U.S. Department of Housing and Urban Development
Office Community Planning and Development

Special Attention of:

CPD Division Directors
Entitlement CDBG Grantees
State CDBG Grantees

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Cross References

SUBJECT: US Department of Housing and Urban Development (HUD) Suggested Survey Methodology to Determine the Percentage of Low- and Moderate-Income (LMI) Persons in the Service Area of a Community Development Block Grant-Funded Activity.

This Notice describes suggested procedures for conducting a survey to ascertain whether or not a Community Development Block Grant (CDBG)-funded activity designed to benefit an area generally qualifies as primarily benefiting LMI persons. HUD urges field staff to review this Notice to improve their understanding of regulatory requirements and basic techniques that may be used in conducting incomes surveys. HUD's regulatory requirements for conducting a survey to determine the percentage of LMI persons in the service area of a CDBG-funded activity are located at 24 CFR 570.208(a)(1)(vi) for the Entitlement program and at 24 CFR 570.483(b)(1)(i) for the State program. CDBG grantees are urged to use these suggested procedures or other comparable methods when they conduct surveys to ascertain that at least 51 percent of the residents of the service area of a CDBG-funded activity are LMI persons.

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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. It provides Entitlement, State and local CDBG staff who have no substantial survey research background with the basic survey research techniques to make a determination of the income status of residents of the service area of a CDBG-funded activity. 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; therefore, computations of parameters such as standard deviation, variance, standard error, standardized scores, etc. that are routinely undertaken in marketing research and other opinion surveys, are not applicable herein. If an Entitlement grantee chooses another survey method, it is required to demonstrate that the survey method meets standards of statistical reliability that are comparable to decennial census data (24 CFR 570.208(a)(1)(vi)). Prior to conducting a survey, Entitlement grantees are required to have their survey instruments and methodology reviewed and approved by their local HUD Community Planning and Development (CPD) Office. The State CDBG regulations at 24 CFR 570.483(b)(1)(i) requires that the survey be methodologically sound.

Confidentiality

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 should do your very best to maintain this confidentiality. It is recommended that the respondent's name, address, and telephone number appear only on the cover sheet of the questionnaire. After the survey is completed, the cover sheet may be numbered and separated from the actual interview sheet. If the cover sheets and the questionnaires are both numbered, they can be matched if necessary. It is suggested that the grantee make reasonable efforts to protect the privacy of those surveyed and follow applicable State and local laws regarding privacy and obligations of confidentiality.

Lifespan of a Survey

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. Perhaps there might be instances in which an income survey could continue to be used until the next decennial census, but the grantee would have to be sure that there have been no significant demographic, economic and non-economic changes in the area during that time. Such changes may include factory openings

or closings, layoffs by a major employer in the service area, or the occurrence of major disasters (such as tornados hurricanes, earthquakes, etc.). Grantees may also want to conduct income surveys for defined service areas when they develop new Consolidated Plans. Note that even if a survey is current, it cannot be used for a different activity in a different service area; however, it might be usable for another activity in 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 for the Entitlement program. States may choose to adopt the definitions applicable to the Entitlement program or provide their own definitions under 24 CFR 570.481(a) provided that they are explicit, reasonable, and not plainly inconsistent with the Housing and Community Development (HCD) Act of 1974. The definitions below are located at 24 CFR 570.3 and are applicable only to the Entitlement program.

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 - Entitlement grantees may select any one of the following three definitions of income:
    (i) Annual income as defined at 24 CFR 5.609 (except that if the CDBG assistance being provided is homeowner rehabilitation under 24 CFR 570.202, the value of the homeowner's primary residence may be excluded from any calculation of net family assets);
    (ii) Annual income as reported under the Census long-form for the most recent available decennial Census; or
    (iii) 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 50 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. Representativeness refers to the quality of a sample having the same distribution of characteristics as the population from which it is selected.

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.

Entitlement Program

Once it has been determined that the benefits of the activity will be available to 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 and at least 51 percent of the residents are 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. Entitlement grantees may use such service areas if the CDBG-funded activity is located in the same service area. If not, it will be necessary for the service area to be defined before CDBG assistance may be provided if the activity is to qualify under the LMI area benefit criteria. 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, you 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.

The use of more current income data collected by conducting a survey instead of HUD's Low- and Moderate-Income Summary Data (LMISD) derived from the most recent US decennial census may be accepted for any service area, including whole block groups or census tracts for which the percentage of residents that are LMI is 51 percent or greater. However, where such data indicates a percentage lower than 51 percent, the area could only qualify under the *exception rule* provision or *upper quartile criterion*. Section 105(c)(2)(B) of the HCD Act provides an

exception to the general rule at section 105(c)(2)(A) for determining whether CDBG-assisted area benefit activities principally benefit LMI persons. The general rule requires that area benefit activities serve areas where the concentration of LMI persons is at least 51 percent. The *exception rule* provision located at 24 CFR 570.208(a)(1)(ii), allows certain grantees to undertake the same types of activities in areas where the proportion of LMI persons in the area is within the highest quartile of all areas in the grantee's jurisdiction in terms of the degree of concentration of LMI persons. The *exception rule* provision allows these grantees to undertake the same types of activities in areas where the proportion of LMI persons in the area is within the highest quartile of all areas in the grantee's jurisdiction in terms of the degree of concentration of LMI persons. Based on 24 CFR 570.208(a)(1)(ii), HUD uses census block groups as the common denominator for determining the minimum percentage of LMI persons required for area benefit activities in communities qualified to use the *exception rule*.

