Tenure	MSA/TEA	High Return Rate				Low Return Rate			
			N	M	S	W	N	M	S	W
<b>Domain 7</b> (Non-Hispanic White or "Some other race")	Owner	Large MSA MO/MB	01	02	03	04	05	06	07	08
		Medium MSA MO/MB	09	10	11	12	13	14	15	16
		Small MSA & Non-MSA MO/MB	17	18	19	20	21	22	23	24
		All Other TEAs	25	26	27	28	29	30	31	32
	Non-Owner	Large MSA MO/MB	33				34			
		Medium MSA MO/MB	35				36			
		Small MSA & Non-MSA MO/MB	37				38			
		All Other TEAs	39				40			
<b>Domain 4</b> (Non-Hispanic Black)	Owner	Large MSA MO/MB	41				42			
		Medium MSA MO/MB								
		Small MSA & Non-MSA MO/MB	43				44			
		All Other TEAs								
	Non-Owner	Large MSA MO/MB	45				46			
		Medium MSA MO/MB								
		Small MSA & Non-MSA MO/MB	47				48			
		All Other TEAs								
<b>Domain 3</b> (Hispanic)	Owner	Large MSA MO/MB	49				50			
		Medium MSA MO/MB								
		Small MSA & Non-MSA MO/MB	51				52			
		All Other TEAs								
	Non-Owner	Large MSA MO/MB	53				54			
		Medium MSA MO/MB								
		Small MSA & Non-MSA MO/MB	55				56			
		All Other TEAs								
<b>Domain 5</b> (Native Hawaiian or Pacific Islander)	Owner	57								
	Non-Owner	58								
<b>Domain 6</b> (Non-Hispanic Asian)	Owner	59								
	Non-Owner	60								
<b>American Indian or Alaska Native</b>	<b>Domain 1</b> (On Reservation)	Owner	61							
		Non-Owner	62							
	<b>Domain 2</b> (Off Reservation)	Owner	63							
		Non-Owner	64							

(Same definitions as page 5)

**Age**

3 <sup>rd</sup> digit	Category Description	P Sample Variable Definition	Census Variable Definition
1	0-9	$000 \leq \text{NEWAGE} \leq 009$	$000 \leq \text{QAGE} \leq 009$
2	10-17	$010 \leq \text{NEWAGE} \leq 017$	$010 \leq \text{QAGE} \leq 017$
3	18-29	$018 \leq \text{NEWAGE} \leq 029$	$018 \leq \text{QAGE} \leq 029$
4	30-49	$030 \leq \text{NEWAGE} \leq 049$	$030 \leq \text{QAGE} \leq 049$
5	50+	$\text{NEWAGE} \geq 050$	$\text{QAGE} \geq 050$
6	Collapse: 0-9 10-17	$000 \leq \text{NEWAGE} \leq 017$	$000 \leq \text{QAGE} \leq 017$
7	Collapse: 18-29 30-49 50+	$\text{NEWAGE} \geq 018$	$\text{QAGE} \geq 018$
8	Collapse: 0-9 10-17 18-29	$000 \leq \text{NEWAGE} \leq 029$	$000 \leq \text{QAGE} \leq 029$
9	Collapse: 30-49 50+	$\text{NEWAGE} \geq 030$	$\text{QAGE} \geq 030$
0	Collapse: 0-9 10-17 18-29 30-49 50+	$\text{NEWAGE} \geq 000$	$\text{QAGE} \geq 000$

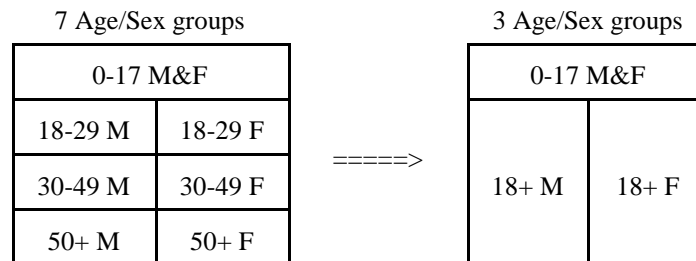
**Sex**

4 <sup>th</sup> digit	Category Description	P Sample Variable Definition	Census Variable Definition
1	Male	$\text{SEX} = 1$	$\text{QSEX} = 1$
2	Female	$\text{SEX} = 2$	$\text{QSEX} = 2$
0	Collapse: Male Female		

