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

This document describes the A.C.E. Revision II measurement error correction post-strata for the Revision E and P Samples. By definition, these post-strata can be obtained by collapsing the A.C.E. Revision II Full E and P Sample post-strata. That is, i' is obtained by collapsing the i post-strata from the Full E Sample while j' is obtained by collapsing the j post-strata from the Full P Sample.

This document also summarizes the variables assigned to the various person-level files, including the Revision E Sample, Full E Sample, Revision P Sample, and Full P Sample Files, as part of this production process.

I. Revision E Sample (i')

A. Assignments to Revision E Sample File

For the Revision E Sample, the measurement error correction post-strata are: Proxies, American Indians on Reservations (AIR) and, for the Non-Proxy/Non-AIR cases, a cross of a two-level RELSIZE variable with eight Age and Sex categories. Since the i' post-strata are required to be a subset of the i post-stratum definitions, the pre-collapsed Age and Sex categories on the Full E Sample are used to define the measurement error correction post-strata.

The variables EFULLLONG and EFULLSHORT will be put on the Revision E Sample File. Use EFULLSHORT to assign people to one of the following 18 EREVGROUP categories. Also, the variables PT1 and PT2 should be copied from the Full E Sample file onto the Revision E Sample. Copy information from the Full E Sample File to the Revision E Sample File by matching Full E Sample people (using variables PUID, PSEQ, and PNC) to Revision E Sample people (using variables CID, SEQ, and PER).

Each Revision E Sample person can be mapped into one of the following 18 EREVGROUP categories. Note that this is a unique partitioning of the Revision E Sample, meaning that each person falls into one and only one of the 18 EREVGROUP categories. Note that the Revision E Sample includes the production variables AGE and SEX. These variables are equivalent to PAGE and PSEX, respectively, on the E Sample Person Dual System Estimation Output File defined in Haines (2001).

Rules for Assigning Revision E Sample People to an EREVGROUP Category

EREVGROUP	Description	If first two digits of EFULLSHORT are:	and:	and:
1	All Proxy cases	87-93	Any AGE	SEX = 1 or 2
2	American Indians on Reservations (AIR) who are Non-Proxy	77-78	Any AGE	SEX = 1 or 2
3	Non-Proxy/Non-AIR Nuclear Member 0-9 M&F	01-08, 21-24, 29-32, 37-40, 45-48, 53-56, 61-64, 69-72, 79-82	$000 \le AGE \le 009$	SEX = 1 or 2
4	Non-Proxy/Non-AIR Nuclear Member 10-17 M&F	01-08, 21-24, 29-32, 37-40, 45-48, 53-56, 61-64, 69-72, 79-82	$010 \le AGE \le 017$	SEX = 1 or 2
5	Non-Proxy/Non-AIR Nuclear Member 18-29 M	01-08, 21-24, 29-32, 37-40, 45-48, 53-56, 61-64, 69-72, 79-82	$018 \le AGE \le 029$	SEX=1
6	Non-Proxy/Non-AIR Nuclear Member 18-29 F	01-08, 21-24, 29-32, 37-40, 45-48, 53-56, 61-64, 69-72, 79-82	$018 \le AGE \le 029$	SEX=2
7	Non-Proxy/Non-AIR Nuclear Member 30-49 M	01-08, 21-24, 29-32, 37-40, 45-48, 53-56, 61-64, 69-72, 79-82	$030 \le AGE \le 049$	SEX=1
8	Non-Proxy/Non-AIR Nuclear Member 30-49 F	01-08, 21-24, 29-32, 37-40, 45-48, 53-56, 61-64, 69-72, 79-82	$030 \le AGE \le 049$	SEX=2
9	Non-Proxy/Non-AIR Nuclear Member 50+ M	01-08, 21-24, 29-32, 37-40, 45-48, 53-56, 61-64, 69-72, 79-82	$AGE \ge 050$	SEX=1
10	Non-Proxy/Non-AIR Nuclear Member 50+ F	01-08, 21-24, 29-32, 37-40, 45-48, 53-56, 61-64, 69-72, 79-82	$AGE \ge 050$	SEX=2
11	Non-Proxy/Non-AIR Other Member 0-9 M&F	09-20, 25-28, 33-36, 41-44, 49-52, 57-60, 65-68, 73-76, 83-86	$000 \le AGE \le 009$	SEX = 1 or 2
12	Non-Proxy/Non-AIR Other Member 10-17 M&F	09-20, 25-28, 33-36, 41-44, 49-52, 57-60, 65-68, 73-76, 83-86	$010 \le AGE \le 017$	SEX = 1 or 2
13	Non-Proxy/Non-AIR Other Member 18-29 M	09-20, 25-28, 33-36, 41-44, 49-52, 57-60, 65-68, 73-76, 83-86	$018 \le AGE \le 029$	SEX=1
14	Non-Proxy/Non-AIR Other Member 18-29 F	09-20, 25-28, 33-36, 41-44, 49-52, 57-60, 65-68, 73-76, 83-86	$018 \le AGE \le 029$	SEX=2
15	Non-Proxy/Non-AIR Other Member 30-49 M	09-20, 25-28, 33-36, 41-44, 49-52, 57-60, 65-68, 73-76, 83-86	$030 \le AGE \le 049$	SEX=1
16	Non-Proxy/Non-AIR Other Member 30-49 F	09-20, 25-28, 33-36, 41-44, 49-52, 57-60, 65-68, 73-76, 83-86	$030 \le AGE \le 049$	SEX=2
17	Non-Proxy/Non-AIR Other Member 50+ M	09-20, 25-28, 33-36, 41-44, 49-52, 57-60, 65-68, 73-76, 83-86	$AGE \ge 050$	SEX=1
18	Non-Proxy/Non-AIR Other Member 50+ F	09-20, 25-28, 33-36, 41-44, 49-52, 57-60, 65-68, 73-76, 83-86	$AGE \ge 050$	SEX=2