Block group data cannot be relied on to exclusively determine the percent of LMI persons currently residing in the service area of an area benefit activity when the service area boundaries do not reasonably coincide with census areas. Where fragments of one or more block groups form part of the service area of an activity, the following approach may be used to determine the income characteristics of each fragment:

1. Assume that the percentage of LMI persons in the respective block group(s) also applies to the fragments therein, unless there is good reason to believe that the residents of the fragments have higher incomes than the balance of the block group; or

2. Either: (a) determine the likely income levels in the fragments through analysis of HUD's Low and Moderate-Income Summary Data (LMISD) at the block face level; or (b) conduct an income survey throughout the fragment(s) to determine the current income levels; or

3. Combine the data arrived at for the fragment(s) with the values already determined through the use of the LMISD for any block group(s) that are completely subsumed within the service area of the activity.

As discussed above, the statute and the regulations recognize that some entitlement communities have few, if any, areas within their jurisdiction that have 51% or more LMI residents. Exception grantees qualify for this exception when less than one-quarter of the populated block groups in its jurisdiction contain at least 51 percent LMI persons. Grantees who decide to conduct an income survey must do so in all block groups in its jurisdiction so that a new assessment can be made of the upper quartile percentage resulting from the more current data obtained from the survey. The standards for accepting an area benefiting less than 51 percent LMI persons should be unambiguous—that is, there should be clear evidence that the percentage of LMI persons in a block group shown by the more current data is less than 51 percent and falls within the upper quartile of all block groups based on that same data source. The *upper quartile criterion* does not apply to the State CDBG program.

State Program

HUD will generally accept the determination of the service area by the state and its grant recipients unless the nature of the activity or its location raises serious doubt about the area claimed by the state and its grant recipients. The area to be served by a CDBG funded activity need not be coterminous with census tracts or other officially recognized boundaries; it is critical that the service area be the entire area served by the activity (see 24CFR 570.483(b)(1)(i)). The service area boundaries of State CDBG-funded activities may or may not coincide with census or other geographic boundaries, especially in smaller communities and rural areas where block groups or census tracts with low population densities cover large areas. One census tract may cover an entire city or there may be only two or three census tracts in an entire county. Scenarios which states and state grant recipients commonly face include the following:

1. 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.

2. The service area includes all or part of several units of general local government and may contain both incorporated and unincorporated areas. Data from HUD may be usable for a portion of the service area; therefore, the State and its grant recipients 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).

For the State CDBG program, the service area may be a sparsely populated rural area. For such an area, a census of the entire population may be undertaken; however, the following conditions are applicable:

- 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. If 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 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 census, or 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, say, 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 LMISD and give an explanation if the two percentages differ widely.

Performing LMI Qualification

Once the boundaries of the service area of the CDBG-funded activity have been defined, the next step is to determine the required percentage of residents that are LMI persons. To determine the percentage of LMI persons in the service area, grant recipients may utilize HUD's LMISD. HUD's LMISD is based on the most recent US decennial census data, which may not reflect current income levels in the service area and/or the census tract/block boundaries may not coincide sufficiently with the service area. This leads to the option of conducting a survey to determine the percentage of LMI persons in the service area.

For the Entitlement program, the CDBG Regulations at 24 CFR 570.208(a)(1)(vi) require that the results of the survey meet standards of statistical reliability comparable to that of the decennial census for areas of similar size to determine the percentage of LMI persons in the service area of a CDBG-funded activity. A statistically reliable survey entails the following:

1. The grantee must clearly state the survey method used: mail questionnaire, face-to-face or telephone interviews, etc. (Each method has advantages and disadvantages.)

2. Participants for the survey must be selected through a random sampling process, and replacements for nonrespondents must also be selected through the same random sampling process.

For the State program, CDBG regulations at 24 CFR 570.483(b)(1)(i) require that grantees conduct surveys that are methodologically sound to determine the percentage of LMI persons in the service area of a CDBG-funded activity.

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 LMISD data are not used in documenting LMI benefit on an area basis, CDBG grantees must comply with the standards for conducting surveys located at 24CFR 570.208(a)(1)(vi) for the Entitlement program and 24 CFR 570.483(b)(1)(i) for the State CDBG program. Experienced researchers employ survey methods that are easy to complete, generate consistent and accurate data, and produce results that answer specific questions. Anybody who has not conducted a survey can still do so by following a systematic approach. This guide describes procedures that may be used to determine whether the requisite percentage of the residents of a service area (51% or the exception percentage, as applicable) of a CDBG-funded activity are LMI persons. This guide does not restrict the CDBG grantee to any one type of survey methodology. 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. The bibliography at the end of this Notice contains a list of books on how to conduct other types of surveys.

Step 2: Develop the Questionnaire

If you choose to conduct a mail questionnaire, use standard 12-point print and do not congest too many questions on one sheet of paper. Generally, follow these guidelines:

- The questions in the questionnaire should be short, simple and efficient. Keep the language as simple as possible. Avoid bias. Do not encourage particular answers. Include other questions, if you like, but make sure that the survey does not take too long.
- Use the correct income limits (correct amount, correct year, and correct service area) for the survey instrument. (Contact your local HUD CPD Office when in doubt.).
- Avoid loaded questions—i.e., questions with no correct answers. Loaded questions increase respondent burden.

