MASTER FILE

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DSSD A.C.E. REVISION II MEMORANDUM SERIES #PP-24

MEMORANDUM FOR	Donna Kostanich Chair, A.C.E. Revision II Planning Group
From:	Deborah Fenstermaker)F Chair, A.C.E. Revision II Duplicate Subgroup
Prepared by:	Peter P. Davis Sample Design Staff Decennial Statistical Studies Division
Subject:	A.C.E. Revision II: Requirements for E- and P-sample Duplicate Link Files

The attached document contains the E- and P-sample Duplicate Link file requirements. The Accuracy and Coverage Evaluation (A.C.E.) Revision II Duplicate Subgroup will create the E- and P-sample Duplicate Link files. These files contain only links to census enumerations outside the A.C.E. search area. These files are inputs to the process that prepares the duplicate links for the A.C.E. Revision II estimation process. See DSSD A.C.E. REVISION II MEMORANDUM SERIES #PP-25 for the process requirements for preparing the duplicate links for estimation.

The A.C.E. Revision II Duplicate Subgroup maintains separate E- and P-sample Master Duplicate Link files. A duplicate link record consists of characteristics of the E- or P-sample record as well as characteristics of the census record to which it is linked. Duplicate links can occur across any geographic distance in the fifty states and the District of Columbia. Any one E- or P-sample record can have links to multiple census records. These Master Duplicate Link files contain duplicate links outside the scope of A.C.E. Revision II estimation such as duplicate links inside the A.C.E. block cluster. These file requirements state which records to extract for A.C.E. Revision II estimation.

E- and P-Sample Duplicate Link Files

Software Requirements Specifications

Participants:
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E- and P-sample Duplicate Link File Requirements

E-sample Duplicate Link File Requirements

The E-sample Duplicate Link file meets the following criteria:

1.   Contains all E-sample duplicate links to Census records (including reinstated and deleted records from the Housing Unit Duplication Operation) having a probability of duplication greater than zero.
        # $PT1 > 0$

2.   Contains only E-sample links to census records located outside the A.C.E. search area. ("Outside the A.C.E. search area" for Targeted Extended Search people corresponds to links to records outside the one ring of surrounding blocks. "Outside the A.C.E. search area" for non-Targeted Extended Search people corresponds to links to records outside the block cluster. All links to group quarters were outside the search area regardless of geography. A.C.E. clerks did not search for duplicates between housing units and group quarters in the same cluster.)
        #   OUTSIDE = '1'

3.   Contains E-sample links to E-sample Eligible, Group Quarters, or Reinstated and Deleted records.
        #   ETARGET = '1' (E-sample Eligible)
        #   ETARGET = '2' (Group Quarters)
        #   ETARGET = '3' (Reinstated)
        #   ETARGET = '4' (Deleted)

4.   Does not contain any E-sample links when the A.C.E. Final Match Code indicates the E-sample case had Insufficient Information for matching.
        #   FINMAT = 'KE'

5.   Includes a flag to identify non-response follow-up training example cases.
        #   NRFUTREX = '0' (Not a non-response follow-up training case)
        #   NRFUTREX = '1' (A non-response follow-up training case)

6.   Contains all variables from the E-sample Master Duplicate Link file in the attached record layout. See Attachment A.

P-sample Duplicate Link File Requirements

The P-sample Duplicate Link file meets the following criteria:

1. Contains all P-sample duplicate links to Census records (including reinstated and deleted records from the Housing Unit Duplication Operation) having a probability of duplication greater than zero.
   # $PT1 > 0$

2. Contains only P-sample links to census records located outside the A.C.E. search area. ("Outside the A.C.E. search area" for Targeted Extended Search people corresponds to links to records outside the one ring of surrounding blocks. "Outside the A.C.E. search area" for non-Targeted Extended Search people corresponds to links to records outside the block cluster. All links to group quarters were considered outside the search area regardless of the geography. For production, P-sample cases could match to persons in group quarters within the search area. Since duplicates between E-sample Eligible and group quarters were out-of-scope in production and now are being accounted for by the duplicate search, we are being consistent in the treatment of the P-sample links to group quarters found by the duplicate study.)
   # OUTSIDE = '1'

3. Contains only P-sample links to E-sample Eligible, Group Quarters, or Reinstated and Deleted records.
   # ETARGET = '1' (E-sample Eligible)
   # ETARGET = '2' (Group Quarters)
   # ETARGET = '3' (Reinstated)
   # ETARGET = '4' (Deleted)

4. Does not contain any P-sample links when the A.C.E. Final Match Code indicates the P-sample case had Insufficient Information for matching.
   # FINMAT = 'KP'
   # FINMAT = 'KI'

5. Contains P-sample nonmover, inmover, outmover, removed and unresolved links.
   # RSC = 'N' (Nonmover)
   # RSC = 'I' (Inmover)
   # RSC = 'O' (Outmover)
   # RSC = 'U' (Unresolved
   # RSC = 'R' (Removed)

6. Contains all variables from the P-sample Master Duplicate Link file in the attached record layout. See Attachment A.

E- and P-sample Duplicate Link Files

Below is the layout for the E- and P-sample Duplicate Link files. The layout is identical whether referring to the E or the P sample. For this reason, some P-sample variables may be blank when viewing characteristics that pertain to the E-sample and vice versa. This layout is separated by "Headers" which are in **bold**. These "Headers" represent the source of the variables contained within that section.