For each of the 18 EREVGROUP categories in the Revision E Sample, calculate:

- The F1 numerator (F1N) by summing the appropriate product with revision codes
- The F1 denominator (F1D) by summing the appropriate product with production codes

This results in 18 different numerator and denominator F1 values. For example, all people in EREVGROUP 1 on the Revision Sample E File will have the same value of F1N and the same value of F1D. For each person on the Revision E Sample, assign the variables EREVGROUP, F1N, and F1D.

B. Assignments to Full E Sample File

Once these variables are assigned to the Revision E Sample, the Full E Sample with 525 i post-strata must be mapped into the Revision E Sample. That is, each i in the Full E Sample must be associated with an i′ in the Revision E Sample. Based on pre-collapsed Age and Sex values, map each Full E Sample person into one of the following 32 EFULLGROUP categories. This mapping is based solely on the four digits of the variable EFULLSHORT. The variable EFULLGROUP will be assigned to the person-level Full E Sample File in addition to its corresponding F1 value.

Rules for Assigning Full E Sample People to an EFULLGROUP Category

EFULLGROUP	Description	If first two digits of EFULLSHORT are:	and 3rd digit of EFULLSHORT is:	and 4th digit of EFULLSHORT is:	Num and Den of F1 value is summed over EREVGROUP categories:
1	All Proxy cases	87-93	Any	Any	1
2	American Indians on Reservations (AIR) who are Non-Proxy	77-78	Any	Any	2
3	Non-Proxy/Non-AIR Nuclear Member 0-9 M&F	01-06, 08, 21-24, 37-40, 45-46, 48, 53-56, 69-70	1	0	3
4	Non-Proxy/Non-AIR Nuclear Member 10-17 M&F	01-06, 08, 21-24, 37-40, 45-46, 48, 53-56, 69-70	2	0	4
5	Non-Proxy/Non-AIR Nuclear Member 18-29 M	01-06, 08, 21-24, 37-40, 45-46, 48, 53-56, 69-70	3	1	5
6	Non-Proxy/Non-AIR Nuclear Member 18-29 F	01-06, 08, 21-24, 37-40, 45-46, 48, 53-56, 69-70	3	2	6
7	Non-Proxy/Non-AIR Nuclear Member 30-49 M	01-06, 08, 21-24, 37-40, 45-46, 48, 53-56, 69-70	4	1	7
8	Non-Proxy/Non-AIR Nuclear Member 30-49 F	01-06, 08, 21-24, 37-40, 45-46, 48, 53-56, 69-70	4	2	8
9	Non-Proxy/Non-AIR Nuclear Member 50+ M	01-06, 08, 21-24, 37-40, 45-46, 48, 53-56, 69-70	5	1	9
10	Non-Proxy/Non-AIR Nuclear Member 50+ F	01-06, 08, 21-24, 37-40, 45-46, 48, 53-56, 69-70	5	2	10
11	Non-Proxy/Non-AIR Other Member 0-9 M&F	13-14, 17-18, 20, 25-28, 33-34, 36, 41-44, 49-50, 52, 57-60	1	0	11
12	Non-Proxy/Non-AIR Other Member 10-17 M&F	13-14, 17-18, 20, 25-28, 33-34, 36, 41-44, 49-50, 52, 57-60	2	0	12