Step 3: 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?

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. Use an acceptable random selection method and decide the number of attempts and replacement procedures to be used. 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.

Step 4: 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:

- 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 5: Analyze the Results

Complete the LMI Worksheet correctly. Record your calculated percentage of LMI persons.

Step 6: 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.

V. Suggested Procedures for Conducting a Survey to Determine The Percentage of LMI Persons in the Service Area of a CDBG-Funded Activity

Step 1: Selecting the Survey Type

The most commonly used surveys for this application are: (a) mail survey (or self-administered questionnaire), (b) face-to-face (or door-to-door) interviews, and (c) telephone interviews (see Table A). For telephone and door-to-door surveys, it might be useful for the survey team to notify people by mail in advance, to let them know that they will be contacted for a survey. This can overcome resistance due to 'telemarketing fatigue.'

(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 aren't 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)

HUD does not recommend mail surveys unless at least one follow-up letter or telephone call is made to obtain an adequate response rate. 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

Table A – Summary Comparison of the Three Survey Methods

Dimension of Comparison	**Mailed Questionnaire**	**Face-to-Face Interviews**	**Telephone Interviews**
Cost	Moderate	High	Low
Data Quality: Response rate Respondent motivation Interview bias	 Low Low None	 High High Moderate	 Moderate to High High Low
Sample quality	Low	High	Moderate
Interview length	Short	Very Long (but depends on size of service area)	Long
Ability to probe and clarify	None	High	High
Speed	Low	Low	High
Interviewer supervision	None	Low	High
Anonymity	High	Low	Low
Ability to use computer assistance during process	May be possible but too expensive	Possible	High
Dependence on respondent's reading and writing abilities	High	None	None
Control of context and question order	High	High	High

Step 2: Developing a Questionnaire

Constructing a questionnaire is a skill, which requires decisions concerning the content, wording, format, and placement of questions—all of which have important consequences on the results of what you intend to measure. There are basically four areas involved in constructing a questionnaire:

- Determine the question content, scope, and purpose
- Choose the response format to be used in collecting information from the respondent
- Word the questions so as to get at the issue of interest
- Determine how best (i.e., the order) to place the question(s) of interest among other questions in the questionnaire

It is important that all respondents be asked the same questions, in the same order, and their responses recorded exactly, without additions or deletions. To ensure this, the questions must be written properly and the exact response of each respondent recorded as it is presented.

It is recommended that interviewers carry two cards for each family. One card will contain figures for each low- and moderate-income level and its corresponding family size (see Table B). If racial data are to be collected, the other card will contain the following racial categories: White, Black/African American, Asian, American Indian/Alaskan Native, and Native Hawaiian/Other Pacific Islander, American Indian/Alaskan Native & White, Asian & White, Black/African American & White, American Indian/ Alaskan Native & Black/African American, Other Multi-racial; and the following ethnic categories: Hispanic, Latino, or not Hispanic or Latino.

TABLE B - Illustration of Income Cards

Card Number	Number of Persons in Family	Low/Mod Income Level
1	1	$19,800
2	2	$22, 650
3	3	$25,450
4	4	$28,300
5	5	$30,050
6	6	$31,850
7	7	$33,600
8	8	$35,400
9+	9+	$37,200+

Information about the racial and ethnic composition of the service area may be obtained directly from Census data. However, HUD does not object to collecting information about racial and

ethnic composition of the service area from the survey. CDBG regulations at 24 CFR 570.506(g)(2) for the Entitlement program and 24 CFR 570.491 for the State program require submission of data on the racial, ethnic and gender characteristics of persons who are applicants for, participants in or beneficiaries of their CDBG programs. This information must be reported for each activity and should indicate the number persons benefiting by race, ethnicity, and gender.

Sample Questions

Question 1
How many families currently reside at this address? _____ (If more than one family, each family must complete a separate questionnaire).

Question 2
How many persons are there in your family including yourself? _____ (If you are single with no dependents, write 1).

If more than one family resides at the address, complete the following:
Family #1: family size (i.e., number of persons in family) _____
Family #2: family size (i.e., number of persons in family) _____
Family #3: family size (i.e., number of persons in family) _____

Question 3
Is the current, combined income of all family members residing at this address (including any related, dependent persons over 65 or working dependent children over 18) above or below the figure quoted on this card? ___ Yes, ___ No (Present the card showing family sizes and income levels from Table A).

Question 4
Please, check the ethnic group to which you belong:
Hispanic or Latino_____, Not Hispanic or Latino_____

Please, check the racial group to which you belong:
White _____, Black/African American _____, Asian _____, American Indian/Alaskan Native _____, and Native Hawaiian/Other Pacific Islander _____, American Indian/Alaskan Native & White _____, Asian & White _____, Black/African American & White _____, American Indian/ Alaskan Native & Black/African American _____, Other Multi-racial_____.
(Present the card showing various categories).

Making Contact

Initially, the interviewer should make contact with the head of the family or someone who is qualified to speak for the family and has knowledge about the family income. After making contact, the interviewer should introduce him/herself, state the purpose of the survey and solicit the participation of the respondent. If the interview is being conducted face-to-face, the interviewer should find the card for the family size of the respondent, hand it to the respondent, and then ask the questions and record the answers. If the interview is being conducted by telephone, a card cannot be used; therefore, the interviewer should make reference to the income level that is the threshold for a family of the size of that of the respondent. For example, if there are three persons in the respondent's family you might ask, "is the current combined income for your family during the past twelve months, less than or more than $25,450?"

