How to Conduct a Survey

I. Introduction

This guide is prepared to assist CDBG grantees to develop surveys for the purpose of determining whether the service area of a proposed activity meets the LMI Area Benefit national objectives criteria. The methods discussed in this guide are basic techniques for conducting a survey that will yield acceptable levels of accuracy.

The procedures described in this guide are comprehensive approaches to conducting the least costly surveys possible and attempts are made to render them as simple as possible. The procedures are purposely designed to be used for the determination of income levels in the service area of a CDBG-funded activity. The State CDBG regulations at 24 CFR570.483(b)(1)(i) requires that the survey be methodologically sound.

If U.S. Census data shows LMI below 24.99 percent, a challenge to the data will not be allowed. Waivers will not be allowed.

Before You Conduct a Survey

All requests to conduct a survey should be approved by CDBG staff prior to their commencement. Surveys are completed by housing unit, not persons. To initiate the survey process, the following documentation must be provided:

1. **A letter from the City or County**: The letter should provide a detailed description of the project, including its location and intended beneficiaries. It must include a map of the project site, an outline the survey methodology used, specify the applicant's population and estimated number of housing units.
2. **For Random Sample Surveys**: Communities with populations of 200 persons or fewer are ineligible to complete a random survey and must conduct a community-wide survey. For communities with a population of 200 persons or higher, a random sample survey is possible with approval from Commerce. If a community is eligible for a random sample survey, it is necessary to provide the estimated number of housing units within the city or county. This number will determine the number string that is generated to assist the community with conducting the survey. It is important that this figure for housing units is as accurate as possible. Sample size is based upon housing units and not strictly on population.

Please ensure that all necessary documents are submitted to CDBG staff before proceeding with any surveys. Survey Methodology approval will be issued by CDBG staff in the form of a formal memo. For Random Sample Surveys, an approved number string will be included with the approval memo.

It is essential that this approval memo be received before your community proceeds with conducting any surveys. Surveys conducted without pre-approval will not be recognized as valid for CDBG purposes.

Completed Survey Submission and Approval Requirements

As part of the grantee application process, all completed surveys must be submitted prior to or at the time of application. Surveys may be mailed, or hand delivered to CDBG Staff, all of which must take place prior to submission. Electronic submission is not currently acceptable due to confidentiality concerns.

Surveys that do not meet the 51 percent Low-Moderate Income (LMI) national objective will be deemed non-compliant. In such cases, the survey will be returned to the grantee or their designated administrator for necessary corrections and resubmission.

It is critical to ensure that surveys comply with the 51 percent LMI threshold, as failure to do so may impact the eligibility and timeliness of your application. Please ensure all survey documentation is complete and meets the necessary requirements of 24 CFR 570.208(a)(1)(vi) before submission.

In the CDBG program, the service area may be a sparsely populated rural area. For such an area, a survey of the entire population may be undertaken. The following conditions are true for all surveys:

- The grantee must show how the percentage of LMI persons was calculated. The percentage of LMI persons must be calculated from the entire population of the service area, and not from the proportion of participants who responded to the survey. For example, a town in rural America with a population of 640 conducts a census of the entire population to determine the percentage of LMI persons, and it gets an 80 percent response rate. Fifty-one percent of 640 is 326, and 80 percent of 640 is 512. Of the 512 respondents, 326 of them should be LMI persons. It is inaccurate to use 51 percent of 512 which is 261.

- It is possible that some families in the service area may vehemently refuse to participate in the survey, or it cannot be reached (after several attempts) for several reasons (for example, families on lengthy vacations). In such cases, it is suggested that the total number of persons in the families that participated in the census be used in calculating the percentage of LMI persons. However, the number of refusals or absentees must be relatively small (for example, two or three families out of 50) so as to have a negligible effect on the validity of the results of the census. Regardless of the type of method used, compare the percentage of LMI persons obtained from the survey or census with the percentage of LMI persons provided in the most recent HUD LMI and give an explanation if the two percentages differ widely. If variance is more than six percent, a detailed explanation of causes must be submitted with the application.