EFULLGROUP	Description	If first two digits of EFULLSHORT are:	and 3rd digit of EFULLSHORT is:	and 4th digit of EFULLSHORT is:	Num and Den of F1 value is summed over EREVGROUP categories:
13	Non-Proxy/Non-AIR Other Member 18-29 M	13-14, 17-18, 20, 25-28, 33-34, 36, 41-44, 49-50, 52, 57-60	3	1	13
14	Non-Proxy/Non-AIR Other Member 18-29 F	13-14, 17-18, 20, 25-28, 33-34, 36, 41-44, 49-50, 52, 57-60	3	2	14
15	Non-Proxy/Non-AIR Other Member 30-49 M	13-14, 17-18, 20, 25-28, 33-34, 36, 41-44, 49-50, 52, 57-60	4	1	15
16	Non-Proxy/Non-AIR Other Member 30-49 F	13-14, 17-18, 20, 25-28, 33-34, 36, 41-44, 49-50, 52, 57-60	4	2	16
17	Non-Proxy/Non-AIR Other Member 50+ M	13-14, 17-18, 20, 25-28, 33-34, 36, 41-44, 49-50, 52, 57-60	5	1	17
18	Non-Proxy/Non-AIR Other Member 50+ F	13-14, 17-18, 20, 25-28, 33-34, 36, 41-44, 49-50, 52, 57-60	5	2	18
19	Non-Proxy/Non-AIR Nuclear Member 0-17 M&F	07, 29-30, 32, 47, 71-72	6	0	3-4
20	Non-Proxy/Non-AIR Nuclear Member 18-29 M&F	07, 29-30, 32, 47, 71-72	3	0	5-6
21	Non-Proxy/Non-AIR Nuclear Member 30-49 M&F	07, 29-30, 32, 47, 71-72	4	0	7-8
22	Non-Proxy/Non-AIR Nuclear Member 50+ M&F	07, 29-30, 32, 47, 71-72	5	0	9-10
23	Non-Proxy/Non-AIR Other Member 0-17 M&F	16, 19, 35, 51, 73, 74, 76	6	0	11-12
24	Non-Proxy/Non-AIR Other Member 18-29 M&F	16, 19, 35, 51, 73, 74, 76	3	0	13-14
25	Non-Proxy/Non-AIR Other Member 30-49 M&F	16, 19, 35, 51, 73, 74, 76	4	0	15-16
26	Non-Proxy/Non-AIR Other Member 50+ M&F	16, 19, 35, 51, 73, 74, 76	5	0	17-18
27	Non-Proxy/Non-AIR Nuclear Member 0-29 M&F	31, 61-64, 79-82	8	0	3-6
28	Non-Proxy/Non-AIR Nuclear Member 30+ M&F	31, 61-64, 79-82	9	0	7-10
29	Non-Proxy/Non-AIR Other Member 0-29 M&F	09, 10, 12, 15, 65-66, 68, 75, 83-84, 86	8	0	11-14
30	Non-Proxy/Non-AIR Other Member 30+ M&F	09, 10, 12, 15, 65-66, 68, 75, 83-84, 86	9	0	15-18
31*	Non-Proxy/Non-AIR Nuclear Member 0+ M&F		0	0	3-10
32	Non-Proxy/Non-AIR Other Member 0+ M&F	11, 67, 85	0	0	11-18

* EFULLGROUP 31 was never assigned since this collapsing never occurred.

Note that except for Proxies and American Indians on Reservations, a Full E Sample person can be classified into four EREVGROUP categories. The last column in the table above indicates which EREVGROUP categories the F1N and F1D values should be summed over to obtain F1 for each value of EFULLGROUP.

For example, consider EFULLGROUP = 19: Non-Proxy/Non-AIR Nuclear Member 0-17 M&F. Compute F1 for EFULLGROUP = 19 as follows:

$$F1(EFULLGROUP=19) = \frac{(F1N(EREVGROUP=3) + F1N(EREVGROUP=4))}{(F1D(EREVGROUP=3) + F1D(EREVGROUP=4))}$$

Each person in the Full E Sample in EFULLGROUP = 19 has the same value of F1. The person-level Full E Sample File should include the variables EFULLGROUP and F1.