While the necessary questions are brief and simple, there are some additional factors to take into account when designing the questionnaire. First, the questions used in the survey cannot be "loaded" or biased. For example, the interviewer may not imply that the neighborhood will benefit or receive Federal funding if respondents say that they have low incomes. The questions must be designed to determine truthfully and accurately whether respondents are LMI persons. It is permissible to state that the reason for the survey is to gather information essential to support an application for funding under the CDBG program or to undertake a CDBG-funded activity in the area.

Second, bear in mind that questions about income are rather personal. Some people may be suspicious or reluctant to answer questions about their incomes—especially if they do not see the reason for the question. A good way to handle this problem is usually to put questions about income at the end of a somewhat longer questionnaire on other community development matters. In this instance, a local agency can use this questionnaire to gather some information on what the neighborhood sees as important needs or to gather feedback on a proposed policy or project. At the end of such a questionnaire, it is usually possible to ask questions on income more discretely. If this option is chosen, however, the interviewer should be cautioned that a lengthy questionnaire might cause respondents to lose interest before completing the survey. The ideal length here would probably be less than ten minutes, although certainly you could develop an even longer or shorter questionnaire as necessary.

Step 3: Selecting the sample

The selection of a sample of families to interview involves a series of steps. You must begin by defining the population whose characteristics you are trying to estimate. Then you must determine how many families in that group must be sampled in order to estimate the overall characteristics accurately. Next you must make some allowances for families who, for whatever reason, you will not be able to interview. And finally you must actually select the families from which you will try to obtain interviews. This section discusses each of these steps.

Defining the Population

If you are trying to determine the proportion of families in a neighborhood with low- and moderate-incomes, that neighborhood is the population. However, instead of a neighborhood, the population may be a town, it may be as large as a county, or it may be defined by some other boundary. But before you can obtain a sample, you must clearly define what area you want the sample to represent. Let us assume here that the population is a neighborhood that contains about 400 families. You will sample from the 400 families and make estimates about the income levels of all of the persons in the sample.

Once you have defined your population, you next need a method of identifying the families in that area so that you can interview them. Ideally, for a given neighborhood, you would have a list of every family living in the neighborhood and perhaps his or her telephone number. Then you would devise a procedure to randomly select the families you want to interview. In reality, you probably will not have a list of all of the families in the neighborhood, so you will have to improvise. One way would be to go to the neighborhood and randomly select which homes to go to for an interview—the advantage of this method is that the houses are there, so you can go right to them instead of using a list. After collecting information on the various families, you can then make some estimates about the number of people in the neighborhood and their incomes.

City indexes (if available and up-to-date) usually provide the best source of household information suitable for sampling. Telephone books may be adequate, but keep in mind that you will miss people without telephones or with unlisted numbers. Also, telephone directories usually will have far more people listed than those who are in the service area, so you will need to eliminate those outside of your service area. Tax rolls are a source of identifying addresses in an area; however, they identify only property owners whereas you are interested in residents. Also, tax rolls generally identify building addresses, whereas in the case of apartment buildings you are interested in the individual apartments. You can use tax rolls to identify addresses to go to, in order to get an interview, but you cannot use them as the basis of a mail or telephone survey (unless you have access to a telephone directory that identifies telephone numbers by property address).

How Big a Sample?

After you have defined your population and selected a method for identifying individual families in the service area, you must next determine how many families to survey—that is, the sample size. A sample is representative of the population from which it is selected if its aggregate characteristics closely approximate those same aggregate characteristics in the population. The larger the sample, the more likely it is that its aggregate characteristics truly reflect those of the population. However, sample size is not dependent on the size of the population, for large populations. This means that a random sample of 500 people is equally useful in examining the characteristics of a state of 6,000,000 as it would a city of 100,000 or 50,000. For this reason, the

size of the population is irrelevant when it is large or unknown; however, it becomes relevant when dealing with sparsely populated areas.

Sample Size Calculator (SSC) is a website (*http://surveysystem.com/sscalc.htm*) developed by Creative Research Systems to enable survey researchers to calculate sample sizes from various population sizes. To use the SSC you need both the confidence interval and the confidence level. The confidence interval is the range of values within which a population parameter is estimated to lie. Confidence interval is sometimes referred to as margin of error (+ or –).

Table C – Sample Sizes at 95% Confidence Level

Total Number of Families in the Service Area	**Sample Size: Number of Families**	
	95% Confidence Level	
	Confidence Interval = 4	**Confidence Interval = 5**
50	46 – 50 (may conduct a census)	43 – 50 (may conduct a census)
60	51 – 59	47 – 57
80	67 – 75	61 – 71
110	89 – 97	81 – 91
150	116 – 124	103 – 113
210	152 – 160	131 – 141
290	192 – 200	160 – 170
400	236 – 244	191 – 201
700	319 – 327	243 – 253
1200	396 – 404	286 – 296
1800	446 – 454	312 – 322
2500	480 – 488	328 - 338

For example, if a survey shows that 55 percent of a randomly selected sample has the parameter under investigation and the confidence interval is 5, what that means is that the actual percentage

of the population which has that parameter may lie within the interval 50 to 60. Confidence intervals are applicable only in surveys where the sample is randomly selected from the relevant population.

