

CDBG INCOME SURVEYING

Guidance and Methodology



Department of
**Economic &
Community Development**

Purpose

- To analyze the current process for CDBG income surveys, and determine the soundness of the methodology.
- HUD Notice: CPD-14-013 (September 23, 2014)

Low and Moderate Income Household

- Family or household income less than or equal to the Section 8 Low Income limit, usually 80% of the area median income, as established by HUD.
- Can be a single person or group of people living together
- Does not discriminate against actual or perceived sexual orientation, gender identity, or marital status.

Determining the Service Area

- The service area is the entire area that will be served by the CDBG-funded activity.
- The service area must have a minimum of 51% LMI persons to qualify as LMI Area Benefit (LMA).
- Area boundaries must be set before deciding data to be used to determine LMI percentage.
 - Boundaries cannot be drawn to specifically enhance LMI numbers

Ways to Determine LMI

- Use the HUD Low and Moderate Income Survey Data (LMISD)
- Conduct a census of the service area
- Conduct a sampling of the service area

Using HUD LMISD

Pros

- HUD published figures
- No additional surveying needed
- Published at multiple geographic levels (county, city, & block group)
 - Block group data can be aggregated to determine census tract data

Cons

- May not accurately depict LMI (based on ACS data)
- Only published for US Census geographic boundaries

Conducting a Census

- A census is when the entire population of an area is surveyed.
(Example: Sending out income surveys with the utility bill.)
- A census provides for the most accurate measure, but is typically the most costly and time intensive.
- If conducting a census, the percentage of LMI persons must be taken from the total population of the service area, not the total number of respondents.
(Example: Area population = 500. 400 households respond to the survey. Minimum LMI households = 255
($500 \times .51$)
NOT 204 ($400 \times .51$))

Conducting a sampling

- A sampling can be conducted by surveying a smaller sample of the service area population to represent the population as a whole.
- Easier to conduct than a census
- Must be truly random
- Be aware of seasonal residents and if the activity is of incidental benefit

Steps to Conducting LMI Surveys

1. Select the Type of Survey
2. Develop the Questionnaire
3. Select the Sample
4. Conduct the Survey
5. Analyze the Results
6. Document and Save the Results

Step 1: Select the Type of Survey

- The type of survey you select will depend on multiple factors like staff size, cost, time constraints, sample size, etc.

- Four basic types
 1. Mail Questionnaire
 2. Face-to-Face (Door-to-Door) Interview
 3. Web-based Survey
 4. Telephone Interview

Survey Types: Mail Questionnaire

Advantages

- Covers a large area
- Opportunity for more honest answers
- No travel
- Allows for respondent convenience

Disadvantages

- Coverage errors
- Not suitable for detailed or written responses
- Low return rate if poorly designed
- Easy to disregard
- Costly
- Longer collection time
- Lack of control of respondent

Survey Types: Face-to-Face Interview

Advantages

- Reliability
- Full range and depth of available information
- Interview scheduling
- Ability clarification of questions or responses
- Easy to target and locate the target population

Disadvantages

- Less candid responses
- Possible bias responses due to interviewer presence
- Amount of travel
- Time-consuming
- Smaller sample size
- Can be costly
- Respondent reluctance

Survey Types: Web-based Survey

Advantages

- Protection of respondent identity
- Efficient
- Inexpensive
- No travel by surveyor or respondent
- Automatic response validation
- Easily accommodate persons with disabilities or Limited English Proficiency (LEP)

Disadvantages

- Lack of internet access
- Easy to disregard
- Difficult to follow-up to improve response rate
- Equipment malfunction or slow speed can lead to impatience and incompleteness
- Nearly impossible for post-disaster surveys
- Lack of control over who completes survey

Survey Types: Telephone Interview

Advantages

- Easy to conduct
- Efficient
- Inexpensive
- Potential for more candid responses
- Allows for follow-up questions
- No fear for personal safety
- Appearance won't influence responses

Disadvantages

- Hostility of respondent based on past telemarketing calls/surveys
- Hang ups
- Call screening
- Difficult to reach unlisted numbers and cell phones
- Scheduling conflicts
- Difficulty with LEP respondents

Step 2: Develop the Questionnaire

- Determine the question content, scope, and purpose.
- Choose the response format to be used for data collection.
- Word the questions to get at the issue of interest.
- Determine the best order and placement for the questions.

Step 3: Select the Sample

- Define the population (service area)
 - The population is defined as households not persons.

- Determine the sample needed for an accurate representation
 - How are you going to make it random?
 - Tax rolls
 - Cannot use for mail or telephone
 - Be aware of renters
 - Phone books
 - How will replace unresponsive people?

How to Calculate Sample Size

- Confidence Interval (CI) – the range of values within which a population parameter is estimated to lie (margin of error).
- Confidence Level (CL) – the estimated probability that population parameter lies within a given confidence interval.
- Recommended values: $CI \leq 5$ and $CL \geq 95\%$
- Sample size does not adjust proportionally with population size.
- <http://surveysystem.com/sscalc.htm>

Sample Size Calculation Examples

Example 1

Population: 1,500 houses
Confidence Interval: 5
Confidence Level: 95%

Sample Size Needed: 306
houses

Example 2

Population: 7,500 houses
Confidence Interval: 5
Confidence Level: 95%

Sample Size Needed: 365
houses

- Notice the large increase in population results in a relatively small increase in the sample size needed.

Unavailable Households & Non-responses

- 100% is nearly impossible and unexpected
- Be sure to follow-up with and retry unavailable and unresponsive households
 - At least 2 tries should be made for in-person interviews
 - 3 or 4 attempts should be made for telephone surveys
 - Possibly adjust the time of day when retrying to contact a household
- If replacements have to be made for unreachable households, make sure they are also randomly selected
- Non-response rates over 20% may affect validity

Step 4: Conduct the Survey

- Publicize the survey and purpose. Advance notice may increase participation. (Be sure not to create bias)
- Prepare and train interviews.
 - In-person v. telephone interviews
 - Interview kits may be necessary
 - Be aware of the population you are surveying
 - Train interviewers how present questions in an unbiased manner
 - Income information is personal and sensitive
 - All interviewers should ask the same questions in the same order
 - Record answers and data without omitting or editing
- Replacements should be used for surveys with errors or that are incomplete and cannot be resolved.

Step 5: Analyze the Results

- Tabulate the results of the completed surveys.
- Analyze the results to verify LMI percentage of the service area.

Step 6: Document & Save Your Results

- The survey results must be documented and retained for monitoring and auditing.

- Keep all survey documentation
 - Surveys (complete and incomplete)
 - List of persons/households sampled and interviewed
 - List of replacements
 - Documentation of methodology used

Recommendations & Considerations

- Use multiple survey types for better success
- HUD does not recommend mail surveys without a follow-up letter or phone call
- For in-person interviews, interviewers may want cards with the income levels for the corresponding family size
- Keep sensitive and non-sensitive information separate with corresponding identifiers

Recommendations & Considerations

- For sample size and minimum LMI households, always round up.
- **Special Note** – HUD published data calculates LMI in persons, not households. Surveys may be done in households, due to the population being more easily defined.
(Example: A utility service area is defined by households, not persons. This should make surveying simpler and easier)

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