#### **B.** Collections of Information Employing Statistical Methods

#### 1. Universe and Respondent Selection

The 2008 Dress Rehearsal Census Coverage Measurement survey sample is a multiphase 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, California site and 300 block clusters in the South Central North Carolina site and 40,000 housing units overall or 20,000 housing units per site. Finally, after selecting the CCM sample addresses for interviewing, the 2008 Dress Rehearsal coverage measurement sample is approximately 6,250 housing units in the San Joaquin County, California site and 6,250 housing units in the South Central North Carolina site and 6,250 housing units in the South Central North Carolina site and 6,250 housing units in the South Central North Carolina site and 6,250 housing units in the South Central North Carolina site and 6,250 housing units in the South Central North Carolina site and 6,250 housing units in the South Central North Carolina site and 6,250 housing units in the South Central North Carolina site and 6,250 housing units in the South Central North Carolina site and 6,250 housing units in the South Central North Carolina 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					
South Central 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 clusters – those clusters with zero to two housing units, (2) medium clusters – those clusters with three to 79 housing units, and (3) large clusters – those clusters with 80 or more housing units. The second classification categorizes medium and large 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 clusters because housing units in large clusters are subsampled in a later operation, bringing the overall sampling weight for housing units in these clusters more in line with the overall sampling weights for housing units in the medium 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.

Table 2 summarizes the housing unit and block cluster listing workloads.

		South Central North Carolina			San Joaquin County, CA		
	Total	Small Stratum	Medium and Large Strata	Total	Small Stratum	Medium and Large Strata	Total
Expected Listing Workload							
Block Clusters	525	90	210	300	15	210	225
Housing Units	40,000	45	19,955	20,000	10	19,990	20,000

 Table 2: 2008 CCM Dress Rehearsal Workload Estimates

The Census Bureau expects a response rate of 85-90 percent for the Independent Listing and Relisting operations.

#### 2. Procedures for Collecting Information

The CCM Independent Listing Form, Form DX-1302, known as the Independent Listing Book (ILB), is used by Listers to canvass every street, road, or other place where people might live in their assigned block clusters to construct a list of housing units. Listers will contact a member (or proxy, as a last resort) of each housing unit to ensure all units at a given address are identified, identify the type of housing unit (single-family, multiunit, mobile home, or trailer), for a multiunit, the number of apartments occupied or vacant, and for a mobile home park, the number of mobile homes, trailers, and empty trailer lots/sites in the park. They also identify the location of each housing unit by assigning map spots on block cluster maps provided with their assignment materials. If an enumerator is uncertain whether particular living quarters is a housing unit, it will be listed and flagged for possible followup, if still unresolved after matching. Listers will provide each respondent with the privacy act notice, Form DX-31.

For the Independent Listing Dependent Quality Check (DQC), a random starting point from each completed block cluster will be identified to start the selection of 12 housing units from the block cluster for verification. DQC listers will locate the housing unit identified as the starting unit on the ground, and then compare the next 12 housing units they see on the ground to what is listed in the ILB. If there are fewer than 12 housing units in the block cluster, the entire block cluster will be verified. Block clusters not passing the DQC will be 100 percent verified to ensure the data quality of the Independent Listing.

At the completion of the Independent Listing, the ILBs will be keyed to construct the CCM housing unit list needed for subsequent CCM operations. The same procedures will be used for Independent Listing and Relisting.

## 3. Methods to Maximize Response

The Independent Listing Books contain 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 the 2000 Decennial Census, and updated and refined the approach for the 2008 Dress Rehearsal.

## 5. Contacts for Statistical Aspects and Data Collection

Magdalena Ramos Coverage Measurement Data Collection Operations Branch Decennial Statistical Studies Division U.S. Census Bureau 301-763-4295

#### **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. Independent Listing Book, Form DX-1302
- B. Privacy Act Notice, Form