The confidence level is the estimated probability that a population parameter lies within a given confidence interval. The confidence level tells you how sure you can be. It is expressed as a percentage and represents how often the true percentage of the population with the parameter being examined lies within the confidence interval. The 95% confidence level means you can be 95% certain; the 99% confidence level means you can be 99% certain. Most researchers use the 95% confidence level because the 99% level leaves very little margin for error.

The numbers in the column titled "Total Number of Families in the Service Area" in Table C, are hypothetical numbers. If the total number of families in your service area does not match any of the numbers in Table C, select a confidence level and a confidence interval, and use the SSC to calculate the number of families in your sample.

As seen in Table C, at the same confidence level, sample size decreases as confidence interval increases. For example, when the total number of families in the service area is 80, the range for the number of families is 67 – 75, at a confidence interval of 4 compared to a range of 61 – 71, for a confidence interval of 5. This has serious implications on the representativeness of the sample. A small sample size may decrease the extent to which the sample is representative of the population. For any given population, the sample size will be larger at a confidence interval of 4 than at a confidence interval of 5.

Unreachables and Other Nonresponses

The standard requirements for conducting surveys include not only the notion that systematic, representative sampling methods be used, but also that high response rates be obtained and statistical weighting procedures be imposed to maximize representativeness. No matter what you do, some families will not be home during the time you are interviewing, some probably will refuse to be interviewed, some will terminate the interview before you finish, and some will complete the interview but fail to provide an answer to the key question on income level. If you choose to get responses from replacements, they must be selected through a random sampling process. The decision to get responses from replacements may become inevitable if the proportion of non-responses is high enough to affect the validity of the results of the survey. Non-response rates greater than 20 percent may affect the validity of the survey; for example, a non-response rate can become a serious problem when a census is conducted instead of a survey (as may the case in sparsely populated areas). If the non-response rate is too high, there is the risk of not having enough LMI respondents to make the required percent of the total population of the service area.

Drawing Samples

In sampling, you are looking at a portion of everyone in a group and making inference about the whole group from the portion you are observing. For those inferences to be most accurate, everyone who is in the group should have an equal chance of being included in the sample. For example, if you are sampling from a list, using a random numbers table will provide you with a random sample—see instruction at Appendix A and numbers at the Table in Appendix B. In using a random-numbers table, you take a list of your population and draw from it according to the table. If, for example, the first three random numbers were 087, 384, and 102, then you would go through your population list and target the 87th, 384th, and 102nd families for an interview.

If your sample size is less than 384, you should skip '384' and go to the next number in the Table. Continue until you have achieved the desired sample size. If you encounter unreachables, you should replace them with the next family in the list, in the order they were selected. For example, if you draw a list of 300 families in an effort to obtain 250 interviews, the first family you write off as *unreachable* should be replaced with the 251st family.
If you do not have a list of all the families in a service area you are trying to measure, but you know the geographic boundaries of the area, you might randomly select a point at which to start and proceed systematically from there. In the hypothetical 400-family neighborhood, in trying for 250 interviews, you would need to interview every 1.6th family (400 divided by 250) in order to cover the entire neighborhood. In whole numbers, this works out to about 2 of every 3 families. Therefore, you could start at one end of the neighborhood and proceed systematically through the entire neighborhood trying two doors and then skipping one. A family that is skipped may be used as replacement for any family selected but for which an interview is not possible. If the sample size allows for systematic selection of one out of every six families for interview, begin by randomly selecting any number from one to six; use that family as the starting point for the interview and from there select the every sixth family for interviewing. If the sixth family is unreachable, you could use the third family within the count as replacement.

You will achieve more accuracy if you are not too quick to write off a family as unreachable. You are more likely to achieve randomness if you obtain interviews from the families you selected first. Thus, if you are doing a door-to-door survey, you probably should make two or more passes through the area (preferably at different times) to try to catch a family at home. Frequently they will be busy, but may say that they can do the interview later—you should make an appointment and return. Only after at least two tries or an outright refusal should a sampled family be replaced. With a telephone survey, at least three or four calls should be made before replacing a family.

Step 4: Conducting the survey

To carry out the survey, you have to reproduce a sufficient number of questionnaires, recruit and train interviewers, schedule the interviewing, and develop procedures for editing, tabulating, and analyzing the results.

Publicity

To promote citizen participation it may be worthwhile to arrange advance notice. A notice in a local newspaper or announcements at churches or civic organizations can let people know that you will be conducting a survey to determine the income levels of the area. Moreover, if you let people know in advance how, why, and when you will be contacting them, usually they may be more likely to cooperate.

As with all aspects of the survey and questionnaire, any publicity must be worded so that it does not bias the results. For example, it is better to say that the community is applying for a CDBG grant and that, as part of the application, the community has to provide current estimates of the incomes of the residents of the service area. It is not appropriate to say that, in order for the community to receive the desired funding, a survey must be conducted to show that most of the residents of the service area have low and moderate incomes.

Interviewers

It may not be necessary to hire professional interviewers. Volunteers from local community groups and civic organizations serve well. Also, schools or colleges doing courses on civics, public policy, or survey research may be persuaded to assist in the effort as a means of providing students with practical experience.