II. Revision P Sample (j′)

A. Assignments to Revision P Sample File

For the Revision P Sample, the measurement error correction post-strata (j′) depends on a person's mover status. Since mover status is not embedded in the Full P Sample post-stratum code (PFULLSHORT), person records are screened by mover status to assign them to their appropriate j′ category. Note, however, that the mover status code used for the numerator term is based on Revision Sample coding (MOVERPER_FINAL) while the denominator mover status code is based on production coding (BMOVPER). The variable BMOVPER is equivalent to the MOVERPER variable on the P Sample Person Dual System Estimation Output File documented in Haines (2001).

Both Inmovers and Outmovers in the Revision P Sample will be subdivided into two groups - Owner and Non-Owner. For the Revision P Sample Nonmovers, the measurement error correction post-strata are: American Indians on Reservations (AIR) and, for the Non-AIR cases, a cross of Tenure (Owner versus Non-Owner) with eight Age and Sex categories. Similar to what was done for the E sample, the P Sample j′ post-strata are required to be a subset of the j post-stratum definitions. As a result, the pre-collapsed Age and Sex categories on the Full P Sample are used to define the measurement error correction post-strata.

Both production and revision codes are available for all Revision P Sample people. The variables PFULLLONG and PFULLSHORT will be put on the Revision P Sample File. Use PFULLSHORT to assign people to one of the following 21 PREVGROUPN and PREVGROUPD categories. Also, the variables PT1 and PT2 should be copied from the Full P Sample file onto the Revision P Sample. Copy information from the Full P Sample File to the Revision P Sample File by matching Full P Sample people (using variables CLUSTER,

IL_MAP_SPOT, UNIT_ID, and PERID) to Revision P Sample people (using variables CLUST, MSN, WMSN and PER).

Each Revision P Sample person can be mapped into one of 21 PREVGROUPN (numerator) categories based on their revision codes, and into one of 21 PREVGROUPD (denominator) categories based on their production codes.   Note that this is a unique partitioning of the Revision P Sample, given either the revision coding **or** the production coding. This means that each person falls into one and only one of the 21 PREVGROUPN and REVGROUPD categories. Note that the production variables NEWAGE, SEX, and BMOVPER are used on the Revision P Sample file. The variables SEX and BMOVPER are equivalent to the Census 2000 A.C.E. production variables SEX and MOVERPER, respectively. The variable NEWAGE, which represents an imputed single year of age value, has been added as part of the A.C.E. Revision II production process. See Jones (2002) for details.

A. Inmovers

Assign inmovers as follows:

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Inmovers Based on Revision Coding (MOVERPER_FINAL=2)

PREVGROUPN	Description	If first two digits of PFULLSHORT are:	and:	and:
1	Owner	01-32, 41-44, 49-52, 57, 59, 61, 63	Any NEWAGE	SEX = 1 or 2
2	Non-Owner	33-40, 45-48, 53-56, 58, 60, 62, 64	Any NEWAGE	SEX = 1 or 2

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Inmovers Based on Production Coding (BMOVPER=2)

PREVGROUPD	Description	If first two digits of PFULLSHORT are:	and:	and:
1	Owner	01-32, 41-44, 49-52, 57, 59, 61, 63	Any NEWAGE	SEX = 1 or 2
2	Non-Owner	33-40, 45-48, 53-56, 58, 60, 62, 64	Any NEWAGE	SEX = 1 or 2

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For each of the two PREVGROUPN and PREVGROUPD inmover categories, calculate:

- The F5 numerator (F5N) by summing over all inmovers according to revision codes
- The F5 denominator (F5D) by summing over all inmovers according to production codes

This results in two numerator F5 values and two denominator F5 values. All people in PREVGROUPN = 1 on the Revision Sample P File have the same value of F5N. Likewise, all people in PREVGROUPD = 1 on the Revision Sample P File have the same value of F5D. Revision P Sample inmovers (based on revision coding) are assigned a value of PREVGROUPN and F5N while Revision P Sample inmovers (based on production coding) are assigned a value of PREVGROUPD and F5D.