## II. Pre-collapsing the A.C.E. Revision II Full P Sample

The A.C.E. Revision II Full P Sample file will be pre-collapsed. We are building on the 416 post-strata definitions from production and are also splitting the children into two age groupings: 0-9 and 10-17. As a result, we will have  $416 + 64 = 480$  post-strata for the A.C.E. Revision II Full P Sample.

During Census 2000 A.C.E. production, we collapsed post-strata if their P sample sizes were too small or if a post-stratum CV was too high. Thus, for post-stratum groups **06, 08, 13, 21, 48, 56, 57, and 58**, we collapsed from 7 age/sex groups to 3 age/sex groups as follows:



For the A.C.E. Revision II post-stratification process, we decided to: a) start with the original (post-collapsed) 416 post-strata, and b) split the children into two groups. As a result, post-stratum groups 06, 08, 13, 21, 48, 56, 57, and 58 were pre-collapsed from eight to four Age and Sex groups as follows:

4 Age and Sex groups	
0-9 M&F	
10-17 M&F	
18+ M	
18+ F	



Use the Age and Sex variables:

Age	Category Description
1	0-9
2	10-17
3	18-29
4	30-49
5	50+
6	Collapse: 0-9, 10-17
7	Collapse: 18-29, 30-49, 50+
8	Collapse: 0-9, 0-17, 18-29
9	Collapse: 30-49, 50+
0	Collapse: 0-9, 10-17, 18-29, 30-49, 50+

Sex	Category Description
1	Male
2	Female
0	Male or Female

to code Age and Sex for post-stratum groups 06, 08, 13, 21, 48, 56, 57, and 58 as follows:

4 Age and Sex groups

Age=1 Sex=0
Age=2 Sex=0
Age=7 Sex=1
Age=7 Sex=2

For all other Full P Sample post-stratum groups, define Age and Sex as follows:

8 Age and Sex groups

Age=1 Sex=0	
Age=2 Sex=0	
Age=3 Sex=1	Age=3 Sex=2
Age=4 Sex=1	Age=4 Sex=2
Age=5 Sex=1	Age=5 Sex=2

The number in parentheses in each cell of the following table indicates how many Age and Sex categories are defined for the Full P Sample post-stratum groups. As a result of pre-collapsing, there are 480 post-strata for the A.C.E. Revision II Full P Sample.

Full P Sample Post-Stratum Groups (with the number of Age and Sex categories in parentheses)

Race/Hispanic Origin Domain Number	Tenure	MSA/TEA	High Return Rate				Low Return Rate			
			NE	MW	S	W	NE	MW	S	W
Domain 7 (Non-Hispanic White or "Some other race")	Owner	Large MSA MO/MB	01 (8)	02 (8)	03 (8)	04 (8)	05 (8)	06 (4)	07 (8)	08 (4)
		Medium MSA MO/MB	09 (8)	10 (8)	11 (8)	12 (8)	13 (4)	14 (8)	15 (8)	16 (8)
		Small MSA & Non-MSA MO/MB	17 (8)	18 (8)	19 (8)	20 (8)	21 (4)	22 (8)	23 (8)	24 (8)
		All Other TEAs	25 (8)	26 (8)	27 (8)	28 (8)	29 (8)	30 (8)	31 (8)	32 (8)
	Non-Owner	Large MSA MO/MB	33 (8)				34 (8)			
		Medium MSA MO/MB	35 (8)				36 (8)			
		Small MSA & Non-MSA MO/MB	37 (8)				38 (8)			
		All Other TEAs	39 (8)				40 (8)			
Domain 4 (Non-Hispanic Black)	Owner	Large MSA MO/MB	41 (8)				42 (8)			
		Medium MSA MO/MB	43 (8)				44 (8)			
		Small MSA & Non-MSA MO/MB	45 (8)				46 (8)			
		All Other TEAs	47 (8)				48 (4)			
	Non-Owner	Large MSA MO/MB	49 (8)				50 (8)			
		Medium MSA MO/MB	51 (8)				52 (8)			
		Small MSA & Non-MSA MO/MB	53 (8)				54 (8)			
		All Other TEAs	55 (8)				56 (4)			
Domain 3 (Hispanic)	Owner	Large MSA MO/MB	57 (4)				58 (4)			
		Medium MSA MO/MB	59 (8)				60 (8)			
		Small MSA & Non-MSA MO/MB	61 (8)				62 (8)			
		All Other TEAs	63 (8)				64 (8)			
	Non-Owner	Large MSA MO/MB	65 (8)				66 (8)			
		Medium MSA MO/MB	67 (8)				68 (8)			
		Small MSA & Non-MSA MO/MB	69 (8)				70 (8)			
		All Other TEAs	71 (8)				72 (8)			
Domain 5 (Native Hawaiian or Pacific Islander)	Owner	73 (8)								
	Non-Owner	74 (8)								
Domain 6 (Non-Hispanic Asian)	Owner	75 (8)								
	Non-Owner	76 (8)								
American Indian or Alaska Native	Domain 1 (On Res.)	Owner	77 (8)							
		Non-Owner	78 (8)							
	Domain 2 (Off Res.)	Owner	79 (8)							
		Non-Owner	80 (8)							