It is best if interviewers are chosen that make the respondents feel comfortable. For this reason, survey research companies often employ mature women as their interviewers. When interviewers are of the same race and social class as the respondent, the survey usually generates a better response rate and more accurate results. It is important that the interviewer commands the attention of the respondent, reads the questions as they are written, and writes down the responses as given.

It is important that interviewers have all of the materials they need to complete the interview. Usually, you will want to assemble an interviewer kit that can be easily carried and includes all of the important materials such as:

- A ‘professional-looking’ 3-ring notebook (this may even have the logo of the organization conducting the survey)
- Map of the service area
- Sufficient copies of the survey instrument
- Official identification (preferably a picture ID)

- A cover letter from the sponsor of the survey
- A phone number the respondent can call to verify the interviewer's authenticity.

Contact and follow-up

Interviewers should plan to contact respondents at a time when they are most likely to get a high rate of response. Telephone interviews are usually conducted early in the evening when most people are home. Door-to-door interviews also may be conducted early in the evening (especially before dark) or on weekends. You should try again, at a different time to reach anyone in the initial sample who is missed by the initial effort.

In general, you should know the best times residents of your community can be reached—avoid selecting interview times, which risk yielding biased results. For example, interviewing only during the day, from Monday to Friday, will probably miss families where both the husband and wife work. Since these families may have higher incomes than families with only one employed member, your timing may lead to the biased result of finding a high proportion of low-and moderate-income households.

Of course, in making contact with a member of the family, the interviewer first has to determine that the person being interviewed is of sufficient knowledge and competence to answer the questions being asked. The interviewer thus should ask to speak to the head of the family. If it is absolutely necessary to obtain an interview at the sample residence, the interviewer may conduct an interview with other resident adults or children of at least high school age only after determining that they are mature and competent enough to provide accurate information.

As part of your questionnaire, you should develop an introduction to the actual interview. This should be a standard introduction in which the interviewers introduce themselves, identify the purpose of the survey, and request the participation of the respondents. Usually, it is also a good idea to note the expected duration of the interview—in this case, to let respondents know that the burden to them will be minimal.

Interviewers also should follow the set procedures for replacing "unreachables" (discussed in step 3). If they must write off an interview, they should not say, "well, I was refused an interview here, so I'll go over there where I think I can get an interview." This replacement procedure is not random and thus will affect the validity of your survey results.

The Interview

Every interview includes some common components. There is the introduction where the interviewer is invited into the home and establishes a rapport that facilitates the process of asking questions. The first thing the interviewer must do is gain entry and several factors can enhance this. Probably the most important factor is your initial appearance. The interviewer needs to dress professionally and in a manner that will be comfortable to the respondent. The way the

interviewer appears initially to the respondent sends simple messages—that you are trustworthy, honest, and non-threatening.

You are standing at the doorstep and someone has opened the door, even if only halfway. You need to smile and be brief. State why you are there and suggest what you would like the respondent to do. Don't ask—suggest what you want. For example, instead of saying "May I come in to do an interview?" you might try a more imperative approach like "I'd like to take a few minutes of your time to interview you for a very important study."

Without waiting for the respondent to ask questions, introduce yourself. You should have this part of the process memorized so you can deliver the essential information in 20-30 seconds at most. State your name and the name of the organization you represent. Show your identification badge and the letter that introduces you. If you have a three-ring binder or clipboard with the logo of your organization or sponsor, you should have it out and visible. You should assume that the respondent will be interested in participating in your study—assume that you will be doing an interview here.

If the respondent indicates that the interview should go ahead immediately, you need an opening sentence that describes the study. Keep it short and simple, no big words, and no details. Use the questionnaire carefully but informally. Interviewers should read the questions exactly as they are written. If the respondent does not understand the question or gives an unresponsive answer, it usually is best for the interviewer to just repeat the question. Do not attempt to guide the respondent to give particular responses. Questions should be read in the order in which they are written. The respondents' answers should be recorded neatly, accurately, and immediately as they are provided. At the end of the interview, and before proceeding to the next interview, the interviewer should always do a quick edit of the questionnaire to be sure that they have completed every answer correctly. This simple check helps to avoid the frustrating mistake of having taken the time and expense of conducting the interview, but without getting the information sought.

If you elect to include other questions and if you place the questions on income at the end, it is possible that a willing respondent will end the interview before you get to the critical question. If it appears to the interviewer that the respondent is about to terminate the interview, it is recommended that you immediately try to get an answer to the critical income question(s).

Editing

Interviewers should turn their completed surveys over to the person who will tabulate and analyze the data. That person should review each survey to ensure that it is complete and that each question is answered only once and in a way that is clear and unambiguous. Questions or errors that are found should be referred to the interviewer for clarification. It also may be desirable to call the respondent, if necessary, to clarify incomplete or ambiguous responses. If a question or an error cannot be resolved, a replacement should be added and the new respondent

contacted. Note that editing is an ongoing process because even after you have started to tabulate or analyze the data, you may come across errors that need correction.

Step 5: Determining the Results

After you have your data collected and edited, you need to add up the numbers to see what you have learned. Actually, it is useful to think of this in two parts: (1) tabulating the responses from the questionnaires and calculating an estimated proportion of low-and moderate-income persons; and (2) determining how accurate that estimate is. The first part can be taken care of by completing the sample LMI Worksheet.