A.C.E. Revision II E- and P-sample Duplicate Link Files

Name	Variable Description	Position	Length
STATISTICAL MATCHING VARIABLES			
SID	Source (E- or P-sample) Person ID	001-019	19
	For E-sample records this is PUID(12)/PSEQ(2)/PNC(5)		
	For P-sample records this is CLUST(6)/MSN(5)/WMSN(4)/MOVER(1)/PER(2)		
	MOVER was a character variable set by Mule by recoding MOVERPER, RSC, and RPROB. The remaining variables are the unique identifier for a P-sample record.		
	Unique HU ID for E-sample record: first 12 characters of the person ID (SID): PUID from HCUF		
	Unique HU ID for P-sample record: first 15 characters of the person ID (SID): CLUST(6)/MSN(5)/WMSN(4)		
SCPAGE	Source Computed Age	020-022	3
SRMOB	Source Month of Birth	023-024	2
SRDOB	Source Day of Birth	025-026	2
TID	Target (Census) Person ID	027-045	19
	For Census records this is PUID(12)/PSEQ(2)/PNC(5)		
	Unique HU ID for Census records: first 12 characters of the person ID (SID): PUID from HCUF		
TCPAGE	Target Computed Age	046-048	3
TRMOB	Target Month of Birth	049-050	2
TRDOB	Target Day of Birth	051-052	2
BLOCKID	Blocking ID for regular 2nd-stage processing	053-060	8
IBLOCKID	Blocking ID for inverted 2nd-stage processing	061-068	8
MSCORE	Match score for modeling	069-078	10
	From 2nd-stage if HU to HU link		
	From 1st-stage if HU to GQ link		
	Blank if only from inverted processing		
FMSCORE	Match score for regular 1st stage processing	079-088	10

Name	Variable Description	Position	Length
IFMSCORE	Match score for inverted 1ˢᵗ stage processing	089-098	10
SMSCORE	Match score for regular 2ⁿᵈ stage processing	099-108	10
ISMSCORE	Match score for inverted 2ⁿᵈ stage processing	109-118	10

HCEF BLOCK RECORD CHARACTERISTICS FOR E SAMPLE (blank for P sample)
Formed by "S" concatenated with the HCEF variable name.

Name	Variable Description	Position	Length
SBKN	Collection block number of the source record	119-123	5
SBKP	Collection block part of the source record	124-124	1
SAIR	American Indian reservation/ANVSA/TDSA/TJSA of the source record	125-128	4
SAA	Assignment Area of source record	129-134	6
SACER	A.C.E. ring indicator of source record	135-135	1

HCEF HOUSING UNIT RECORD CHARACTERISTICS FOR E SAMPLE (blank for P sample)
Formed by "S" concatenated with the HCEF variable name.

Name	Variable Description	Position	Length
SMSOUR	MAF source flag of source record	136-137	2
SMAILD	Mail return check-in date MM/DD of source record	138-141	4
SUAA	Undeliverable as addressed (UAA) of the source record	142-142	1
SCEU	Coverage edit follow-up (CEFU) of the source record	143-143	1
SNRU	Non-response follow-up universe of the source record	144-144	1
SCIU	Coverage improvement follow-up (CIFU) of the source record	145-145	1
SUBSA	Units at basic street address of the source record	146-149	4
SSTENURE	"Is this house, apartment, or mobile home?" of the source record	150-150	1
SFTENURE	STENURE edit/allocation flag of the source record	151-151	1
SFINST	Final status of source record	152-152	1
SSFINST	Source of FINST and NP for source record	153-153	1
SRFT	Form type of source record HU	154-155	2
SRHHMEM	Household member (enumerator only) of source record	156-156	1
SNP	Estimated number of people of source record	157-158	2

HCEF PERSON RECORD CHARACTERISTICS FOR E SAMPLE (blank for P sample)
Formed by "S" concatenated with the HCEF variable name.

Name	Variable Description	Position	Length
SPFT	Form type of source record PER	159-160	2
SPRT	PER form type of source record	161-161	1
SQREL	Relationship of source record	162-163	2
SFREL	QREL edit/allocation flag of source record	164-164	1

HCUF HOUSING UNIT RECORD CHARACTERISTICS FOR E SAMPLE (blank for P sample)
Formed by "S" concatenated with the HCUF variable name with one exception, variable SHHMEM.

Name	Variable Description	Position	Length
SMAILS	Mail check-in source of source record	165-165	1
SFVU	Field verification universe of source record	166-166	1
SRSOURCE	Source of return (recode)(from DRF2 processing) of source record	167-168	2
SUSTAT	Unit status of source record	169-170	2

Name	Variable Description	Position	Length
SNRD	NRFU check-in month/day of source record	171-174	4
SNRS	NRFU status of source record	175-175	1
SNRC	NRFU vacancy status of source record	176-176	1
SFVS	Field verification status of source record	177-177	1
SCID	CIFU check-in month/day of source record	178-181	4
SCIS	CIFU status of the source record	182-182	1
SCIC	CIFU vacancy status of the source record	183-183	1
SREPDATE	Earliest form processing date of the source record	184-187	4
SRCMODE	Response collection mode of the source record	188-188	1
SHHMEM	Household member (enumerator only) of the source record	189-189	1

HCUF PERSON RECORD CHARACTERISTICS FOR E SAMPLE (blank for P sample)
Formed by "S" concatenated with the HCUF variable name.