### III. A.C.E. Revision II Full E Sample Post-Stratification Plan

The post-stratification plan for the A.C.E. Revision II Full E Sample is not constrained to be the same as that for the Full P Sample. The variables Proxy, Type and Date of Return (RDATE), and Relationship and Size (RELSIZE) are now used. These variables were strong indicators of the probability of correct enumeration in logistic regression models. Similar to the Full P Sample, two new post-stratification codes will be on the A.C.E. Revision II Full E Sample file. One will be a Long Code while the other will be a Short Code.

The Long Code (EFULLLONG) includes 7 digits:

- Digit 1: Proxy
- Digit 2: Race/Hispanic Origin Domain
- Digit 3: Tenure
- Digit 4: Type and Date of Return (RDATE)
- Digit 5: Relationship and Size (RELSIZE)
- Digit 6: Age
- Digit 7: Sex

The Short Code (EFULLSHORT) includes 4 digits:

Digits 1 and 2: Are 01-93 according to the A.C.E. Revision II E Sample post-stratum group definitions (see schematic on page 16).

- Digit 3: Age
- Digit 4: Sex

**NOTE:** As for the Full P Sample, Age and Sex are now distinct variables. In addition, the 0-17 age group has been split into two categories, 0-9 and 10-17.

Several HCUF and HCEF variables are required to post-stratify the Full E Sample file. The HCUF and HCEF variables now available on the Full E Sample file are listed in the following table.

Census Variable Name	Description and Source of Variable	E Sample Variable Name
RSOURCE	Source of Return (recode) (from DRF2 processing) - (HCUF Housing Unit Record)	SRSOURCE
REPDATE	Earliest Form Processing Date - (HCUF Housing Unit Record)	SREPDATE
RHHMEM	Respondent Household Member? [EQ only] - (HCEF Housing Unit Record)	SRHHMEM
PFT	Form Type - (HCEF Person Record)	SPFT

A. Definition of Long Code (EFULLLONG)

The Proxy variable for the E Sample (HCEF) is created from the variables SPFT (PFT), SRHHMEM (RHHMEM), SRSOURCE (RSOURCE), and INP (NP). Note that this definition of proxy is different than that used to define a housing unit-level proxy rate. Define proxy versus non-proxy status as follows.