Tabulation

Computer programs such as Excel, Access, Minitab, SAS, and SPSS are easy to use for tabulating data. The computer also makes it relatively easy to check for accuracy and consistency in the data. However, you can perform the calculations by hand or with a calculator. Also, you can process the data by putting it on a code sheet, by entering it on a manual spreadsheet, or just by flipping through the completed surveys. Regardless of how you process and tabulate the data, when you are finished you should be able to complete the Low-and Moderate-Income Worksheet.

Table D - Low- and Moderate-Income Worksheet

1. Enter the Estimated total number of families in the service area	1. _____
2. Enter the total number of families interviewed	2. _____
3. Enter the total number of persons in the families interviewed	3. _____
4. Enter the total number of persons in the families interviewed who are low- and moderate-income persons	4. _____
5. Divide Line 4 by Line 3	5. _____
6. Multiply Line 5 by 100. This is the percentage of LMI persons in the service area	6. _____

Analysis

If you have done everything correct, including random selection of the required number of families, and your estimate shows that less than 51 percent of the residents of the service area have low- and moderate-incomes, you cannot undertake LMI area benefit activities in that area. However, this may not be the case if it is an "upper quartile exception community." Therefore, this section and the remainder of these instructions are not applicable to exception grantees. If the entry at Line 6 is at least 51 percent, you can perform additional analyses to determine the extent to which your estimate of the low- and moderate-income residents is correct. First, compare the average size of low- and moderate-income families with non-LMI families. The closer these figures are to each other, the more confident you can be in your estimate. Thus, if you estimate that 53 percent of the residents have low- and moderate-incomes and you find in your sample that both low- and moderate-income families and above low- and moderate-income-families have an average of 3.4 people, you can be pretty sure that your results are reliable.

Table E – Comparing the Distribution of Family Size by Family Income

Number of Persons in Family	Families With Low-Mod Incomes		Families Above Low-Mod Incomes	
	Number	**Percent**	**Number**	**Percent**
One				
Two				
Three				
Four				
Five				
Six				
Seven				
Eight				
Nine or more				
Total		100%		100%

A second simple calculation is to arrange your data into a table such as that shown in Table E. This table enables you to compare the distribution of family sizes of families of low- and moderate-incomes with those that are above low- and moderate-incomes. In completing Table E, you would count the number of low- and moderate-income families in your survey that have

just one person and enter the figure under "number" across from "one." You would proceed to enter the number of low- and moderate-income families with two persons, with three persons, and so forth through the "nine or more" category. Adding up all the entries in this column, you enter the sum across from "total" which will be the total number of low- and moderate-income families from which you obtained interviews. Then considering families that are above low- and moderate-income levels, you follow the same procedures to complete the "number" column for them. For each income group, divide the number of one person families by the total number of families in that income group and multiply it by 100, to yield the percent of that group that are in one-person families. Fill in the "percent" columns, using this procedure. Each of the percent columns should total to 100 or so allowing for rounding errors.

Upon completion of Table E, compare the percentages of LMI respondents with the percentages of the above LMI respondents for each family size. The more similar the two distributions are, the greater the degree of confidence you can have in your estimate of the proportion of persons with low- and moderate-incomes. For example, if among your low and moderate-income group, 10 percent have one person, 40 percent have two persons, and 50 percent have three persons, and among your above low- and moderate-income group 12 percent have one person, 41 percent have two persons, and 47 percent have three persons, you would have a great deal of confidence in your estimate.

Compare your survey results to the most recent LMISD (available on HUD's website) for the census geography that most closely matches the service area. If there is a big difference (e.g., LMISD = 29%, survey = 55%), then there may be other known factors to explain the difference. For example, there may have been a major economic downturn in the service area since the last census or the service area may be only a small part of a large census tract. Also, compare the block-group level data to ascertain that there were no anomalies in one part of town versus another; review the map of respondents versus block groups to make sure the responses were not skewed toward one side of town. Carefully analyze each scenario and make efforts to document the basis for any discrepancy.

Consider the scenario where you estimate that 51 percent of the residents have low- and moderate-incomes. You examine the distribution of the family sizes according to Table D and find that in your sample 100 percent of your low- and moderate-income group has just one person per family and 100 percent of your 'above low- and moderate-income' group has nine or more persons (this would be an exceptional neighborhood).

Third, after completing data collection, non-respondents should be analyzed to determine that they were reasonably random. For example, you may want to tabulate the rate of response by street or block in the service area to see whether there are notable gaps in the coverage of your survey. You may want to examine the racial or ethnic background of your respondents (if your survey collected such information) and compare them with what you supposed the distribution to be. If you do not detect any major gaps in the coverage of your sample or any anomalies in the characteristics of your non-respondents, you can be more certain of the accuracy of your estimates.

Step 6: Documenting Your Results

It is important that the results of the survey be documented, since those who audit or evaluate your program may want to review the procedures and data used to determine that the service area qualifies under the CDBG program regulations. You should therefore maintain careful documentation of the survey. The contents of that documentation are as follows:

1. Keep the completed surveys. This will show that you actually did the survey and that you asked the proper questions. It is best if each survey has a cover sheet containing information that identifies the respondent, such as name, address, and telephone number. Then, when the survey is complete, the cover sheets can be separated from the questionnaires. You can save the questionnaires as documentation of your work, but you maintain the privacy of your respondents.

