



MASTER FILE

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DSSD CENSUS 2000 PROCEDURES AND OPERATIONS MEMORANDUM SERIES #L-6
(Revised)

MEMORANDUM FOR Michael Longini
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Subject: Specification for Census 2000 Final Response Rate for the
'90 Plus Five Project

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This memorandum defines the method of calculating the Census 2000 Final Response Rates used for the '90 Plus Five component of the How America Knows What America Needs (HAKWAN) program. These rates were posted on September 19, 2000, on the '90 Plus Five internet site that displayed the Census 2000 Initial Response Rates in March and April of 2000. They provided the final verdict for the achievement of Census 2000 response goals for the entities in the '90 Plus Five universe. Note that this specification for the Census 2000 Final Response Rate was finalized well after the actual calculation of the rates rather than serving as a request for their calculation. Informal exchanges provided the methodology for calculating the rates at the time that they were generated.

Census 2000 Final Response Rates were calculated based on Decennial Master Address File (DMAF) variable values. For each entity, the Census 2000 Final Response Rate was not less than the Census 2000 Initial Response Rate as posted publicly on April 25, 2000. Census 2000 Final Response Rates were calculated by dividing the numerator by the denominator, multiplying by 100, and rounding the result to the nearest whole integer.

To be part of the denominator, a housing unit satisfied the following criteria. (See Attachment 1 for a list of the DMAF variables referenced below and their values.) The housing unit must have been a part of the universes described in steps A, B, and C below, but it could **not** be a member of that universe's subset described in step D.

- A. The housing unit appeared in one of the entities of interest. Geography Division (GEO) and Decennial Statistical Studies Division (DSSD) created a file which describes all of the counties and functioning governmental units as of January 1, 1999.

These 38,146 entities represent the same universe of 38,147 that was used for the calculation of the Census 2000 Initial Response Rates, with a couple of exceptions. One entity (the city of Hudson in Ohio) not included in the March and April postings was added for the September posting. Two entities that were included previously were removed for disclosure reasons, as DMAF changes since the earlier postings pushed their housing unit count below the eight housing unit lower bound.

- B. The housing unit fell under one of the applicable blocks found on the DMAF based upon collection geography. GEO produced a universe file of blocks which contained mailback areas (TEAs 1, 2, 6, 7, and 9) for the governmental entities defined in step A above. Block variables found in the Collection GRFC Index File section of the DMAF were used by Decennial Systems and Contracts Management Office (DSCMO) to identify the appropriate corresponding housing units for each entity that were to have a calculated Census 2000 Final Response Rate. A given housing unit qualified for the denominator if corresponding block variables in the Collection GRFC Index File portion of the DMAF satisfied...

...the applicable blocks (provided for DSCMO by GEO) defined for the project via variables **BKN** and **BKP** and linked back to the step A geocode universe via variables **CST**, **CCOU**, **MCD**, **PLACE**, **AIR**, and **CCITY**

AND

(TEA = 1 or 2 or 6 or 7 or 9).

- C. The housing unit must have been part of the nonresponse followup (NRFU) eligible universe and thus part of the NRFU listing pages (regardless of whether or not it was designated for a NRFU visit). A given housing unit qualified for the denominator if corresponding housing unit variables from the DMAF Operational File satisfied...

NRU = 1, 2, 3, or 4.

- D. Removed from the entity denominators described by steps A, B, and C were those housing units which had a surviving MAF ID. The presence of this ID indicates that the housing unit is a duplicate of another housing unit that is already on the file. In terms of the DMAF variables, a given housing unit was excluded from the Census 2000 Final Response Rate denominator if corresponding housing unit variables from the DMAF Operational File records satisfied...

SMAFID ≠ “ ” AND SMAFID ≠ 000000000000.

Note: “ ” refers to a blank value.

A housing unit was counted as a respondent in the Census 2000 Final Response Rate if there was a corresponding mail, Telephone Questionnaire Assistance (TQA), internet, or Be Counted Form response. It was also counted if it was included in the Coverage Edit Followup (CEFU) operation. In terms of the DMAF variables, a given housing unit qualified for the Census 2000 Final Response Rate numerator if it satisfied the above criteria for the denominator (steps A, B, C, and D) and if corresponding DMAF Operational File records satisfied...

[DC(1) = 1 or DC(2) = 1 or DC(3) = 1 or DC(4) = 1]

OR

CEU ≠ 0.

Though all non-zero surviving MAF ID housing units were removed from the denominator as mentioned in step D, their data was intended to have affected the numerator. If the duplicate MAF ID met the numerator criteria, then the original MAF ID to which it matched was planned to have counted toward the numerator. However, though this step was taken for the Census 2000 Initial Response Rates, it was not done for the Census 2000 Final Response Rates.

The Census 2000 Final Response Rate file was provided by DSCMO for Systems Support Division (SSD), which prepared the rates for the internet by linking them to the entity file mentioned in step A.

Again, a Census 2000 Final Response Rate was calculated for each of the entities described in step A by dividing the number of housing units in the numerator by the number of housing units in the denominator, multiplying by 100, and rounding to the nearest whole integer. Rounding to the nearest integer rates that had already been rounded to the nearest tenth actually produced some rounding error that would have been generous to theoretically about five percent of the entity universe. If a Census 2000 Final Response Rate had raw tenths and hundredths digits of .45, .46, .47, .48, or .49, then the rate would have been rounded up at the integer level. The Census 2000 Final Response Rate was not allowed to be lower than the last Census 2000 Initial Response Rate released to the internet on April 25, 2000.

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DMAF Variables and Values

From the Collection GRFC Index File

BKN	Collection Block Number
BKP	Block Part
TEA	Type of Enumeration Area
	1 = Mailout Mailback
	2 = Update Leave
	3 = List Enumerate
	4 = Remote List Enumerate
	5 = Update Enumerate
	6 = Military in Update Leave Area
	7 = Urban Update Leave
	9 = Update Leave (converted from TEA 1)
CST	Current FIPS State Code
CCOU	Current FIPS County Code
MCD	Minor Civil Division Code
PLACE	Census Incorporated Place Code
AIR	American Indian Reservation Code
CCITY	Consolidated City Code

From the DMAF Operational Files

SMAFID	Surviving MAF and DMAF ID
	If this field is neither blank nor zero-filled, it implies that the housing unit is a duplicate record of the twelve digit housing unit ID which it contains. If the field is blank, it implies that the housing unit is not a duplicate. (For any pair of IDs, this reference only goes one way. For example, if two or more records refer to the same housing unit, then one of the records would have a blank or zero-filled SMAFID value.)
DC(1)	Mail Return Data Capture (paper)
DC(2)	Mail Return Data Capture (CATI)
DC(3)	Mail Return Data Capture (Internet)
DC(4)	Mail Return Data Capture (Be Counted)
	Possible values for the DC variables are:
	0 = None
	1 = Some Data Capture

NRU Nonresponse Followup (NRFU) Universe
0 = Universe not set
1 = Not in NRFU, data received
2 = Not in NRU; but NRD, NRS, NRC, and NRPOP set by Update/Enumerate or
 List/Enumerate
3 = In NRFU; Nonresponse
4 = In NRFU: Too late for mailout

CEU Coverage Edit Followup (CEFU) Universe
0 = Not sent to CEFU
1 = Sent for Large Household
2 = Sent for Possible Large Household
3 = Sent for Count Difference - High
4 = Sent for Count Difference - Low