**Proxy**

1 <sup>st</sup> digit	Category Description	E Sample Variable Definition	Census Variable Definition
1	Proxy	If [(SPFT ∈ {05, 06, 17, 18, 19, 20} or SRSOURCE ∈ {31, 32, 33}) and SRHHMEM ∈ {2, 3}]	If [(PFT ∈ {05, 06, 17, 18, 19, 20} or RSOURCE ∈ {31, 32, 33}) and RHHMEM ∈ {2, 3}]
2	Non-proxy	All others	All others

**Race/Hispanic Origin Domain\***

2 <sup>nd</sup> digit	Category Description	E Sample and Census Variable Definition
1	American Indian or Alaska Native on Reservations	1 <sup>st</sup> two digits of POSTSTR ∈ {61-62}
2	Off-Reservation American Indian or Alaska Native	1 <sup>st</sup> two digits of POSTSTR ∈ {63-64}
3	Hispanic	1 <sup>st</sup> two digits of POSTSTR ∈ {49-56}
4	Non-Hispanic Black	1 <sup>st</sup> two digits of POSTSTR ∈ {41-48}
5	Native Hawaiian or Pacific Islander	1 <sup>st</sup> two digits of POSTSTR ∈ {57-58}
6	Non-Hispanic Asian	1 <sup>st</sup> two digits of POSTSTR ∈ {59-60}
7	Non-Hispanic White or “Some other race”	1 <sup>st</sup> two digits of POSTSTR ∈ {01-40}

\* Note that although the variable POSTSTR was defined for the original A.C.E. production process, this variable can still be used to define the value of Race/Hispanic Origin Domain. This variable is available both on the E Sample and the HCEF.

### Tenure

3 <sup>rd</sup> digit	Category Description	E Sample Variable Definition	Census Variable Definition
1	Owner	TENURE2=1	STENURE $\in$ {1,2}
2	Non-Owner	TENURE2=2	STENURE $\in$ {3,4}
0	Collapse: Owner Non-Owner		

### Type and Date of Return (RDATE)

4 <sup>th</sup> digit	Category Description	E Sample Variable Definition	Census Variable Definition
1	Mailback with earliest form processing date on or before March 24	SRSOURCE $\in$ {01, 03-12, 30-36, blank} and SREPDATE $\leq$ 0324	RSOURCE $\in$ {01, 03-12, 30-36, blank} and REPDATE $\leq$ 0324
2	Mailback with earliest form processing date after March 24	SRSOURCE $\in$ {01, 03-12, 30-36, blank} and SREPDATE $\geq$ 0325	RSOURCE $\in$ {01, 03-12, 30-36, blank} and REPDATE $\geq$ 0325 or blank
3	Non-mailback with earliest form processing date on or before June 1	SRSOURCE $\in$ {13-29, 37} and SREPDATE $\leq$ 0601	RSOURCE $\in$ {13-29, 37} and REPDATE $\leq$ 0601
4	Non-mailback with earliest form processing date after June 1	SRSOURCE $\in$ {13-29, 37} and SREPDATE $\geq$ 0602	RSOURCE $\in$ {13-29, 37} and REPDATE $\geq$ 0602
0	Collapse: All Type and Date of Return Categories		