- If you choose to conduct a survey, you must emphasize to respondents that their answers will be kept confidential. People are more likely to provide honest answers if their answers are to remain anonymous. You must maintain this confidentiality. Surveyors should have a master list that has names and addresses of housing units, which list should create ID numbers that are unique and cannot be traced back to residents without the master list. These IDs should be the identifiers on survey forms.

- There is no firm answer as to how long an income survey for the purpose of determining the percentage of LMI persons in the service area is good for. The Kansas CDBG has determined a survey will be good until the next HUD census data is released unless the community meets the special circumstances, which is generally every five years. Surveys that have been previously approved by Commerce are only eligible to use for the associated service area and cannot be used for different projects within different service areas. However, with approval from Commerce, these surveys may be used for other projects that encompass the same service area.

II. Definition of Terminologies

Some of the terms defined in this section are governed by CDBG regulatory requirements.
CDBG regulatory definitions of *income*, *family* and *household* are located at 24 CFR 570.3.

CDBG Terminology

1. Family means all persons living in the same household who are related by birth, marriage or adoption.
2. Household means all persons who occupy a housing unit. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements.

3. Income - Adjusted gross income as defined for the purpose of reporting under Internal Revenue Service (IRS) Form 1040 for individual Federal annual income tax purposes.
4. Low-Income person means a member of a family that has an income equal to or less than the Section 8 very low-income limit established by HUD. Unrelated individuals shall be considered as one-person families for this purpose. (The Section 8 very low-income limit is income that does not exceed fifty percent of the median income for the area, as adjusted by HUD.)
5. Moderate-Income person means a member of a family that has an income equal to or less than the Section 8 low-income limit and greater than the Section 8 very low-income limit, established by HUD. Unrelated individuals shall be considered as one-person families for this purpose.

Terms Used in Survey Research

1. Unit of analysis refers to what is being measured and for the purpose of this guidance the unit of analysis is family income. Whether one is counting households or families, what actually matters is the total family income, not the income of any one individual.
2. Respondent refers to the person who is responding to the questionnaire or interview.
3. Rate of response is expressed as a percent; it refers to the number of households participating in a survey divided by the number of households in the sample.
4. Population refers to the group whose characteristics you seek to estimate.
5. Parameter is the summary description of a given variable in a population.
6. Sample refers to a portion of the population under study. Samples are used to draw inferences about the population.
7. Sampling is the process of selecting a sample from the population.
8. Simple random sampling is a type of probability selection process in which the units composing a population are assigned numbers and a set of random numbers is then generated, and the units having those numbers are selected to make up the sample.
9. Margin of error is provided in the U.S. Census data for the LMI percent and must be used in factoring sample size for Random Sample Surveys.
10. Confidence level is established by Kansas at 90 percent to ensure accurate sample size of communities when conducting random sample income surveys and cannot be altered.
11. Number string is a list produced by Commerce for communities which contains targeted identifiers that correspond with the random sampling probability selection process.

III. Service Area

This is the area to be served by the CDBG-funded activity. One of the crucial aspects of qualifying an activity as principally benefiting LMI persons on an area basis is the proper identification of the service area. The service area must be defined first before deciding which data to use to determine the percentage of LMI persons and not vice versa. The principal responsibility for determining the area served by the activity rests with each CDBG grantee. Each service area must be approved by CDBG staff prior to conducting a survey.