2. Saving the cover sheets separately provides a record of who was contacted. If anyone wanted subsequently to verify that you have not made up that data, they could contact some of the respondents noted on the cover sheet and ask them whether, in fact, they have been contacted on such-and-such a date by such-and-such a person to discuss matters related to community development. The privacy of their original responses still is protected by this procedure.

3. Keep a list of the actual families sampled. This might be one list with the sampled families checked once if they were sampled, and checked twice if they were interviewed. Replacement families should be noted too. There should be written documentation about the method you used to select families from the list for interviewing. Note that this is different from keeping just the cover sheets, since it documents not just who was interviewed, but also who was not interviewed and how interviewees were selected. If you did a door-to-door sample without starting from a universe, you should have written down the procedures used to select the sample, including instructions to interviewers for replacing sampled families who were not interviewed.

4. Survey data should be retained in accordance with record-keeping requirements of the State program at 24 CFR 570.490 and the Entitlement program at 24 CFR 570.506. Keep a backup disk of your data. If you do your tabulations on spreadsheets, retain the spreadsheets. If you just read through the questionnaires and count up responses and enter them into a table as you go, keep the tables with the raw data counts.

Appendix A – Using Random Numbers Table

This appendix shows four examples of how numbers can be randomly drawn from a table. Numbers can be drawn vertically, horizontally or diagonally using any column or combination of columns. Examples 1 – 4 show how random numbers can be drawn from the table in Appendix

B. The numbers on the first column of the Table in Appendix B denote row numbers, 1 to 19, they are labels only. (*The numbers used in Examples 1 to 4 are for illustration only*).

Example 1 – Drawing a Sample of 5 of 10

Assume that you have a listing of 10 families and you want to draw a random sample of 5 families. Find the number "53" in the upper left-hand corner—column 2, row 1. Start with the first digit of the first five numbers in column 2 and you will have the following numbers: "5," "6," "9," "1," and "3." So from the list of 10 families, the sample of five would include the fifth, sixth, ninth, first, and third family.

Example 2 – Drawing a Sample of 5 of 100

Start at "31" in the lower left-hand corner of the table (column 2, row 19) and work across the bottom row; the numbers are "31," "6," "46," "39," and "27." From the list of 100 families, our sample would include the 31st, 6th, 46th, 39th, and 27th families on the list.

Example 3 – Drawing a Sample of 5 of 30

Start at the upper left-hand corner and begin with the "53" (column 2, row 1) and work across. The numbers in order are "53," "95," "67," "80," "79," "93," "28," "69," and "25." The problem here is that you are sampling from a population of 30 so any number above 30 must be skipped. Except for 28 and 25, the rest of the numbers are greater than 30. Keep skipping until you find a number in your range. Here you would sample the 28th and 25th family on your list and continue until you find three more (which would be the 13th, 24th, and the 21st).

Example 4 – Drawing a Sample of 5 of 300

Start again with "53" (column 2, row 1) in the upper left-hand corner. Disregard the first digit (i.e.,'5') and take the second digit ('3'); combine this with the number in column 3, row 1 ('95'); this will make it "3 95." Since we need a three-digit number to cover the size of our service area, we can use these three (or any three columns—each number is random). Reading from the "3 95," we see "3 95," "2 12," "0 16," and "0 59." From the list of 300 families, then, you would take the 212th, 16th, and the 59th families (as well as how many more you need—the next two would be the 217th and the 60th).

Appendix B -- Random Numbers

1	53	95	67	80	79	93	28	69	25	78	13	24	100	62	62	21	11	4	54
2	62	12	27	41	5	4	19	34	84	78	71	45	73	79	33	57	29	58	75
3	90	16	47	72	20	60	70	71	2	67	21	65	7	39	58	81	61	11	70
4	10	59	4	76	80	6	82	20	60	92	33	61	76	83	73	12	84	43	90
5	32	17	36	64	3	30	80	95	61	33	65	5	39	88	36	44	42	43	5
6	54	71	27	89	41	53	60	10	2	91	76	95	98	91	64	65	23	57	16
7	10	60	18	77	34	59	28	99	15	11	70	34	27	78	67	19	97	30	33
8	42	20	24	36	78	58	82	81	49	91	35	53	30	92	57	19	97	40	58
9	73	55	87	48	49	97	60	92	27	78	2	55	29	76	99	21	45	72	56
10	21	56	41	23	58	57	49	49	70	33	6	79	95	3	70	38	26	26	5
11	9	60	37	99	6	41	69	97	18	44	100	18	46	3	90	57	22	82	15
12	63	26	41	8	21	38	15	63	38	100	68	69	24	39	19	29	93	97	40
13	98	72	9	45	69	50	7	86	5	80	0	8	25	96	45	0	0	13	95
14	87	89	65	22	98	55	86	9	66	43	64	55	80	30	15	99	26	25	71
15	5	91	68	44	67	2	71	96	15	73	78	3	12	87	53	9	11	12	21
16	75	93	62	49	95	82	30	81	24	4	11	30	71	96	49	47	65	48	28
17	76	15	55	38	29	0	8	20	71	42	81	51	44	76	93	42	87	89	38
18	26	76	93	84	8	40	96	69	84	52	89	5	16	43	34	37	64	39	14
19	31	6	46	39	27	8	67	81	13	33	14	86	38	23	33	22	56	47	60

Note: Other methods of creating random numbers include using a random number generator computer program or the phone book method.

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