

Local Census Office Profile for Census 2000

FINAL REPORT

This evaluation study reports the results of research and analysis undertaken by the U.S. Census Bureau. It is part of a broad program, the Census 2000 Testing, Experimentation, and Evaluation (TXE) Program, designed to assess Census 2000 and to inform 2010 Census planning. Findings from the Census 2000 TXE Program reports are integrated into topic reports that provide context and background for broader interpretation of results.

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PURPOSE

The Local Census Office Profile for Census 2000 is a database of a wide variety of variables aggregated at the Local Census Office level. Data were produced specifically for the Local Census Office database, which also contains data from Census 2000 evaluations. The Local Census Office profile contains data from the following types of files and systems: address frame files, data processing files, and field tracking systems. It contains more than 1400 statistics for each of the 520 Local Census Offices. These data include total housing counts, occupied housing counts, vacant housing counts, total population counts, response rates, various operation summaries as well as many demographic characteristics. The database is intended to provide internal Census Bureau researchers and planners a rich comprehensive dataset which will add a historical perspective and provide benchmarks for planning the 2010 Census.

1. BACKGROUND

In past censuses and tests, there was no plan to produce local field office statistics across multiple census programs. Since no program was developed for the 1990 Census programs, statistics at the District Office (DO) level were not available for Census 2000 planning activities or tests. In an effort to improve and enhance planning for the 2010 Census, a profile of the Census 2000 Local Census Offices (LCOs) was planned as part of the Census 2000 Testing, Experimentation and Evaluation Program. Profile results will be used by internal Census Bureau researchers for historical purposes and to provide benchmarks for future operations. The Local Census Office Profile evaluation report does not include analysis of the data. For a brief description of terminology used in this report, refer to the Local Census Office Profile Glossary in the Appendix.

2. METHODOLOGY

2.1 Data Sources

2.1.1 Combination File

The basis for the LCO Profile Evaluation data file was the Combination (COMBO) File. This file was created by combining the March 2001 Master Address File (MAF) Extract data with selected data from the Decennial Response File (DRF-2), the Decennial Master Address File (DMAF), the Hundred Percent Census Unedited File (HCUF), and the Hundred Percent Census Edited File (HCEF). For a brief description of the files and other terminology used in this report, refer to the Local Census Office Profile in the Appendix.

2.1.2 Return and Response Rates

Return and response rates from the Census 2000 Response and Return Rates Evaluations were appended to the LCO file. These evaluations are titled "Census 2000 Mail Response Rates," A7.a (U.S. Census Bureau of the Census, 2003) and "Census 2000 Mail Return Rates," A7.b (U.S. Census Bureau of the Census, 2003).

2.1.3 Nonresponse Followup

Nonresponse Followup data from the evaluation H.5, "Nonresponse Followup (NRFU) for Census 2000" (U.S. Census Bureau of the Census, 2002) were appended to the LCO file. These data include occupied units with no population count, status in Nonresponse Followup by form type, respondent type by form type and return responses by form type.

2.1.4 Coverage Improvement Followup

Coverage Improvement Followup data from the evaluation I.4, "Coverage Improvement Followup (CIFU) for Census 2000" (U.S. Census Bureau of the Census, 2003) were appended to the LCO file. These data include status in Coverage Improvement Followup by form type, respondent type by form type and return response by form type.

2.1.5 Residual Nonresponse POP 99 Workload

The POP 99 workloads for the Residual Nonresponse operation were obtained from the Decennial Management Division (DMD) Tracking Database and appended to the LCO file. A POP 99 is defined by the Census Bureau as an occupied unit where the population in the unit is unknown.

2.1.6 Start and Finish Dates

For Nonresponse Followup and Coverage Improvement Followup operations, start and finish dates, and for Field Verification operation, return and keying dates were obtained from the Technologies Management Office (TMO) Data Warehouse and appended to the LCO file.

The NRFU “start” date is defined as the day the first NRFU enumerator questionnaire was checked into the Operations Control System (OCS) 2000. The NRFU “finish” date is defined as the day the last NRFU enumerator questionnaire was checked into the OCS 2000 (U. S. Bureau of the Census, 2002).

Similarly, the CIFU “start” date is defined as the day the first CIFU enumerator questionnaire was checked into the Operations Control System (OCS) 2000. The CIFU “finish” date is defined as the day the last CIFU enumerator questionnaire was checked into the OCS 2000. This information was retrieved from the data warehouse by the attributes “First Check-in Date” and “Last Check-in Date” (U. S. Bureau of the Census, 2003).