Once it has been determined that the activity will equally benefit all residents of a particular service area, the activity may meet the LMI Area Benefit national objective if the boundaries of the area served by the activity are clearly defined. At least 51 percent of the of the service area residents must be LMI persons. In some communities, the planning department or the agency administering a particular facility or service, for their own purposes, establishes service areas for such things as libraries, parks, playgrounds, etc. Factors to be considered in defining the service area include:

1. Nature of the activity: In determining the boundaries of the area served by a facility, one must consider whether the facility is adequately equipped to meet the needs of the residents. For example, a park that is expected to serve an entire neighborhood cannot be too small or have so little equipment (number of swings, slides, etc.) that it would only be able to serve a handful of persons at a time. Conversely, a park that contains three ball fields or a ball field with grandstands that can

accommodate hundreds of spectators cannot reasonably be said to be designed to serve a single neighborhood. The same comparison would apply to the case of assisting a small two-lane street in a residential neighborhood versus that of assisting an arterial four-lane street that may pass through the neighborhood but is clearly used primarily by persons commuting.

2. Location of the activity: Where an activity is located may affect its capacity to serve particular areas, especially when the location of a comparable activity is considered. For example, a library cannot reasonably benefit an area that does not include the area in which it is located. When a facility is located near the boundary of a particular neighborhood, its service area would be expected to include portions of the adjacent neighborhoods as well as the one in which it is located. The grantee may even carry out activities that are outside its jurisdiction if this is done in accordance with 24 CFR 570.309.

3. Accessibility issues: If a geographic barrier such as a river or an interstate highway separates persons residing in an area in a way that precludes them from taking advantage of a facility that is otherwise nearby, that area should not be included in the service area. Language barriers might also constitute an accessibility issue in some circumstances.

4. The service area comprises only a small portion of the unit of general local government, or of a census tract. In such situations, information on the unit of government or the census tract is not useful because the residents of the service area make up only a small fraction of the total, and their characteristics may not mirror those of the larger area. A survey of the residents of the service area may be the most appropriate way to determine whether the service area qualifies under the LMI criterion. Examples of activities in which this may be encountered include: extending water lines to serve rural settlements in a county; construction of a neighborhood tot lot serving one subdivision in a city where the entire city is one census tract.

5. The service area includes all or part of several units of general local government and may contain both incorporated and unincorporated areas. HUD's LMI survey data may be usable for only a portion of the service area; therefore, communities may need supplementary survey data for the other portions of the service area. It may be necessary to survey a large area to determine the percentage of service area residents who are LMI. Examples of activities include: (1) construction of a rural water system which serves more than one incorporated city plus portions of the surrounding unincorporated area of two counties in which the cities are located; (2) construction of a new fire station in a city where the municipal fire department provides, through contract, fire protection service for two adjoining townships (one of which is in a different county).

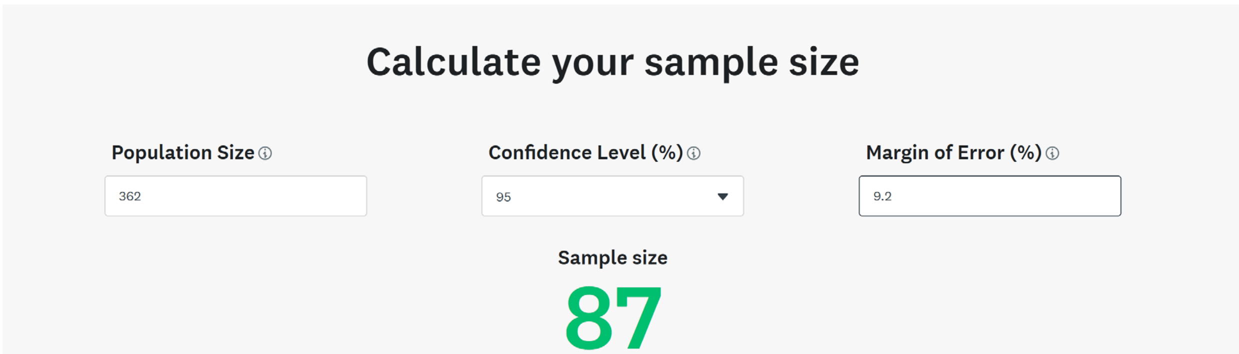
Random Income Survey Sample Size

Prior to drawing the sample for random sampling, you need to estimate the number of responses required for the survey. HUD guidelines include a minimum number of responses required for the survey to be considered valid. Many sample size calculators are available online, and most use the same (or similar) underlying calculations. The example below is from SurveyMonkey. Kansas CDBG will provide the minimum number of responses required when the survey approval memo is returned.

