B. Collections of Information Employing Statistical Methods

1. Universe and Respondent Selection

The 2008 Census Coverage Measurement (CCM) Dress Rehearsal survey sample is a multi phase probability sample of housing units. The CCM sampling operation comprises a number of distinct processes from forming block clusters, selecting sample block clusters, to eventually selecting addresses for interviewing. After the CCM block clusters are selected, an address list is created independent of the census for each CCM sample block cluster. The approximate CCM listing workload is 525 block clusters comprising 225 block clusters in the San Joaquin County site and 300 block clusters in the Fayetteville site. There are 40,000 housing units overall or 20,000 housing units per site. Finally, after selecting the CCM sample addresses for person interviewing, the 2008 Census Dress Rehearsal coverage measurement sample is approximately 6,250 housing units in the San Joaquin County site and 6,250 housing units in the Fayetteville site.

Table 1 shows the Dress Rehearsal site universe size from Census 2000, the estimated number of housing units as of July 1, 2005 released by the Population Division, U.S. Census Bureau, along with the CCM sample expected listing and person interviewing workloads.

Table 1: 2008 Dress Rehearsal Site Housing Unit Summary

2008 Dress Rehearsal Site	Census 2000	July 1, 2005 Estimate	Expected Listing Workload	Expected Person Interview Workload
Fayetteville, North Carolina	294,690	321,950	20,000	6,250
San Joaquin County, California	189,160	217,991	20,000	6,250

The block cluster is the CCM primary sampling unit. Each block cluster consists of one or more geographically contiguous census blocks grouped together to form an average of 30 housing units. The block cluster requirements are designed to attempt to meet both statistical and operational needs. A statistical feature of the block clustering is the combining of collection blocks with no housing units with adjacent collection blocks containing housing units to reduce the number of small blocks, thus reducing the sampling weight for these types of small clusters. Operational needs include an emphasis on visible boundaries, limited geographic size, and respecting boundaries between areas like military reservations and American Indian Reservations.

Within each site, block clusters are stratified based on the cross-classification of their size and tenure (renter/owner). First, block clusters are classified by size into three mutually exclusive groups based on the expected number of housing units within the cluster. These three mutually exclusive groups are (1) small block clusters – those clusters with zero to two housing units, (2) medium block clusters – those clusters with three to 79 housing units, and (3) large block clusters – those clusters with 80 or more housing units. The second classification categorizes medium and large block clusters based on tenure, i.e. the proportion of persons who rent or own based on Census 2000 data. The proportion renter population of a block cluster classifies the cluster as being either in the renter stratum or the owner stratum.

A systematic sample of block clusters is selected from each sampling stratum using different probabilities of selection. In general, block clusters are selected at a higher rate from the renter stratum than the owner stratum. In addition, block clusters with 80 or more housing units are selected at a higher rate than medium block clusters because housing units in large block clusters are subsampled in a later operation, bringing the overall sampling weight for housing units in these block clusters more in line with the overall sampling weights for housing units in the medium block clusters. Small block clusters are proportionally allocated to the two sites based on the number of small block clusters in each site. After listing, a subsample of small block clusters will be selected to remain in the sample. Within each of the five sampling strata, block clusters are sorted and a systematic sample of block clusters is selected from each stratum with equal probability.

The next phase of sampling introduces some double sampling to both sites. In this second phase, using updated measures of size from census and CCM listing operations, block clusters from the small sampling stratum (those expected to have had less than 2 housing units) are re-stratified based on size. We stratify small block clusters into four groups based on the number of housing units in the block cluster. The strata are formed so that block clusters with more housing units than we initially expect will be sampled at a higher rate to keep their sampling weights lower. The measure of size is the larger of the number of housing units on the census address list and the number on the independent address list, which gives us a conservative estimate for the number of housing units that are actually in the block cluster. Sampling rates for these strata are in Table 2.

Table 2: 2008 CCM Dress Rehearsal Small Block Cluster Subsampling Strata

Stratum (Block Cluster Size)	2008 Dress Rehearsal Rates
0 to 2 HUs	1-in-10
3 to 5 HUs	1-in-4
6 to 9 HUs	1-in-2.22
10+ HUs	1-in-1

All block clusters from the small sampling stratum with 10 or more housing units based on the updated size information are retained. Within each of the other three subsampling strata, block clusters are sorted and a systematic sample of block clusters is selected with equal probability from each small block cluster subsampling stratum.

2. Procedures for Collecting Information

The CCM Initial Housing Unit Followup Form, Form DX-1303 (see Attachment A), is used by interviewers to resolve discrepancies from matching the CCM Independent listing and the census address lists. Interviewers will contact a member (or proxy, as a last resort) of each housing unit being followed up to ensure the accuracy of the address lists. Interviewers will be provided the Housing Unit Reference list (see Attachment B) to aid in following up housing units. Each respondent will be given the privacy act notice, Form DX-31 (see Attachment D). In addition, if a Group Quarters is being followed up, Interviewers will provide the respondent with the Group Quarters Question Definition Flashcard (see Attachment C).

For the Initial Housing Unit Followup Quality Check (QC), approximately 10 percent of all housing units followed up will be identified for a Quality Check. The QC interviewer will locate the housing units identified for the quality check and compare the information collected by the initial interviewer to what they see on the ground. A single attempt will be made to contact a respondent for the quality check. If no one is available the quality check will be completed by observation. Block clusters not passing the QC will be 100 percent verified to ensure the data quality of the Initial Housing Unit Followup.

3. Methods to Maximize Response

The Initial Housing Unit Followup contains the minimum number of questions necessary to obtain the data required for the 2008 CCM Dress Rehearsal, and the interviewer will make up to three attempts to obtain an interview. The interviewer will explain the reason the Census Bureau is conducting this operation and respondents will be informed of their legal responsibility to answer the questions. In addition, respondents will be assured that their answers are confidential. If a respondent refuses to answer the questions, the interviewer may attempt to interview another eligible respondent.

4. Testing of Procedures or Methods

The Census Bureau developed the CCM approach for measuring the coverage of the population in the decennial census. It was used in Census 2000, and the approach was updated and refined for the 2008 Census Dress Rehearsal.

5. Contacts for Statistical Aspects and Data Collection

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Definition of Terms

Components of Coverage Error – The two components of census coverage error are census omissions (missed persons or housing units) and erroneous inclusions (persons

or housing units enumerated in the census that should not have been). Examples of erroneous inclusions are: housing units built after Census Day and persons or housing units enumerated more than once (duplicates).

Net Coverage Error – Reflects the difference between census omissions and erroneous inclusions. A positive net error indicates an undercount, while a negative net error indicates an overcount.

For more information about the Census 2000 Coverage Measurement Program, please visit the following page of the Census Bureau's website:
http://www.census.gov/dmd/www/refroom.html

List of Attachments

    A. Initial Housing Unit Followup Form, Form DX-1303
    B. Housing Unit Reference List, Form DX-1303.REF
    C. Definitions for Initial Housing Unit Followup and Group Quarters Question Flashcard
    D. Privacy Act Notice, Form DX-31