CDBG INCOME SURVEYING

Guidance and Methodology



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 discrimination 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 <u>before</u> 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

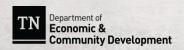
Using HUD LMISD

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

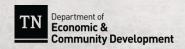


Conducting a Census

- 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.

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(Example: Area population = 500. 400 households respond to the survey. Minimum LMI households = 255 (500 x .51)

NOT 204 (400 x .51))
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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

<u>Advantages</u>

- 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

<u>Advantages</u>

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

<u>Disadvantages</u>

- 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

<u>Advantages</u>

- 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)

<u>Disadvantages</u>

- 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 postdisaster surveys
- Lack of control over who completes survey

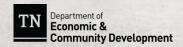
Survey Types: Telephone Interview

<u>Advantages</u>

- 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

<u>Disadvantages</u>

- 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 <= 5 and CL >= 95%
- Sample size does not adjust proportionally with population size.
- http://surveysystem.com/sscalc.htm



Sample Size Calculation Examples

Example 1

Example 2

Population: 1,500 houses

Confidence Interval: 5

Confidence Level: 95%

Sample Size Needed: <u>306</u> houses

Population: 7,500 houses

Confidence Interval: 5

Confidence Level: 95%

Sample Size Needed: 365

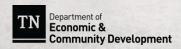
<u>houses</u>

 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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