A local income survey's sample size shall be determined using not less than a 90 percent confidence level and cannot be altered, and the maximum allowable MOE of the local survey shall be the lesser of 10 percent or the MOE of the HUD-provided data for the equivalent geography. For example, if HUD's data indicate an 8 percent MOE, the local survey will be required to have an MOE of 8 percent or less. If HUD's data indicate a 12 percent MOE, the local income survey would be required to have an MOE of 10 percent or less. If there is not an equivalent geography in the LMISD, the maximum MOE of the local survey shall be no more than 10 percent. The maximum MOE (10 percent or the equivalent LMISD MOE, whichever is smaller) establishes a standard that a local income survey must be "at least as good as" the 2020 ACS LMISD.

Per HUD guidance, Kansas CDBG provides a number string of double the number of addresses required. You can collect more responses if you have time and labor to support this effort, or to account for vacancies or unavailable households. As illustrated by Figure 1 below, if you have an estimate of 362 housing units in a service area, which area's ACS LMISD MOE is 9.2, the minimum required number of responses is then factored at 87. Kansas CDBG would provide a number string of approximately 180 addresses with which to conduct a survey after request to conduct a survey has been approved.

Figure 1. Example of a Sample Size Calculator



Temporary residents (for example, residents of seasonal cabins) may not participate in an income survey if their benefit of a service or an activity is incidental. For example, the use of a library or senior center by temporary residents would be considered an incidental benefit. Temporary residents may participate in income surveys for CDBG-funded activities such as installation of sewer lines and sewage treatment plants, etc.

IV. A Summary of Steps in Conducting LMI Surveys

When HUD's LMI data is not used in documenting LMI benefit on an area basis, communities must comply with the above standards for conducting surveys. The steps in conducting surveys are as follows:

Step 1: Select the Type of Survey

Decide which survey method to use (telephone, door-to-door, or mail questionnaire) and base your decision on available staff, size of the sample you need, and the means you have available for identifying samples for the survey.

(a) Mail (or Self-Administered) Questionnaires

This is a basic method for collecting data through the mail: a questionnaire is a set of questions sent by mail accompanied by a letter of explanation and self-addressed stamped envelope for returning the questionnaire. The respondent is expected to complete the questionnaire, put it in the envelope and return it. A common reason for not returning a questionnaire is that some people may feel it's too burdensome. To overcome this problem, researchers often send a self-mailing questionnaire that can be folded in a certain way so that the return address appears on the outside. In this manner, the respondent does not risk losing the envelope.

Advantages of Mail Questionnaires

- Covers large geographic area.
- Provides an opportunity for honest answers to very personal questions.
- No travel required.
- Enables researcher to target a particular segment of the population.
- Allows respondents to complete the questionnaire at their convenience.

Disadvantages of Mail Questionnaires

- May have possible coverage errors; for example, address lists might be inaccurate or out of date (duplicate address, incomplete or wrong addresses).
- Not appropriate for requesting detailed written responses.
- May have a low return rate if too lengthy, poorly worded, or seems too personal.
- May not have anyone available to assist the respondent with questions, especially if the questions are in English but the respondent's primary language is not English. Provisions must be made to provide non-English-speaking residents with a questionnaire in their own language, as appropriate.
- Easiest for people to disregard, postpone, misplace or forget about it.
- Needs to allow longer time to collect responses.
- Costly—must pay for return postage to get a decent response rate; also, you have paid for postage even for those that are not returned.
- It's all or nothing—people will either do it all or not at all; with phone or in-person surveys, one might at least get some answers.
- Lack of control over who fills out the questionnaire (for example, a child).