Name	Variable Description	Position	Length
SPCMODE	Response collection mode of the source record	190-190	1
SPCLANG	Language of captured form of the source record	191-191	1

E- AND P-SAMPLE PERSON DUAL SYSTEM ESTIMATION VARIABLES

Name	Variable Description	Position	Length
CST	Current FIPS State Code	192-193	2
REGION	Census Region 1=Northeast 2=Midwest 3=South 4=West 0=Puerto Rico	194-194	1
DIV	Census Division 1=New England 2=Middle Atlantic 3=East North Central 4=West North Central 5=South Atlantic 6=East South Central 7=West South Central 8=Mountain 9=Pacific 0=Puerto Rico	195-195	1
AICIND	American Indian Country Indicators 0=Not American Indian Country 1=American Indian Reservation/Trust Land 2=Oklahoma Tribal Statistical Area (OTSA) 3=Alaska Native Village Statistical Area (ANVSA) 4=Tribal Designated Statistical Area (TDSA)	196-196	1

Name	Variable Description	Position	Length
TEA	Type of Enumeration Area	197-197	1
	1=Mailout/Mailback		
	2=Update/Leave		
	3=List/Enumerate		
	4=Remote Alaska (out of scope)		
	5=Rural Update/Enumerate		
	6=Military in Update/Leave		
	7=Urban Update/Leave		
	8=Urban Update/Enumerate		
	9=Mailout/Mailback to Update/Leave Conversion		
CCOU	Current FIPS County Code	198-200	3
TRACT	Pseudo-tract Number	201-206	6
CLUSTER	Cluster Number and Check Digit	207-212	6
BLOCK	Block Number and Suffix	213-218	6
LCO	Local Census Office	219-222	4
RACE	Race Code	223-224	2
	1=Other Race		
	2=Pacific Islander (PI)(includes Native Hawaiians)		
	3=PI and Other Race		
	4=Asian		
	5=Asian and Other Race		
	6=Asian and PI		
	7=Asian, PI and Other Race		
	8=American Indian or Alaska Native (AI)		
	9=AI and Other Race		
	10=AI and PI		
	11=AI, PI, and Other Race		
	12=AI and Asian		
	13=AI, Asian, and Other Race		
	14=AI, Asian, and PI		
	15=AI, Asian, PI, and Other Race		
	16=Black		
	17=Black and Other Race		
	18=Black and PI		
	19=Black, PI, and Other Race		
	20=Black and Asian		
	21=Black, Asian, and Other Race		
	22=Black, Asian, and PI		
	23=Black, Asian, PI, and Other Race		
	24=Black and AI		
	25=Black, AI, and Other Race		
	26=Black, AI, and PI		
	27=Black, AI, PI, and Other Race		
	28=Black, AI, and Asian		
	29=Black, AI, Asian, and Other Race		
	30=Black, AI, Asian, and PI		
	31=Black, AI, Asian, PI, and Other Race		
	32=White		
	33=White and Other Race		

Name	Variable Description	Position	Length
	34=White and PI		
	35=White, PI, and Other Race		
	36=White and Asian		
	37=White, Asian, and Other Race		
	38=White, Asian, and PI		
	39=White, Asian, PI, and Other Race		
	40=White and AI		
	41=White, AI, and Other Race		
	42=White, AI, and PI		
	43=White, AI, PI, and Other Race		
	44=White, AI, and Asian		
	45=White, AI, Asian, and Other Race		
	46=White, AI, Asian, and PI		
	47=White, AI, Asian, PI, and Other Race		
	48=White and Black		
	49=White, Black, and Other Race		
	50=White, Black, and PI		
	51=White, Black, PI, and Other Race		
	52=White, Black and Asian		
	53=White, Black, Asian, and Other Race		
	54=White, Black, Asian, and PI		
	55=White, Black, Asian, PI, and Other Race		
	56=White, Black, and AI		
	57=White, Black, AI, and Other Race		
	58=White, Black, AI, and PI		
	59=White, Black, AI, PI, and Other Race		
	60=White, Black, AI, and Asian		
	61=White, Black, AI, Asian, and Other Race		
	62=White, Black, AI, Asian, and PI		
	63=White, Black, AI, Asian, PI, and Other Race		
ST	Collection FIPS State Code	225-226	2
COU	Collection FIPS County Code	227-229	3
FINMAT	Final Match Code	230-231	2
FUFLAG	DSE Follow-up Flag Blank=No one in household needs follow-up 0=Someone in household needs follow-up but person doesn't 1=Person needs follow-up 2=Person needs follow-up (special question)	232-232	1
TESPER	TES Person Indicator 0=Not TES Person 1=TES Person	233-233	1
MATEIND	E-Sample Indicator of Primary Person 0=No Primary Person 1=Primary Person in E-Sample 3=Primary Person in Surrounding Block	234-234	1
FU_CODE1	After Follow-up Code	235-235	1