2.2 Statistics

The LCO Profile evaluation details statistics across 16 general topics:

- total housing units in the DMAF
- total occupied housing units in Census 2000
- total vacant housing units in Census 2000
- total deleted housing units on the DMAF but not included in Census 2000
- total UAA forms identified by the United States Postal Service
- number of housing units by type of address
- demographics of the householder
- population counts
- household size distribution
- mail response rate
- mail return rate
- Nonresponse Followup workload
- Coverage Improvement Followup workload
- Field Verification workload
- start and finish dates for NRFU, CIFU, and return and keying dates for FV
- additional statistics calculated using data produced in the previous 15 categories

Across the 16 sections, more than 1400 statistics were produced for each of the 520 LCOs.

2.3 Application of Quality Assurance Procedures

We applied quality assurance procedures throughout the creation of this report. They encompassed how we determined evaluation methods, created specifications for project procedures and software, designed and reviewed computer systems, developed clerical and computer procedures, tabulated data, and prepared this report

3. LIMITATIONS

The tabulated data are limited by the quality of the source data files outlined in Section 2.1. In addition, tabulation was based on variables and operations involved in the evaluation.

4. RESULTS

For each variable defined in the LCO profile, the following statistics were provided at the United States level with and without the inclusion of Puerto Rico LCOs:

- number of LCOs where the statistics were not equal to zero
- total
- mean
- minimum value
- maximum value

Because the data generated for this evaluation is intended for internal Census Bureau researchers, the resulting data was produced but not included in this report.

5. RECOMMENDATIONS

In order to preserve data for historical purposes and to develop benchmarks for future censuses, a profile of the Local Census Offices similar to this one should be conducted for the 2010 Census. In addition, a profile of the Local Census Offices should be created for the 2010 Census to aid in planning activities for 2020 Census.

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Appendix: Local Census Office Profile Glossary

Combination File (COMBO) - A file created in the Decennial Statistical Studies Division which combines the March 2001 Master Address File (MAF) Extract data with selected data from the Decennial Response File (DRF-2), the Decennial Master Address File (DMAF), the Hundred Percent Census Unedited File (HCUF), and the Hundred Percent Census Edited File (HCEF).

Coverage Edit Followup (CEFU) - A telephone operation in which telephone agents contracted by the Census Bureau called households whose census responses failed population count discrepancies and large household edits. These edits were performed only for mailback and Internet responses. This edit includes the Large Household Followup.

Coverage Improvement Followup (CIFU) - A census field operation during which addresses previously identified as vacant or previously deleted from the Master Address File were verified to be sure that their “vacant” or “deleted” status was correct. If the unit was occupied on Census Day, a completed questionnaire was obtained. Also enumerated in CIFU were addresses identified by governmental units for the New Construction program, late-added addresses identified during update/leave and through update partnership efforts with the U.S. Postal Service, and addresses for which mail return questionnaires were lost or returned blank. Field staff visited these addresses to determine the status of each address as of Census Day. If the housing unit was occupied on Census Day, enumerators completed a questionnaire for the address.

Decennial Master Address File (DMAF) - An extract of the Master Address File that the Census Bureau used, with added fields, to control and track the operations and programs of Census 2000. The DMAF supported long-form sampling, questionnaire mailout, response check-in, tracking and reporting, and field enumeration operations. For example, census staff used the DMAF to create address files for questionnaire labeling and delivery and for the check-in of questionnaires and enumerator interview form returns. The universes for field enumeration operations, notably Nonresponse Followup and Coverage Improvement Followup, were extracted from the DMAF. The Census Bureau periodically updated the DMAF with address additions, deletions, and corrections from census and other operations.

Decennial Management Division (DMD) - The DMD directs and monitors the decennial census. It coordinates and provides project management for all census operations; maintains the Cost Model and the Executive Information System, which includes the Master Activity Schedule and the Cost and Progress Reporting System; manages the decennial budget; manages decennial communications, issue resolution/change control, and requirements documentation; and directs development of the census plan.

Decennial Response File (DRF) - A file that contains every response to the census from all sources. The Primary Selection Algorithm was applied to this file to unduplicate people from multiple returns for a housing unit and to determine the housing unit record and the people to include at the housing unit. The DRF was then combined with the Decennial Master Address File to create the Census Unedited File.

Delivery Sequence File (DSF) - A U.S. Postal Service (USPS) computer file containing all mailing addresses serviced by the USPS. The USPS continuously updates the DSF as its letter carriers identify addresses for new delivery points and changes in the status of existing addresses. The Census Bureau uses the DSF as a source for maintaining and updating its Master Address File.