B. Outmovers

Assign outmovers as follows:

Outmovers Based on Revision Coding (MOVERPER_FINAL=3)

PREVGROUPN	Description	If first two digits of PFULLSHORT are:	and:	and:
3	Owner	01-32, 41-44, 49-52, 57, 59, 61, 63	Any NEWAGE	SEX = 1 or 2
4	Non-Owner	33-40, 45-48, 53-56, 58, 60, 62, 64	Any NEWAGE	SEX = 1 or 2

Outmovers Based on Production Coding (BMOVPER=3)

PREVGROUPD	Description	If first two digits of PFULLSHORT are:	and:	and:
3	Owner	01-32, 41-44, 49-52, 57, 59, 61, 63	Any NEWAGE	SEX = 1 or 2
4	Non-Owner	33-40, 45-48, 53-56, 58, 60, 62, 64	Any NEWAGE	SEX = 1 or 2

For each of the two PREVGROUPN and PREVGROUPD outmover categories, calculate:

- The F3 numerator (F3N) by summing over all outmovers according to revision codes
- The F3 denominator (F3D) by summing over all outmovers according to production codes
- The F4 numerator (F4N) by summing over all outmovers according to revision codes
- The F4 denominator (F4D) by summing over all outmovers according to production codes

This results in two numerator F3 and F4 values and two denominator F3 and F4 values. All people in PREVGROUPN = 4 on the Revision P Sample File have the same value of F4N. Likewise, all people in PREVGROUPD = 3 on the Revision P Sample File have the same value of F3D. Revision P Sample outmovers (based on revision coding) are assigned a value of PREVGROUPN, F3N, and F4N while Revision P Sample outmovers (based on production coding) are assigned a value of PREVGROUPD, F3D, and F4D.

C. Nonmovers

Assign nonmovers as follows:

Nonmovers Based on Revision Coding (MOVERPER_FINAL=1)

PREVGROUPN	Description	If first two digits of PFULLSHORT are:	and:	and:
5	American Indians on Reservations (AIR)	61-62	Any NEWAGE	SEX = 1 or 2
6	Non-AIR/Owner 0-9 M&F	01-32, 41-44, 49-52, 57, 59, 63	$000 \leq NEWAGE \leq 009$	SEX = 1 or 2
7	Non-AIR/Owner 10-17 M&F	01-32, 41-44, 49-52, 57, 59, 63	$010 \leq NEWAGE \leq 017$	SEX = 1 or 2
8	Non-AIR/Owner 18-29 M	01-32, 41-44, 49-52, 57, 59, 63	$018 \leq NEWAGE \leq 029$	SEX=1
9	Non-AIR/Owner 18-29 F	01-32, 41-44, 49-52, 57, 59, 63	$018 \leq NEWAGE \leq 029$	SEX=2

10	Non-AIR/Owner 30-49 M	01-32, 41-44, 49-52, 57, 59, 63	$030 \le NEWAGE \le 049$	SEX=1
11	Non-AIR/Owner 30-49 F	01-32, 41-44, 49-52, 57, 59, 63	$030 \le NEWAGE \le 049$	SEX=2
12	Non-AIR/Owner 50+ M	01-32, 41-44, 49-52, 57, 59, 63	$NEWAGE \ge 050$	SEX=1
13	Non-AIR/Owner 50+ F	01-32, 41-44, 49-52, 57, 59, 63	$NEWAGE \ge 050$	SEX=2
14	Non-AIR/Non-Owner 0-9 M&F	33-40, 45-48, 53-56, 58, 60, 64	$000 \le NEWAGE \le 009$	SEX = 1 or 2
15	Non-AIR/Non-Owner 10-17 M&F	33-40, 45-48, 53-56, 58, 60, 64	$010 \le NEWAGE \le 017$	SEX = 1 or 2
16	Non-AIR/Non-Owner 18-29 M	33-40, 45-48, 53-56, 58, 60, 64	$018 \le NEWAGE \le 029$	SEX=1
17	Non-AIR/Non-Owner 18-29 F	33-40, 45-48, 53-56, 58, 60, 64	$018 \le NEWAGE \le 029$	SEX=2
18	Non-AIR/Non-Owner 30-49 M	33-40, 45-48, 53-56, 58, 60, 64	$030 \le NEWAGE \le 049$	SEX=1
19	Non-AIR/Non-Owner 30-49 F	33-40, 45-48, 53-56, 58, 60, 64	$030 \le NEWAGE \le 049$	SEX=2
20	Non-AIR/Non-Owner 50+ M	33-40, 45-48, 53-56, 58, 60, 64	$NEWAGE \ge 050$	SEX=1
21	Non-AIR/Non-Owner 50+ F	33-40, 45-48, 53-56, 58, 60, 64	$NEWAGE \ge 050$	SEX=2

Nonmovers Based on Production Coding (BMOVPER=1)