### Relationship and Size (RELSIZE)

5 <sup>th</sup> digit	Category Description	E Sample Variable Definition	Census Variable Definition
1	HHer or Nuclear Member in 2 or 3 person HH	(PRELSUP ∈ {1, 2} and INP ∈ {2, 3}) or (PRELSUP ∈ {3, 4, 5} and PAGE ≤ 17 and INP ∈ {2, 3})	(QREL ∈ {01, 02} and NP ∈ {2, 3}) or (QREL ∈ {03, 04, 05} and QAGE ≤ 17 and NP ∈ {2, 3})
2	HHer or Nuclear Member in 4+ person HH	(PRELSUP ∈ {1, 2} and INP = 4+) or (PRELSUP ∈ {3, 4, 5} and PAGE ≤ 17 and INP = 4+)	(QREL ∈ {01, 02} and NP = 4+) or (QREL ∈ {03, 04, 05} and QAGE ≤ 17 and NP = 4+)
3	(Other) Single person HH	PRELSUP = 1 and INP = 1	QREL = 01 and NP = 1
4	Other Member in 2 or 3 person HH	(PRELSUP ∈ {3, 4, 5} and PAGE ≥ 18 and INP ∈ {2, 3}) or (PRELSUP ∈ {6-19} and INP ∈ {2, 3})	(QREL ∈ {03, 04, 05} and QAGE ≥ 18 and NP ∈ {2, 3}) or (QREL ∈ {06-23} and NP ∈ {2, 3})
5	Other Member in 4+ person HH	(PRELSUP ∈ {3, 4, 5} and PAGE ≥ 18 and INP = 4+) or (PRELSUP ∈ {6-19} and INP = 4+)	(QREL ∈ {03, 04, 05} and QAGE ≥ 18 and NP = 4+) or (QREL ∈ {06-23} and NP = 4+)
6	Collapse: HHer or Nuclear Member in 2 or 3 person HH HHer or Nuclear Member in 4+ person HH	(PRELSUP ∈ {1, 2} and INP = 2+) or (PRELSUP ∈ {3, 4, 5} and PAGE ≤ 17 and INP = 2+)	(QREL ∈ {01, 02} and NP = 2+) or (QREL ∈ {03, 04, 05} and QAGE ≤ 17 and NP = 2+)
7	Collapse: (Other) Single person HH Other Member in 2-3 person HH Other Member in 4+ person HH	(PRELSUP = 1 and INP = 1) or (PRELSUP ∈ {3, 4, 5} and PAGE ≥ 18 and INP = 2+) or (PRELSUP ∈ {6-19} and INP = 2+)	(QREL = 01 and NP = 1) or (QREL ∈ {03, 04, 05} and QAGE ≥ 18 and NP = 2+) or (QREL ∈ {06-23} and NP = 2+)
0	Collapse All Relationship/Size Categories		

**Note:** PRELSUP on the E Sample file is a numeric variable while QREL on the HCEF is a character variable. This explains why there are leading zeros on the HCEF variable definition and not on the E Sample variable definition.

### Age

6 <sup>th</sup> digit	Category Description	E Sample Variable Definition	Census Variable Definition
1	0-9	$0 \leq \text{PAGE} \leq 9$	$000 \leq \text{QAGE} \leq 009$
2	10-17	$10 \leq \text{PAGE} \leq 17$	$010 \leq \text{QAGE} \leq 017$
3	18-29	$18 \leq \text{PAGE} \leq 29$	$018 \leq \text{QAGE} \leq 029$
4	30-49	$30 \leq \text{PAGE} \leq 49$	$030 \leq \text{QAGE} \leq 049$
5	50+	$\text{PAGE} \geq 50$	$\text{QAGE} \geq 050$
6	Collapse: 0-9 10-17	$0 \leq \text{PAGE} \leq 17$	$000 \leq \text{QAGE} \leq 017$
7	Collapse: 18-29 30-49 50+	$\text{PAGE} \geq 18$	$\text{QAGE} \geq 018$
8	Collapse: 0-9 10-17 18-29	$0 \leq \text{PAGE} \leq 29$	$000 \leq \text{QAGE} \leq 029$
9	Collapse: 30-49 50+	$\text{PAGE} \geq 30$	$\text{QAGE} \geq 030$
0	Collapse All Age Categories		

### Sex

7 <sup>th</sup> digit	Category Description	E Sample Variable Definition	Census Variable Definition
1	Male	$\text{PSEX} = 1$	$\text{QSEX} = 1$
2	Female	$\text{PSEX} = 2$	$\text{QSEX} = 2$
0	Collapse: Male Female		

B. Definition of Short Code (EFULLSHORT)

1<sup>st</sup> and 2<sup>nd</sup> digits are defined according to this schematic:

Domain	Tenure	Relationship	HH Size	Early Mail-back	Late Mail-back	Early Non-Mail-back	Late Non-Mailback
<b>Domain 7</b> PROXY Non-Hispanic White or SOR				87			
<b>Domain 4</b> PROXY Non-Hispanic Black				88			
<b>Domain 3</b> PROXY Hispanic				89			
<b>Domain 5</b> PROXY Native Hawaiian or Pacific Islander				90			
<b>Domain 6</b> PROXY Non-Hispanic Asian				91			
<b>Domain 1</b> PROXY AI or AN On Reservation				92			
<b>Domain 2</b> PROXY AI or AN Off Reservation				93			
<b>Domain 7</b> Non-Hispanic White or Some other race	Owner	HHer/Nuclear	2-3	01	02	03	04
			4+	05	06	07	08
		Other	1	09	10	11	12
			2-3	13	14	15	16
			4+	17	18	19	20
	Non-Owner	HHer/Nuclear		21	22	23	24
Other			25	26	27	28	
<b>Domain 4</b> Non-Hispanic Black	Owner	HHer/Nuclear		29	30	31	32
		Other		33	34	35	36
	Non-Owner	HHer/Nuclear		37	38	39	40
		Other		41	42	43	44
<b>Domain 3</b> Hispanic	Owner	HHer/Nuclear		45	46	47	48
		Other		49	50	51	52
	Non-Owner	HHer/Nuclear		53	54	55	56
		Other		57	58	59	60
<b>Domain 5</b> Native Hawaiian or Pacific Islander	Owner & Non-Owner	HHer/Nuclear		61	62	63	64
		Other		65	66	67	68
<b>Domain 6</b> Non-Hispanic Asian	Owner & Non-Owner	HHer/Nuclear		69	70	71	72
		Other		73	74	75	76
<b>American Indian or Alaska Native</b>	<b>Domain 1</b> On Reservation	Owner & Non-Owner	HHer/Nuclear	77			
			Other	78			
	<b>Domain 2</b> Off Reservation	Owner & Non-Owner	HHer/Nuclear	79	80	81	82
			Other	83	84	85	86



(Same definitions as page 15)

**Age**

3 <sup>rd</sup> digit	Category Description	E Sample Variable Definition	Census Variable Definition
1	0-9	$0 \leq \text{PAGE} \leq 9$	$000 \leq \text{QAGE} \leq 009$
2	10-17	$10 \leq \text{PAGE} \leq 17$	$010 \leq \text{QAGE} \leq 017$
3	18-29	$18 \leq \text{PAGE} \leq 29$	$018 \leq \text{QAGE} \leq 029$
4	30-49	$30 \leq \text{PAGE} \leq 49$	$030 \leq \text{QAGE} \leq 049$
5	50+	$\text{PAGE} \geq 50$	$\text{QAGE} \geq 050$
6	Collapse: 0-9 10-17	$0 \leq \text{PAGE} \leq 17$	$000 \leq \text{QAGE} \leq 017$
7	Collapse: 18-29 30-49 50+	$\text{PAGE} \geq 18$	$\text{QAGE} \geq 018$
8	Collapse: 0-9 10-17 18-29	$0 \leq \text{PAGE} \leq 29$	$000 \leq \text{QAGE} \leq 029$
9	Collapse: 30-49 50+	$\text{PAGE} \geq 30$	$\text{QAGE} \geq 030$
0	Collapse: 0-9 10-17 18-29 30-49 50+	$\text{PAGE} \geq 0$	$\text{QAGE} \geq 000$

**Sex**

4 <sup>th</sup> digit	Category Description	E Sample Variable Definition	Census Variable Definition
1	Male	$\text{PSEX} = 1$	$\text{QSEX} = 1$
2	Female	$\text{PSEX} = 2$	$\text{QSEX} = 2$
0	Collapse: Male Female		

#### IV. Pre-collapsing the A.C.E. Revision II Full E Sample

The A.C.E. Revision II Full E Sample file will be pre-collapsed. The number of Age and Sex groups defined for each of the 93 post-stratum groups is based on sample size concerns and a hierarchical set of collapsing rules. Four possible Age and Sex groupings are defined as:

8 groups		4 groups		2 groups	1 group
0-9 M&F		0-17 M&F		0-29 M&F	All ages M&F
10-17 M&F		18-29 M&F			
18-29 M	18-29 F	30-49 M&F		30+ M&F	
30-49 M	30-49 F	50+ M&F			
50+ M	50+ F				

Use the Age and Sex variables:

Age	Category Description
1	0-9
2	10-17
3	18-29
4	30-49
5	50+
6	Collapse: 0-9, 10-17
7	Collapse: 18-29, 30-49, 50+
8	Collapse: 0-9, 10-17, 18-29
9	Collapse: 30-49, 50+
0	Collapse: 0-9, 10-17, 18-29, 30-49, 50+