Name	Variable Description	Position	Length
FU_CODE2	Recoded After Follow-Up Code 1=Potentially fictitious (FU_CODE1 = "b") 2=Potentially lived elsewhere on census day (FU_CODE1 = "e", "f", or "g") 3=Person went to follow-up (FU_CODE2 ≠ 1 or 2) 8=Person went to follow-up (no information used) (FU_CODE1 is blank and FUFLAG = 1 or 2) 9=Person did not go to follow-up (FU_CODE1 is blank and FUFLAG = 0, 3, or blank)	236-236	1
TENURE2	Recoded Tenure 1=Owner 2=Renter	237-237	1
AGE2	Age Category 1=0-17 2=18-29 3=30-49 4=50+	238-238	1
RACE2	Recoded Race for Hispanic Origin Imputation 0=Missing 1=White 2=Other race or white and other race 3=Remaining race categories	239-239	1
TENIFL	Imputation Flag for Recoded Tenure 1=No Imputation 2=Imputation because of edit failure 3=Imputation because of missing value	240-240	1
AGEIFL	Imputation Flag for Age Category 1=No Imputation 2=Imputation because of edit failure 3=Imputation because of missing value	241-241	1
SEXIFL	Imputation Flag for Sex 1=No Imputation 2=Imputation because of edit failure 3=Imputation because of missing value	242-242	1
HISPIF	Imputation Flag for Recoded Hispanic Origin 1=No Imputation 2=Imputation because of edit failure 3=Imputation because of missing value	243-243	1
RACEIF	Imputation Flag for Race 1=No Imputation 2=Imputation because of edit failure 3=Imputation because of missing value	244-244	1

Name	Variable Description	Position	Length
BFUGP	E-Sample Before Follow-up Match Code Group 1=Matches needing follow-up 2=Possible matches 3=Nonmatches from partial household nonmatches 4=Nonmatches from whole-household nonmatches where HU matched in HU matching 5=Nonmatches from conflicting households where E-Sample HU was not in regular NRFU 6=Nonmatches from conflicting households where E-Sample HU was in regular NRFU (NRU=3) 7=Nonmatches from whole-household nonmatches where HU did not match during HU matching 8=Persons resolved before follow-up 9=Persons with insufficient information for matching 10=TES Persons	245-246	2
FIPS_MSA	MSA/CMSA FIPS Code 9999 = Non-MSA	247-250	4
MSAGROUP	MSA Group L=Large (U.S.) M=Medium (U.S.) S=Small (U.S.) X=Non-MSA (U.S.) 1=San Juan CMSA (PR) 2=Other MSA (PR) 3=Non-MSA (PR)	251-251	1
RETRATE	Tract-level Return Rate - See DSSD memos Q-38 and Q-48 for details	252-256	5
RRNUM	Numerator of Return Rate - See DSSD memos Q-38 and Q-48 for details	257-266	10
RRDEN	Denominator of Return Rate - See DSSD memos Q-38 and Q-48 for details	267-276	10
DOMAIN	A.C.E. Race/Hispanic Origin Domain 1=American Indian on Reservation 2=American Indian off Reservation 3=Hispanic 4=Non-Hispanic Black 5=Native Hawaiian or Pacific Islander 6=Non-Hispanic Asian 7=Non-Hispanic White or "Some other race"	277-277	1
AGESEX	Age/Sex Post-Stratification Variable 1=0-17 Male and Female 2=18-29 Male 3=18-29 Female 4=30-49 Male 5=30-49 Female 6=50+ Male 7=50+ Female	278-278	1
POSTSTR	A.C.E. Pre-Collapsed Post-Stratum Code - See DSSD memos Q-38 and Q-48 for details.	279-281	3
CPOSTSTR	A.C.E. Post-Collapsed Post-Stratum Code - See DSSD memos Q-38 and Q-48 for details.	282-284	3

11

Name	Variable Description	Position	Length
E-SAMPLE PERSON DUAL SYSTEM ESTIMATION VARIABLES (blank for P sample)			
ECLUSURB	Estimated Cluster Urbanicity 1=Urban with Population ≥ 250,000 2=Other Urban 3=Non-Urban	285-285	1
MPSIND	Indicator for Matching Person in P Sample Blank=Not matched N=Matched to non P Sample P=Matched to P Sample	286-286	1
MMSPOT	Matching Enhanced IL Map Spot Number	287-291	5
MUNIT_ID	Matching Within Map Spot Unit ID	292-295	4
MPERID	Matching A.C.E. Person ID	296-299	4
NESAMP	Total E-sample Persons in Household	300-301	2
INP	Number of Persons at this Housing Unit	302-305	4
RTENURE	Tenure 1=Owned with mortgage or loan 2=Owned free and clear, without mortgage 3=Rented for cash rent 4=Occupied without payment of cash rent 9=Missing	306-306	1
PAGE	Age 999=Missing	307-309	3
CPAGE	Computed Age 999=Missing	310-312	3
PSEX	Sex Code 1=Male 2=Female	313-313	1
PSPAN	Hispanic Code 1-Non Hispanic 2-Hispanic	314-314	1