PREVGROUPD	Description	If first two digits of PFULLSHORT are:	and:	and:
5	American Indians on Reservations (AIR)	61-62	Any NEWAGE	SEX = 1 or 2
6	Non-AIR/Owner 0-9 M&F	01-32, 41-44, 49-52, 57, 59, 63	$000 \le NEWAGE \le 009$	SEX = 1 or 2
7	Non-AIR/Owner 10-17 M&F	01-32, 41-44, 49-52, 57, 59, 63	$010 \le NEWAGE \le 017$	SEX = 1 or 2
8	Non-AIR/Owner 18-29 M	01-32, 41-44, 49-52, 57, 59, 63	$018 \le NEWAGE \le 029$	SEX=1
9	Non-AIR/Owner 18-29 F	01-32, 41-44, 49-52, 57, 59, 63	$018 \le NEWAGE \le 029$	SEX=2
10	Non-AIR/Owner 30-49 M	01-32, 41-44, 49-52, 57, 59, 63	$030 \le NEWAGE \le 049$	SEX=1
11	Non-AIR/Owner 30-49 F	01-32, 41-44, 49-52, 57, 59, 63	$030 \le NEWAGE \le 049$	SEX=2
12	Non-AIR/Owner 50+ M	01-32, 41-44, 49-52, 57, 59, 63	$NEWAGE \ge 050$	SEX=1
13	Non-AIR/Owner 50+ F	01-32, 41-44, 49-52, 57, 59, 63	$NEWAGE \ge 050$	SEX=2
14	Non-AIR/Non-Owner 0-9 M&F	33-40, 45-48, 53-56, 58, 60, 64	$000 \le NEWAGE \le 009$	SEX = 1 or 2
15	Non-AIR/Non-Owner 10-17 M&F	33-40, 45-48, 53-56, 58, 60, 64	$010 \le NEWAGE \le 017$	SEX = 1 or 2
16	Non-AIR/Non-Owner 18-29 M	33-40, 45-48, 53-56, 58, 60, 64	$018 \le NEWAGE \le 029$	SEX=1
17	Non-AIR/Non-Owner 18-29 F	33-40, 45-48, 53-56, 58, 60, 64	$018 \le NEWAGE \le 029$	SEX=2
18	Non-AIR/Non-Owner 30-49 M	33-40, 45-48, 53-56, 58, 60, 64	$030 \le NEWAGE \le 049$	SEX=1
19	Non-AIR/Non-Owner 30-49 F	33-40, 45-48, 53-56, 58, 60, 64	$030 \le NEWAGE \le 049$	SEX=2
20	Non-AIR/Non-Owner 50+ M	33-40, 45-48, 53-56, 58, 60, 64	$NEWAGE \ge 050$	SEX=1
21	Non-AIR/Non-Owner 50+ F	33-40, 45-48, 53-56, 58, 60, 64	$NEWAGE \ge 050$	SEX=2

For each of the 17 PREVGROUPN and PREVGROUPD Nonmover categories, calculate:

- The F2 numerator (F2N) by summing over all nonmovers according to revision codes
- The F2 denominator (F2D) by summing over all nonmovers according to production codes
- The F6 numerator (F6N) by summing over all nonmovers according to revision codes
- The F6 denominator (F6D) by summing over all nonmovers according to production codes

This results in 17 numerator F2 and F6 values and 17 denominator F2 and F6 values. All people in each PREVGROUPN on the Revision P Sample File will have the same value of F2N and the same value of F6N. Likewise, all people in PREVGROUPD on the Revision P Sample File will have the same value of F2D and the same value of F6D. Revision P Sample nonmovers (based on revision coding) are assigned a value of PREVGROUPN, F2N, and F6N while Revision P Sample nonmovers (based on production coding) are assigned a value of PREVGROUPD, F2D, and F6D.

B. Assignments to Full P Sample File

Once the values of PREVGROUPN, PREVGROUPD, F2N, F2D, F3N, F3D, F4N, F4D, F5N, F5D, F6N, and F6D are assigned to the person-level Revision P Sample file, the Full P Sample with 480 j post-strata must be mapped into the Revision P Sample. That is, each j in the Full P Sample must be associated with a j′ in the Revision P Sample. Based on pre-collapsed Age and Sex values, map each Full P Sample person into one of the following 25 PFULLGROUP categories. This mapping is based on the four digits of the variable PFULLSHORT and mover status based on **production codes** (BMOVPER). The variables PFULLGROUP, F2, F3, F4, F5, and F6 will be assigned to the person-level Full P Sample File.