Sex	Category Description
1	Male
2	Female
0	Male or Female

to code the four groupings as follows:

8 groups		4 groups		2 groups	1 group
Age=1 Sex=0		Age=6 Sex=0		Age=8 Sex=0	Age=0 Sex=0
Age=2 Sex=0		Age=3 Sex=0			
Age=3 Sex=1	Age=3 Sex=2	Age=4 Sex=0		Age=9 Sex=0	
Age=4 Sex=1	Age=4 Sex=2	Age=5 Sex=0			
Age=5 Sex=1	Age=5 Sex=2				

The number in parentheses in each cell in the following table indicates how many Age and Sex categories are defined for the Full E Sample post-stratum groups. For example, eight Age and Sex categories are defined for post-stratum group 87 while only four Age and Sex categories are defined for post-stratum group 91. As a result of pre-collapsing, there are 525 post-strata for the A.C.E. Revision II Full E Sample.

Full E Sample Post-Stratum Groups (with the number of Age and Sex categories in parentheses)

Domain		Tenure	Relationship	HH Size	Early Mail-back	Late Mail-back	Early Non-Mailback	Late Non-Mailback
<b>Domain 7</b> PROXY Non-Hispanic White or SOR					87 (8)			
<b>Domain 4</b> PROXY Non-Hispanic Black					88 (8)			
<b>Domain 3</b> PROXY Hispanic					89 (8)			
<b>Domain 5</b> PROXY Native Hawaiian or Pacific Islander					90 (1)			
<b>Domain 6</b> PROXY Non-Hispanic Asian					91 (4)			
<b>Domain 1</b> PROXY AI or AN On Reservation					92 (4)			
<b>Domain 2</b> PROXY AI or AN Off Reservation					93 (1)			
<b>Domain 7</b> Non-Hispanic White or Some other race	Owner	HHer/Nuclear	2-3	01 (8)	02 (8)	03 (8)	04 (8)	
			4+	05 (8)	06 (8)	07 (4)	08 (8)	
		Other	1	09 (2)	10 (2)	11 (1)	12 (2)	
			2-3	13 (8)	14 (8)	15 (2)	16 (4)	
	Non-Owner	HHer/Nuclear	4+	17 (8)	18 (8)	19 (4)	20 (8)	
			Other	21 (8)	22 (8)	23 (8)	24 (8)	
<b>Domain 4</b> Non-Hispanic Black	Owner	HHer/Nuclear		29 (4)	30 (4)	31 (2)	32 (4)	
			Other	33 (8)	34 (8)	35 (4)	36 (8)	
	Non-Owner	HHer/Nuclear		37 (8)	38 (8)	39 (8)	40 (8)	
			Other	41 (8)	42 (8)	43 (8)	44 (8)	
<b>Domain 3</b> Hispanic	Owner	HHer/Nuclear		45 (8)	46 (8)	47 (4)	48 (8)	
			Other	49 (8)	50 (8)	51 (4)	52 (8)	
	Non-Owner	HHer/Nuclear		53 (8)	54 (8)	55 (8)	56 (8)	
			Other	57 (8)	58 (8)	59 (8)	60 (8)	
<b>Domain 5</b> Native Hawaiian or Pacific Islander	Owner & Non-Owner	HHer/Nuclear		61 (2)	62 (2)	63 (2)	64 (2)	
			Other	65 (2)	66 (2)	67 (1)	68 (2)	
<b>Domain 6</b> Non-Hispanic Asian	Owner & Non-Owner	HHer/Nuclear		69 (8)	70 (8)	71 (4)	72 (4)	
			Other	73 (4)	74 (4)	75 (2)	76 (4)	
<b>American Indian or Alaska Native</b>	<b>Domain 1</b> On Reservation	Owner & Non-Owner	HHer/Nuclear		77 (8)			
				Other		78 (8)		
	<b>Domain 2</b> Off Reservation	Owner & Non-Owner	HHer/Nuclear		79 (2)	80 (2)	81 (2)	82 (2)
				Other		83 (2)	84 (2)	85 (1)