Combining a mail survey with a follow-up letter or telephone call may improve the rate of response. For example, if in a door-to-door survey you find that someone is not at home, you can leave a note for the head of the family (or responsible adult) to telephone the interviewer. You can also use the phone to schedule a time when to conduct an interview or mail a letter to residents of the service area and let them know in advance when an interviewer will call or visit.

(b) Face-to-Face (Door-to-Door) Interviews

This is a data collection technique in which one person (an interviewer) asks questions of another (the respondent) in a face-to-face encounter. It involves more work since the interviewer must go and knock on doors in order to obtain interviews. However, in small areas this type of survey may be the easiest because one can define the service area by its geographic boundaries and develop procedures for sampling within those boundaries so that a list of families living in the area is not required. Interviewers have to be well trained to ensure that procedures are consistently followed and that responses are not influenced by facial expressions.

Advantages of Face-to-Face Interviews

- Is a very reliable method of data-collection.
- Researcher has full range and depth of information.
- Interview may be scheduled to suit respondent's daily agenda.
- Respondent has the option to ask for clarifications.
- Target population may be easily located and defined.
- People may be willing to talk longer, face-to-face, particularly with in-home interviews that have been arranged in advance.

Disadvantages of Face-to-Face Interviews

- Responses may be less candid and less thoughtful.
- Interviewer's presence and characteristics may bias responses.
- Interviewer is required to go to the respondent's location.
- Respondents who prefer anonymity may be influenced negatively.
- May reach a smaller sample.
- Lengthy responses must be sorted and coded.
- Can take too much time.
- Costs more per interview than other survey methods; particularly true of in-home interviews in rural areas where travel time is a major factor.

- May not be able to gain access to the house (e.g., locked gates, guard dogs, no trespassing signs, etc.)
- Translators may be needed when dealing with non-English speakers.

(c) Telephone Interviews

A telephone interview is a data collection technique in which one person (an interviewer) asks questions of another (the respondent) via telephone. Telephone numbers of potential participants must be selected randomly. The interviewer must ensure that the respondent is someone competent and knowledgeable enough to answer questions about the family income status. In a telephone survey, you must devise a method for contacting those families without telephones or those with unlisted numbers. Hence it may be preferable to conduct door-to-door interviews in small service areas, especially in rural areas.

Advantages of Telephone Interviews

- Relatively easy to conduct.
- Saves money and time.
- Appearance and demeanor of interviewer do not influence the respondent.
- Respondents may be more honest in giving socially disapproved or sensitive answers due to greater anonymity for respondent.
- Interviewer may use an alias rather than his/her real name for privacy or to conceal ethnicity if relevant to the study.
- Allows interviewer to ask follow up questions.
- No fear for personal safety.

Disadvantages of Telephone Interviews

- Respondents may be hostile to interviews because of experience with previous telemarketing sales calls disguised as surveys.
- Respondents may terminate the interview abruptly.
- The interviewer may have problems reaching potential respondents by telephone because of the prevalence of answering machines that screen telephone calls.
- May not be able to reach households with unlisted numbers, no telephone at all, or families that use only cell phones.
- Some people often do not like the intrusion of a telephone call to their homes.
- Difficulty of reaching people due to reasons such as conflicting schedules.
- It may be easier to be less candid to someone on the phone than in person.
- Difficult to get accurate answers from non-English speakers.

The sample survey provided by CDBG is attached to this document and must be used by applicants.

Step 2: Select the Sample

Define your service area: What are the boundaries of the service area? What is the size of the population for which you are calculating the percentage of persons who are LMI? For surveys of less than 200 households, a survey is conducted for the entire project and the surveys must indicate that over 51 percent of the entire population of the target area is low-to-moderate income (LMI). For surveys over 200 households, surveys can be done project wide for 51 percent LMI or by random selection.