Rules for Assigning Full P Sample People to an PFULLGROUP Category

For Inmovers (BMOVPER=2) define:

PFULLGROUP	Description	If first two digits of PFULLSHORT are:	and 3rd digit of PFULLSHORT is:	and 4th digit of PFULLSHORT is:	Num of F5 value is summed over PREVGROUPN categories:	Den of F5 value is summed over PREVGROUPD categories:
1	Owner	01-32, 41-44, 49-52, 57, 59, 61, 63	Any	Any	1	1
2	Non-Owner	33-40, 45-48, 53-56, 58, 60, 62, 64	Any	Any	2	2

For Outmovers (BMOVPER=3) define:

PFULLGROUP	Description	If first two digits of PFULLSHORT are:	and 3rd digit of PFULLSHORT is:	and 4th digit of PFULLSHORT is:	Num of F3, F4 value is summed over PREVGROUPN categories:	Den of F3, F4 value is summed over PREVGROUPD categories:
3	Owner	01-32, 41-44, 49-52, 57, 59, 61, 63	Any	Any	3	3
4	Non-Owner	33-40, 45-48, 53-56, 58, 60, 62, 64	Any	Any	4	4

For Nonmovers (BMOVPER=1) define:

PFULLGROUP	Description	If first two digits of PFULLSHORT are:	and 3rd digit of PFULLSHORT is:	and 4th digit of PFULLSHORT is:	Num of F2, F6 value is summed over PREVGROUPN categories:	Den of F2, F6 value is summed over PREVGROUPD categories:
5	American Indians on Reservations (AIR)	61-62	Any	Any	5	5
6	Non-AIR/Owner 0-9 M&F	01-32, 41-44, 49-52, 57, 59, 63	1	0	6	6
7	Non-AIR/Owner 10-17 M&F	01-32, 41-44, 49-52, 57, 59, 63	2	0	7	7
8	Non-AIR/Owner 18-29 M	01-05, 07, 09-12, 14-20, 22-32, 41-44, 49-52, 59, 63	3	1	8	8
9	Non-AIR/Owner 18-29 F	01-05, 07, 09-12, 14-20, 22-32, 41-44, 49-52, 59, 63	3	2	9	9
10	Non-AIR/Owner 30-49 M	01-05, 07, 09-12, 14-20, 22-32, 41-44, 49-52, 59, 63	4	1	10	10
11	Non-AIR/Owner 30-49 F	01-05, 07, 09-12, 14-20, 22-32, 41-44, 49-52, 59, 63	4	2	11	11
12	Non-AIR/Owner 50+ M	01-05, 07, 09-12, 14-20, 22-32, 41-44, 49-52, 59, 63	5	1	12	12
13	Non-AIR/Owner 50+ F	01-05, 07, 09-12, 14-20, 22-32, 41-44, 49-52, 59, 63	5	2	13	13
14	Non-AIR/Non-Owner 0-9 M&F	33-40, 45-48, 53-56, 58, 60, 64	1	0	14	14
15	Non-AIR/Non-Owner 10-17 M&F	33-40, 45-48, 53-56, 58, 60, 64	2	0	15	15
16	Non-AIR/Non-Owner 18-29 M	33-40, 45-47, 53-55, 60, 64	3	1	16	16
17	Non-AIR/Non-Owner 18-29 F	33-40, 45-47, 53-55, 60, 64	3	2	17	17
18	Non-AIR/Non-Owner 30-49 M	33-40, 45-47, 53-55, 60, 64	4	1	18	18
19	Non-AIR/Non-Owner 30-49 F	33-40, 45-47, 53-55, 60, 64	4	2	19	19
20	Non-AIR/Non-Owner 50+ M	33-40, 45-47, 53-55, 60, 64	5	1	20	20
21	Non-AIR/Non-Owner 50+ F	33-40, 45-47, 53-55, 60, 64	5	2	21	21
22	Non-AIR/Owner 18+ M	06, 08, 13, 21, 57	7	1	8, 10, 12	8, 10, 12
23	Non-AIR/Owner 18+ F	06, 08, 13, 21, 57	7	2	9, 11, 13	9, 11, 13
24	Non-AIR/Non-Owner 18+ M	48, 56, 58	7	1	16, 18, 20	16, 18, 20
25	Non-AIR/Non-Owner 18+ F	48, 56, 58	7	2	17, 19, 21	17, 19, 21

The last two columns in the previous table indicate which PREVGROUPN and PREVGROUPD categories the F2N, F2D, F3N, F3D, F4N, F4D, F5N, F5D, F6N, and F6D values should be summed over to obtain the F2, F3, F4, F5, and F6 ratios for each PFULLGROUP value.