Name	Variable Description	Position	Length
PRELSUP	Relationship to Reference Person	315-316	2
	1=Census Reference Person		
	2=Husband/wife		
	3=Natural born son/daughter		
	4=Adopted son/daughter		
	5=Stepson/stepdaughter		
	6=Brother/sister		
	7=Father/mother		
	8=Grandchild		
	9=Parent-in-law		
	10=Son-in-law/Daughter-in-law		
	11=Other relative		
	12=Roomer, boarder		
	13=Housemate/roommate		
	14=Unmarried partner		
	15=Foster child		
	16=Other nonrelative		
	17=Person from another form during linking		
	18=Person from another return during PSA		
	19=Missing		
NUMEDUP	Number of Duplicates with E-Sample Persons (for which person is primary)	317-317	1
NUMDUP	Number of Duplicates with Persons Subsampled Out of the E-Sample.	318-319	2
NRU	Nonresponse Follow-up Universe	320-320	1
	0=Universe not set		
	1=Not in NRFU, data received		
	2=Not in NRFU, but NRD, NRS, NRC, and NRPOP were set on DMAF by Update/Enumerate or List/Enumerate		
	3=in NRFU, Nonresponse		
	4=in NRFU, too late for mailout		
STRCDE	Structure Code	321-321	1
	1=Single Unit		
	2=Multi-unit		
EWGHT	E-Sample Weight (Trimmed Weight)	322-335	14.6
FAGE	HCEF Age Edit/Allocation Flag	336-336	1
	0=Consistent as reported		
	1=Age only		
	2=Date of birth only		
	3=Inconsistent age and date of birth		
	4=Allocated from hot deck		
	9=E-Sample person did not match to the HCEF		
FRACE	HCEF Race Edit/Allocation Flag	337-337	1
	0=As reported		
	1=Code changed through consistency edit		
	3=Classified from race response to Hispanic Origin question		
	4=Allocated from within household		
	5=Allocated from hot deck		
	9=E-Sample person did not match to the HCEF		

13

Name	Variable Description	Position	Length
FTENURE	HCEF Tenure Edit/Allocation Flag 0=As reported 1=Assigned by consistency check 4=Allocated from hot deck 9=E-Sample person did not match to the HCEF	338-338	1
FSPAN	HCEF Hispanic Origin Edit/Allocation Flag 0=1 reported origin 2=Multiple response given a unique Hispanic or Non-Hispanic code 3=Assign Hispanic from race code 4=Allocated from within household 5=Allocated from hot deck (surname used) 6=Allocated from hot deck (surname not used) 9=E-Sample person did not match to the HCEF	339-339	1
FSEX	HCEF Sex Edit/Allocation Flag 0=As reported 1=From first name 2=Edited 4=Allocated from hot deck 5=Allocated from consistency check 9=E-Sample person did not match to the HCEF	340-340	1
FREL	HCEF Relationship to Reference Person Edit/Allocation Flag 0=As reported from code box 1=As reported from write-in 2=Value changed for household consistency 4=Allocated from hot deck 5=Allocated from consistency check 9=E-Sample person did not match to the HCEF	341-341	1
RELATE2	Recoded Relationship to Reference Person 0=Missing or from another return 1=Spouse 2=Child 3=Sibling 4=Parent (includes parent-in-law) 5=Other relative (includes son/daughter-in-law) 6=Nonrelative 9=Census Reference Person	342-342	1
CEPROBI	Probability of Correct Enumeration-Initial	343-352	10.8
CEPROBF	Probability of Correct Enumeration-Final	353-363	11.8
ETESFINWT	E-sample Final TES-adjusted Weight	364-377	14.6

P-SAMPLE PERSON DUAL SYSTEM ESTIMATION VARIABLES (blank for E sample)

Name	Variable Description	Position	Length
FIPS_STA	FIPS State Code	378-379	2
FINOUTI	Final A.C.E. Outcome Code for Interview Day 1-3 are interviews 4-10 are noninterviews 11 is vacant 12 is delete	380-381	2
MID	Census Unit ID of Matching Census Person	382-393	12

14

Name	Variable Description	Position	Length
MSEQ	Census Return Sequence Number of Matching Census Person	394-395	2
MPNC	Computed Census Person Number of Matching Census Person	396-400	5
POSSPSC	Total Possible P-sample Persons in Household for Census Day (Final, after follow-up)	401-402	2
NDATDFC	Number of Data-Defined Possible P-sample Persons in Household for Census Day (Final, after follow-up)	403-404	2
POSSPSI	Total P-Sample Persons in Household for Interview Day	405-406	2
NDATDFI	Number of Data-Defined P-Sample Persons in Household for Interview Day	407-408	2
TENURE	Tenure (from the CAPI path in which the person was collected) 1=Own (with mortgage or own free and clear) 2=Rent 3=Occupy without payment 9=Missing	409-409	1
TOBA	Type of Basic Address 1=One-family house-detached or attached 2=Basic address with 2 or more housing units 3=Mobile home/trailer not in a park 4=Mobile home/trailer park 5=One-family unit in special place 6=Multi-unit in special place 7=Other	410-410	1
AGE	Age 999=Missing	411-413	3
SEX	Sex Code 1=Male 2=Female	414-414	1
HISP	Hispanic Code 1=Not Spanish/Hispanic/Latino 2=Mexican, Mexican-American, Chicano 3=Puerto Rican 4=Cuban 5=Other Spanish/Hispanic/Latino 9=Missing	415-415	1