Decennial Statistical Studies Division (DSSD) - Develops mathematical and statistical techniques for the design and conduct of a census.

Field Verification (FV) - For questionnaires without Master Address File identification numbers, enumerators verified the existence of units that had been geocoded to a census block, but did not match an address in the Master Address File. See no identification number, Invalid Return Detection, and Local Update of Census Addresses Field Verification.

Hundred Percent Census Edited File (HCEF) - A computer file that contains the edited characteristics and records for all households and people in Census 2000. The edits are performed on the Hundred Percent Census Unedited File. The edits include consistency edits and imputation for items or people where the data are insufficient for the hundred percent data items from both the short- and long-form questionnaires. The HCEF provided the census counts for apportionment purposes.

Hundred Percent Census Unedited File (HCUF) - The Decennial Response File was combined with the Decennial Master Address File to create the HCUF and the Sample Census Unedited File. The HCUF contains the individual responses to the hundred percent data items from both the short- and long-form questionnaires.

Local Census Office (LCO) - A temporary office established for Census 2000 data collection purposes. These offices managed address listing field work, conducted local recruiting, and visited living quarters to conduct various Census 2000 operations. Called district office in previous censuses.

Master Address File (MAF) - A computer file of every address and physical/location description known to the Census Bureau, including their geographic locations. The file was created by combining the addresses in the 1990 address file with U.S. Postal Service Delivery Sequence Files, and supplementing this with address information provided by state, local, and tribal governments. Census Bureau staff updated and supplemented the file with address information obtained by several census programs. The MAF is linked to the TIGER[®] database. The MAF was used to create the Decennial Master Address File, which provided the addresses for mailing and delivery of Census 2000 questionnaires. See Decennial Master Address File.

Nonresponse Followup (NRFU) - An operation whose objective is to obtain completed questionnaires from housing units for which the Census Bureau did not have a completed questionnaire in mail census areas (mailout/mailback, update/leave, and urban update/leave). Enumerators visited addresses for which the Census Bureau had no questionnaire and no Internet or telephone response.

Operations Control System (OCS) - One of the decennial field interface systems used for control, tracking, and progress reporting for all field operations conducted for the census, including production of materials used by field staff to do their work. It was one system of the Decennial Field Interface.

Residual Nonresponse (RNR) - Involves enumeration of housing units from the original NRFU universe for which there has been no questionnaire data capture. However, a housing unit included in Coverage Improvement Followup will not be included in R-NRFU. If all the NRFU questionnaires from a Local Census Office (LCO) are data-captured by the universe determination date for R-NRFU, the LCO will not have an R-NRFU workload.

Response Rate - Mail response rate is a measure of the Nonresponse Followup (NRFU) workload. It refers to the number of housing units with corresponding non-blank questionnaires checked in by the late cut for NRFU over the number of housing units that were in the mailback universe. The calculation of these rates is restricted to housing units that are in one of the mailback Type of Enumeration Areas (TEAs) - Mailout/Mailback, Update/Leave, Military, Urban Update/Leave, or Mailout/Mailback converted to Update/Leave.

Mail Return Rate - Mail return rate is a measure of respondent cooperation in mailback areas. It refers to the number of occupied housing units with corresponding non-blank questionnaires checked in by the late cut for NRFU over the number of occupied housing units. The calculation of these rates is restricted to housing units that are in one of the mailback TEAs - Mailout/Mailback, Update/Leave, Military, Urban Update/Leave, or Mailout/Mailback converted to Update/Leave.

Technologies Management Office (TMO) Decennial Data Warehouse - The TMO data warehouse is a repository for data from the OCS 2000 and the Pre-Appointment Management System/Automated Decennial Administrative Management System (PAMS/ADAMS).

Tract - A small, relatively permanent statistical subdivision of a county or statistically equivalent entity, delineated for data presentation purposes by a local group of census data users or the geographic staff of a regional census center in accordance with Census Bureau guidelines. Designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions at the time they are established, census tracts generally contain between 1,000 and 8,000 people, with an optimum size of 4,000 people. Census tract boundaries are delineated with the intention of being stable over many decades, so they generally follow relatively permanent visible features. However, they may follow governmental unit boundaries and other invisible features in some instances; the boundary of a state or county (or statistically equivalent entity) is always a census tract boundary.

Undeliverable As Addressed (UAA) - A U.S. Postal Service notification that a mailing piece could not be delivered to the designated address. Formerly called a Postmaster Return.