

Supporting Statement for Paperwork Reduction Act Submissions
Survey of Market Absorption
of New Multifamily Units (SOMA)
OMB Control # 2528-0013

B. Collections of Information Employing Statistical Methods

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.**

The buildings selected for SOMA are those included in the Census Bureau's Survey of Construction (SOC). For SOC, the United States is first divided into primary sampling units (PSU's) which are sampled based on population. Next, a sample of permit-issuing places is selected within each sample PSU. Finally, all buildings with five or more units within sampled places as well as a subsample of buildings with one to four units are selected for the SOC sample.

The respondent universe consists of builders, building managers, rental agents, sales agents, and landlords of newly completed real estate developments or buildings containing five or more units.

For a more detailed description of the SOC methodology:
https://www.census.gov/construction/nrc/how_the_data_are_collected/soc.html

2. Describe the procedures for the collection of information including:

- **Statistical methodology for stratification and sample selection,**
- **Estimation procedure,**
- **Degree of accuracy needed for the purpose described in the justification,**
- **Unusual problems requiring specialized sampling procedures, and**
- **Any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

Buildings for SOMA come from those included in the Census Bureau's Survey of Construction (SOC). Since SOMA uses the sample from SOC, we begin by describing the sample design of SOC.

For the first-stage sample design of SOC, the United States was first divided into primary sampling units (PSUs) that were stratified based on population and building permit activity.

If a PSU had a large population or high permit activity, it was classified as self-representing. Otherwise it was classified as non-self-representing. There were 48 self-representing PSUs and 772 non-self-representing PSUs. The non-self-representing PSUs were stratified into 121 strata by Census Division, permit activity, metropolitan status, and population. One PSU was then randomly selected from each stratum.

In the second-stage sample design, a sample of geographic locations was chosen within each of the 169 selected PSUs. Areas that do not require building permits were selected separately from the permit-issuing places. Approximately 80 block groups of non-permit areas were selected within the sample PSUs. The permit-issuing places were stratified by permit activity. Approximately 900 permit-issuing places were selected.

In the third stage of the sample design, permits are selected monthly. Within sampled places, permits for buildings with five or more units are selected with certainty and permits for buildings with one to four units are subsampled. In the non-permit areas, field representatives canvass the areas and all housing unit construction starts are included in the sample with certainty. For further details on the SOC sample design and weighting see https://www.census.gov/construction/nrc/how_the_data_are_collected/soc.html.

When SOC indicates the construction of the building is complete that building is selected for SOMA in order to collect absorption data. Construction of a multifamily building is classified as complete when 50 percent of the units are available for occupancy. New Residential Construction, <https://www.census.gov/construction/nrc/definitions/index.html> Each month SOMA selects its sample from the SOC records that reported five or more units. If there are more than 1,200 buildings completed in a month, a subsample of buildings is selected. In this case, Census uses systematic random sampling from an ordered list to reduce the sample. The list is ordered by Regional Office, PSU, Place, Measure of Size (Number of Units * SOC Weight), and SOC Schedule Number (which is a control number). Buildings with measures of size (Number of Units * SOC Weight) are self-representing and included with Certainty. The subsampling rate is dependent on the total number of buildings completed, but the total number of buildings in sample each month can never exceed 1,200 (Alexander 1998). Historically, subsampling has not been applied to SOMA since 2005. (SOMA Source & Accuracy Statement: <https://www2.census.gov/programs-surveys/soma/technical-documentation/SOMA-Source-and-Accuracy.pdf>).

Information is collected quarterly on the proportion of units absorbed 3, 6, 9, and 12 months after completion is obtained for units in buildings selected in a given quarter in each of the next four quarters.

Unbiased quarterly estimates are formed by multiplying the counts for each building by its base weight (the inverse of its probability of selection) and then summing over all buildings. The final estimate is then obtained by multiplying the unbiased estimate by a ratio estimate factor.

3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

The response rate is above 90 percent and is expected to remain at that level. Due to the high response rate, only normal data collection procedures are followed for nonresponse cases, i.e., supervisory personnel contact reluctant respondents.

4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of test may be submitted for approval separately or in combination with the main collection of information.

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In 2014, the SOMA CAPI instrument was developed and thoroughly tested. Testing Included instrument testing, an initial systems test, and a final systems test or verification test. Instrument testing tests different pathways through the instrument, ensuring that questions and response categories appear as intended and that skip patterns are correct. Extensive instrument test was conducted by Census Headquarters staff. In an effort to seek the opinions of actual users, a few local Census Field Representatives (FRs) were invited to Census Headquarters to test the instrument. Feedback was positive and the FRs welcomed the change to an automated instrument. Systems tests test all of the systems that interact with the CAPI instrument, but also allows for continued testing of the instrument. Problems were recorded and fixed during the initial systems test and retested during the verification test. Since then, only minor changes have been made to the instrument. We performed systems testing prior to the April 2015 and April 2016 instrument releases.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

The individuals to contact are:

Tamara Cole
Survey Director, SOMA
Bureau of the Census
Phone: (301) 763-4665

Medell E. Ford III
Chief, Housing and Health Surveys Branch
Field Division
Bureau of the Census
Phone: (301) 763-2185

Stephen Ash
Lead Scientist, SOMA
Demographic Statistical Methods Division
Bureau of the Census
Phone: (301) 763- 4294

List of Attachments

SOMA Items Booklet
USC 1701Z citation