Name	Variable Description	Position	Length
RELATE	Relationship to Reference Person 1=A.C.E. Reference Person 2=Husband/wife 3=Natural born or adopted son/daughter 4=Stepson/stepdaughter 5=Brother/sister 6=Father/mother 7=Grandchild 8=Other relative 9=Roomer, boarder, or foster child 10=Housemate/roommate 11=Unmarried partner 12=Other nonrelative 13 (Not Used in P-Sample file) 14=Missing	416-417	2
PRXYIN	Proxy/Nonproxy Respondent 1=Proxy 2=Nonproxy	418-418	1
MOVERPER	Person Mover Flag 1=Nonmover 2=Inmover 3=Outmover	419-419	1
MOVERHH	Household Mover Flag 1=Person from outmover household 2=Other	420-420	1
RSC	Computer Residence Status Code (A.C.E. Status Code) N=Nonmover I=Inmover O=Outmover U=Unresolved R=Remove	421-421	1
HISP2	Recoded Hispanic Origin 1=Non-Hispanic 2=Hispanic	422-422	1
RTYPE	Recoded Type of Basic Address 1=One-family 2=Apartments (2 or more) 3=Other (TOBA=3-7)	423-423	1
RELAT2	Recoded Relationship to Reference Person 0=Missing 1=Spouse 2=Child 3=Sibling 4=Parent 5=Other relative 6=Nonrelative 9=A.C.E. Reference Person	424-424	1
RPROB	Probability of Residence (Set to 0 for inmovers)	425-434	10.8

16

Name	Variable Description	Position	Length
MPROB	Match Probability (Set to 0 for inmovers and nonresidents)	435-445	11.8
PWGHT	Initial P-sample Weight (Trimmed Weight)	446-459	14.6
NIWGTO	P-sample Noninterview Adjusted Weight based on Census Day Interview Status	460-474	15.6
NIWGTI	P-sample Noninterview Adjusted Weight based on A.C.E. Interview Day Interview Status	475-489	15.6
PTESFINWT	P-sample Final TES-adjusted Weight for Census Day	490-504	15.6
RRATEIND	Return Rate Indicator - See DSSD memos Q-38 and Q-48 for details. 1=High 0=Low 9=Not Applicable	505-505	1

A.C.E. INTERVIEWING CHARACTERISTICS (blank for E sample)

Name	Variable Description	Position	Length
PRXFLG	Proxy Interview Blank is valid	506-506	1
INTFLG	Telephone Interview Blank is valid	507-507	1
INTDATE	Date of Interview	508-515	8
PRTYPE	Proxy Respondent Type	516-516	1

HCEF BLOCK RECORD CHARACTERISTICS FOR LINKED CENSUS RECORD
Formed by "T" concatenated with the HCEF variable name.

Name	Variable Description	Position	Length
TST	Collection FIPS State Code	517-518	2
TCOU	Collection FIPS County Code	519-521	3
TBKN	Collection Block Number of the Target Record	522-526	5
TBKP	Collection Block Part of the Target Record	527-527	1
TTEA	Type of Enumeration Area for the Target Record	528-528	1
TTRACT	Nonresponse Follow-up Tract of the Target Record	529-534	6
TAIR	American Indian Reservation/ANVSA/TDSA/TJSA of the Target Record	535-538	4
TAA	Assignment Area of the Target Record	539-544	6
TACER	A.C.E. Ring of the Target Record	545-545	1

HCEF HOUSING UNIT RECORD CHARACTERISTICS FOR LINKED CENSUS RECORD
Formed by "T" concatenated with the HCEF variable name.

Name	Variable Description	Position	Length
TMSOUR	MAF Source Flag of Target Record	546-547	2
TMAILD	Mail Return Check-in MM/DD of Target Record	548-551	4
TUAA	Undeliverable as Addressed (UAA) of Target Record	552-552	1
TCEU	Coverage Edit Follow-up (CEFU) of Target Record	553-553	1
TNRU	Nonresponse Follow-up Universe of Target Record	554-554	1
TCIU	Coverage Improvement Follow-up	555-555	1
TUBSA	Units at the Basic Street Address of Target Record	556-559	4
TSTENURE	"Is this House, Apartment, or Mobile Home" of Target Record	560-560	1

Name	Variable Description	Position	Length
TFTENURE	STENURE Edit/Allocation of Target Record	561-561	1
TRFT	Form Type of Target Record	562-563	2
TNP	Estimated Number of People of Target Record	564-568	5
TRHHMEM	Household Member (Enumerator Only) of Target Record	569-569	1

HCEF PERSON RECORD CHARACTERISTICS FOR LINKED CENSUS RECORD
Formed by "T" concatenated with the HCEF variable name.