Identify the Sample: Select a procedure for identifying the sample in the service area and identify a procedure for randomly selecting the sample. Obtain a *complete* list of residents, addresses, and telephone numbers in the service area.

Determine the sample size: Determine the sample size needed in order to achieve an acceptable level of accuracy.

Randomly select the sample: Make sure you add families to replace refusals and that the entire service area is covered—that is, be certain that you have not excluded certain areas or groups of people. Commercial (retail and industrial) sites, vacant lots and abandoned and vacant homes should be excluded from the sample because they do not have any effect on the outcome of the survey. Ascertain that the selection of subjects to be included in the sample and replacement procedures are structured to avoid bias; for example, daytime or weekday attempts may skew response rates in favor of unemployed, retired, or single income families. All random surveys must be approved by Commerce, who will send out a number string for use. A list containing all houses must be sent to Commerce before a number string will be sent to the applicant.

Step 3: Conduct the Survey

If you choose to conduct an interview survey, select and train your interviewers. One of the most important aspects of any interview survey is the training of the interviewers. The quality of the results of the survey depends on how well the survey is conducted. Even in small studies involving a single researcher-interviewer, it is important to organize in detail the interviewing process before beginning the formal process. Make sure the interviewers are very comfortable with the questions. The training process includes the following major topics:

- Explaining the need for the survey.
- Describing the entire survey.
- Identifying the sponsor of the survey.
- Providing the interviewer with a working knowledge of survey research.
- Explaining the survey sampling logic and process.
- Explaining interview bias.
- Walking through the interview process.
- Explaining respondent selection process.
- Explaining scheduling and supervision.
- Explaining follow-up for non-response.

Make contact with the residents of the service area and consider writing or telephoning to let people know in advance that you are coming. Or just knock on doors, if this is the procedure you select. Try again (and again) to establish contact and reschedule another interview if initial contact has not resulted in an interview. Replace families you have written off as unreachable.

Step 4: Analyze the Results

Tabulate the survey with the survey tabulation form provided by CDBG. This form is an Excel document available to download in the CDBG resource library and must be used to demonstrate analysis of results. If the survey results vary by more than six percent from the HUD LMI percent, provide an explanation in your methodology of why there is a variance.

- No numbers in the survey can be rounded.
- Survey methodology must be submitted with survey results for approval, as well as the approval memo to conduct a survey. This submission includes when the survey was done and what method was used to collect the data.
- **Survey and census cannot be combined to meet the 51 percent benefit test. Each data must stand on its own**.
- To prove LMI National Objective for a larger project with two or more cities or counties, these surveys may be combined only if each survey is LMI. Each survey must meet the 51 percent benefit test prior to combining the surveys into one beneficiary and LMI total.

- If beneficiaries extend beyond an applicant's boundaries, i.e., water users, fire district, etc., the applicant may use the Census data for the city if it is above the 51 percent LMI requirement, and survey those outside the city limits, which must be above 51 percent, and combine the data for LMI percent. Either by survey or census or combination, each must be able to stand on its own at or above 51 percent LMI. Another option would be to survey all beneficiaries. Regardless of method(s) used, all beneficiaries must be included in the LMI determination.
- The CDBG program will not count a state or federal detention center or prison of any type as beneficiaries and will not fund any connections to the facilities in any community.
- 2.4 is the state-wide average of persons per household. This is used only for target area projects.

Step 5: Document and Save Your Results

- Save the completed questionnaires—preferably in a form that does not reveal the identity of the respondents. Use code numbers to conceal the identity of respondents.
- Save the list of respondents—preferably in a form that does not identify their responses.
- Save the description of the service area, the list of your sampling procedures (original sample, interview sheets or completed questionnaires, tabulations and a list or memo describing how other survey elements were handled, including replacements and replacement methods). Save your data.