For example, consider PFULLGROUP = 22: Non-AIR/Owner 18+ M. Compute F2 for PFULLGROUP=22 as follows:

F2(PFULLGROUP=22) =

$$\frac{(F2N(PREVGROUPN=8) + F2N(PREVGROUPN=10) + F2N(PREVGROUPN=12))}{(F2D(PREVGROUPD=8) + F2D(PREVGROUPD=10) + F2D(PREVGROUPD=12))}$$

III. File Summary

Following is a summary of the variables that will be assigned to each person-level file.

A. Revision E Sample File

Input File: ESTIMATION$DISK:[REVACE.MISSINGDATA]EREVSAM.DAT
Output File: ESTIMATION$DISK:[REVACE.ESTIMATION]EREVSAM.DAT

Variable Description	Name	Length	Position
Full E Sample Long Post-Stratum Code	EFULLLONG	$7	862-868
Full E Sample Short Post-Stratum Code	EFULLSHORT	$4	869-872
Duplicate Probability of Link Outside A.C.E. Search Area (including links to Reinstates and Deletes)	PT1	10.8	873-882
Duplicate Probability of Link Outside A.C.E. Search Area (excluding links to Reinstates and Deletes)	PT2	10.8	883-892
Revision E Sample Group	EREVGROUP	2	893-894
F1 Numerator	F1N	25.10	895-919
F1 Denominator	F1D	25.10	920-944

B. Full E Sample File

Input and Output File: ESTIMATION$DISK:[REVACE.ESTIMATION]EFULLSAM.DAT

Variable Description	Name	Length	Position
Full E Sample Group	EFULLGROUP	2	508-509
Double Sampling Ratio Adjustment for Non-Duplicate Correct Enumerations	F1	25.10	510-534

C. Revision P Sample File

Input File: ESTIMATION$DISK:[REVACE.MISSINGDATA]PREVSAM.DAT
Output File: ESTIMATION$DISK:[REVACE.ESTIMATION]PREVSAM.DAT

Variable Description	Name	Length	Position
Full P Sample Long Post-Stratum Code	PFULLLONG	$7	1151-1157
Full P Sample Short Post-Stratum Code	PFULLSHORT	$4	1158-1161
Duplicate Probability of Link Outside A.C.E. Search Area (including links to Reinstates and Deletes)	PT1	10.8	1162-1171
Duplicate Probability of Link Outside A.C.E. Search Area (excluding links to Reinstates and Deletes)	PT2	10.8	1172-1181
Revision P Sample Numerator Group	PREVGROUPN	2	1182-1183
F2 Numerator	F2N	25.10	1184-1208
F3 Numerator	F3N	25.10	1209-1233
F4 Numerator	F4N	25.10	1234-1258
F5 Numerator	F5N	25.10	1259-1283
F6 Numerator	F6N	25.10	1284-1308
Revision P Sample Denominator Group	PREVGROUPD	2	1309-1310
F2 Denominator	F2D	25.10	1311-1335
F3 Denominator	F3D	25.10	1336-1360
F4 Denominator	F4D	25.10	1361-1385
F5 Denominator	F5D	25.10	1386-1410
F6 Denominator	F6D	25.10	1411-1425

D. Full P Sample File

Input and Output File: ESTIMATION$DISK:[REVACE.ESTIMATION]PFULLSAM.DAT

Variable Description	Name	Length	Position
Full P Sample Group	PFULLGROUP	2	541-542
Double Sampling Ratio Adjustment for Non-Duplicate Non-Mover Matches	F2	25.10	543-567
Double Sampling Ratio Adjustment for Outmover Matches	F3	25.10	568-592
Double Sampling Ratio Adjustment for Outmovers	F4	25.10	593-617
Double Sampling Ratio Adjustment for Inmovers	F5	25.10	618-642
Double Sampling Ratio Adjustment for Non-Duplicate Non-Movers	F6	25.10	643-667

IV. References

Haines, D. (2001), "Accuracy and Coverage Evaluation Survey: Computer Specifications for Person Dual System Estimation Output Files," DSSD Census 2000 Procedures and Operations Memorandum Series # Q-38.

Jones, J. (2002), "A.C.E. Revision II - Specification for the Age Imputation of P-Sample Persons with Missing or Invalid Age," DSSD A.C.E. REVISION II MEMORANDUM SERIES # PP-17.