Name	Variable Description	Position	Length
TPFT	Form Type of Target Record	570-571	2
TQSEX	Sex of Target Record	572-572	1
TQAGE	Age of Target Record	573-575	3
TQSPAN	Hispanic/Origin of Target Record	576-578	3
TQGQTYP	Person Group Quarter Type Code of Target Record	579-581	3
TFSEX	QSEX Edit/Allocation Flag of Target Record	582-582	1
TFAGE	QAGE Edit/Allocation Flag	583-583	1
TFSPAN	Hispanic Origin (QSPAN) Edit/Allocation Flag of Target Record	584-584	1
TFRACE	RACE (QRACE1 - QRACE8) Edit /Allocation Flag of Target Record	585-585	1
TFGQTYP	QGQTYPE Edit/Allocation Flag of Target Record	586-586	1
TPOSTSTR	A.C.E. Pre-collapsed Post-stratum Code	587-589	3
TRACERC	Race Recode of Target Record	590-591	2
TPRT	Person Form Type of Target Record	592-592	1
TQREL	Relationship of Target Record	593-594	2
TFREL	QREL Edit/Allocation Flag of Target Record	595-595	1

HCUF HOUSING UNIT RECORD CHARACTERISTICS FOR LINKED CENSUS RECORD
Formed by "T" concatenated with the HCUF variable name with one exception, THHMEM.

Name	Variable Description	Position	Length
TMAILS	Mail Check-in Source of Target Record	596-596	1
TFVU	Field Verification Universe of Target Record	597-597	1
TRSOURCE	Source of Return(recode)(from DRF2 processing) of Target Record	598-599	2
TUSTAT	Unit Status of Target Record	600-601	2
TNRD	NRFU Check-in MM/DD of Target Record	602-605	4
TNRS	NRFU Status of Target Record	606-606	1
TNRC	NRFU Vacancy Status of Target Record	607-607	1
TFVS	Field Verification Status of Target Record	608-608	1
TCID	CIFU Check-in MM/DD of Target Record	609-612	4
TCIS	CIFU Status of Target Record	613-613	1
TCIC	CIFU Vacancy Status of Target Record	614-614	1
TREPDATE	Earliest form processing date of Target Record	615-618	4
TRCMODE	Response Collection Mode of Target Record	619-619	1
THHMEM	Household Member (enumerator only) of Target Record	620-620	1

Name	Variable Description	Position	Length
TFINST	Final Status of Target Record	621-621	1
TSFINST	Source of FINST and NP for Target Record	622-622	1

HCUF PERSON RECORD CHARACTERISTICS FOR LINKED CENSUS RECORD
Formed by "T" concatenated with the HCUF variable name.

Name	Variable Description	Position	Length
TPCMODE	Response Collection Mode of Target Record	623-623	1
TPCLANG	Language of Captured Form of Target Record	624-624	1

STATISTICAL MODELING VARIABLES

Name	Variable Description	Position	Length
BPEOPLEM	Number of People in Source Modeling Unit E-sample–Modeling Unit is 1st 12 digits of Source ID P-sample–Modeling Unit is 1st 16 digits of Source ID (Includes Mover Status)	625-632	8
CLUSTGEO	Geographic Distance 1=Within Cluster 2=Surrounding Block 3=Outside Surrounding Block	633-640	8
COUNT	Number of 2nd Stage Matching Attempts of Source Model Unit Within Geographic Area (GEOCAT2)	641-648	8
ESAMPLE	E-sample Indicator	649-649	1
FS	First-Stage Indicator	650-650	1
GEOCAT	Geographic Category 1=Within Cluster 2=Surrounding Block 3=Outside Surrounding Block, Within Cluster 4=Different County, same State 5=Different State	651-658	8
GEOCAT2	Geographic Category 2 1=Block 2=Outside Block, Within Tract 3=Outside Tract, Within County 4=Different County, same State 5=Different State	659-666	8
LINK_TO_ESAMPLE	Is Target ID in the E-sample?	667-667	1
MPROBDUP	Probability of Not Observing a Set of Match Score or Better	668-675	8.6
NLINKS	Number of Links Between Source and Target Modeling Housing Units	676-683	8
NLINKSCAT	Category of NLINKS 1=Only 1 2=2 or more	684-684	1
ONE_M_C	Probability of Occurrence between (doesn't account for count)	685-692	8.6
PROBGE	Probability of Match Score of Link is Greater than or Equal to Observed Score	693-700	8.6
PSAMPLE	P-sample Indicator	701-701	1
SPROBDUP	Statistical Probability of Duplication	703-710	8.6

Name	Variable Description	Position	Length
AME	Merge Indicator First Character=Analysis File 1=Yes 0=No Second Character=Model File 1=Yes 0=No Third Character=Exact Match File 1=Yes 0=No	712-714	3
	EXACT MATCHING VARIABLES (Both P- and E-sample variables)		
EYAGEG	Age Group, 2-year Intervals from Exact Matching	715-717	3
EYAGE	Age as of Census Day from Exact Matching	718-720	3
ERPMOB	Month of Birth from Exact Matching	721-722	2
ERPDOB	Day of Birth from Exact Matching	723-724	2
EGQFLAG1	GQ Flag from Exact Matching of First Record 0=HU 1=GQ	725-725	1
EPSEX1	Sex of First Record	727-727	1
EFINST1	Final Status of First Record	728-728	1
EGQFLAG2	GQ Flag from Exact Matching of Second Record 0=HU 1=GQ	729-729	1
EPSEX2	Sex of Second Record	731-731	1
EFINST2	Final Status of Second Record	732-732	1
EDCOUNT	Count of Duplicate for Core Model from Exact Matching	733-737	5
ENCOUNTY	Number of Occurrences from Exact Matching	738-742	5
EMODEL	Model from Exact Matching 1=Core Model 2 - 4 as in Fay, R., "Probabilistic Models for Detecting Census Person Duplication," Proceedings of the Survey Research Methods Section, American Statistical Association, 2002.	743-744	2
EGROUP	Group from Exact Matching If Model=1 then group is COU fro HU pop If Model=2, 3, 4 then age category (out of 11)	745-748	4
EGQF1	Same as EGQFLAG1	749-749	1
EGQF2	Same as EGQFLAG2	750-750	1
EPROBDUP	Estimated Probability Not Including Reinstates and Deletes	752-759	8.6
EPASSIGN	Probability Assign from Exact Matching 1=Probability Assigned 0=Not Assigned	761-761	1

Name	Variable Description	Position	Length
ENAMEGRP	Name Group from Exact Matching C=Common Non-Hispanic D=Less Common Non-Hispanic N=Unlisted S=Common Hispanic	762-762	1
EGEO	Geographic Distance from Exact Matching 1=County 2=Within State 3=Different State	763-763	1
EDCOUNTF	Count of Duplicates for Core Model from Exact Matching Including Reinstates and Deletes	764-768	5
ENCOUNTYF	Number of Occurrences from Exact Matching Including Reinstates and Deletes	769-773	5
EMODELF	Number of Occurrences Including Reinstates and Deletes 1=Core Model 2 - 4 as in Fay, R., "Probabilistic Models for Detecting Census Person Duplication," Proceedings of the Survey Research Methods Section, American Statistical Association, 2002.	774-775	2
EGROUPF	Group from Exact Matching Including Reinstates and Deletes If Model=1 then group is COU fro HU pop If Model=2, 3, 4 then age category (out of 11)	776-779	4
EPROBDUPF	Estimated Probability Including Reinstates and Deletes	781-788	8.6
EPASSIGNF	Probability Assign from Exact Matching Including Reinstates and Deletes 1=Probability Assigned 0=Not Assigned	790-790	1

EXACT MATCHING VARIABLES (P-sample variables only)

Name	Variable Description	Position	Length
EYAGEP	Reported P-sample Age	791-793	3
EPFIPS	State Code for P-sample Record	794-795	2
EPCOU	County Code for P-sample Record	796-798	3
ECPAGEADJ	Adjustment to P-sample Age to Match Census	799-800	2

EXACT MATCHING VARIABLES (E-sample variables only)

Name	Variable Description	Position	Length
ORDER12	Record Indicator for Exact Matching st=Source is Record 1 Target is Record 2 ts=Source is Record 2 Target is Record 1	801-802	2

DUPLICATE LINK ANALYSIS VARIABLES

Name	Variable Description	Position	Length
NRFUTREX	Non-response Follow-up Training Example Case 1=Yes 0=No	803-803	1
ETARGET	Target Record Indicator 1=E-sample Eligible 2=GQ 3=Reinstate 4=Delete	804-804	1

Name	Variable Description	Position	Length
OUTSIDE	Outside A.C.E. Search Area 1=Yes 0=No	805-805	1
PROBDUPF	Initial Probability of Duplication with Links to Reinstates and Deletes	807-814	8.6
ADJCELL1	Adjustment Cell for Probability of Duplication with Links to Reinstates and Deletes	816-820	5
SEST11	Weighted Estimate of (1 - Exact probability) for exact links where statistical probability equal to 1. For probability with links to reinstates and deletes.	822-838	17.6
SEST12	Weighted Estimate of Exact probability for exact links where statistical probability equal to 0. For probability with links to reinstates and deletes.	840-856	17.6
TPROBFACTOR1	Untruncated probability factor for probability with links to reinstates and deletes.	858-869	12.8
PROBFACTOR1	Probability factor (after truncation) for probability with links to reinstates and deletes.	871-882	12.8
PROBDUP	Initial Probability of Duplication without Links to Reinstates and Deletes	884-891	8.6
ADJCELL2	Adjustment Cell for Probability of Duplication without Links to Reinstates and Deletes	893-897	5
SEST21	Weighted Estimate of (1 - Exact probability) for exact links where statistical probability equal to 1. For probability without links to reinstates and deletes.	899-915	17.8
SEST22	Weighted Estimate of Exact probability for exact links where statistical probability equal to 0. For probability without links to reinstates and deletes.	917-933	17.8
TPROBFACTOR2	Untruncated probability factor for probability without links to reinstates and deletes.	935-946	12.8
PROBFACTOR2	Probability factor (after truncation) for probability without links to reinstates and deletes.	948-959	12.8
PT1	Duplication Probability of E-sample/P-Sample Link Outside A.C.E. Search Area, Includes Links to Reinstated and Deleted Census Records	961-970	10.8
PT2	Duplication Probability of E-sample/P-Sample Link Outside A.C.E. Search Area, Does Not Include Links to Reinstated and Deleted Census Records	972-981	10.8