

WASHINGTON STATE INFRASTRUCTURE ASSISTANCE COORDINATING COUNCIL (IACC) INCOME SURVEY GUIDE

Introduction

This guide outlines a step-by-step survey process to be used by applicants for funding assistance to evaluate if:

A. A community meets the primary national objective of the Community Development Block Grant (CDBG) program for infrastructure projects, or

B. A community qualifies for enhanced loan terms for the following loan programs:

- Drinking Water State Revolving Fund (DWSRF)
- Clean Water State Revolving Fund (CWSRF)
- Public Works Trust Fund (PWTF)
- USDA Rural Development (RD)

It contains instructions necessary to develop, administer, and document a statistically valid income survey to determine the community's percentage of Low-and Moderate-Income (LMI) persons for the CDBG program, and the Median Household Income (MHI) for non-CDBG programs.

This guide can be accessed online at www.infracfunding.wa.gov/.

Refer to Appendix A, page 14, for funding program contact information.

Definitions

The following definitions explain terms used throughout this income survey guide:

A. Low- and Moderate-Income (LMI) Households

To determine CDBG eligibility for an area being served by the system, Low-and Moderate-Income (LMI) households are defined as:

- Low-income households at or below 50% of the county's median household income based on household size.
- Moderate-income households at or below 80% of the county's median household income based on household size.

The CDBG Income Limits are updated annually, and can be accessed at

www.commerce.wa.gov/cdbg.

B. Median Household Income (MHI)

To determine eligibility for enhanced loan terms for non-CDBG programs, the median household income (MHI) represents the middle value (if n is odd) or the average of the two

middle values (if n is even) in the ordered list of data values. The median divides the total list of values into two equal parts: one-half of the cases fall below the median and one-half of the cases exceed the median.

C. Area or Universe

The area is the total number of households or connections within the entire system, unless the applicant demonstrates that the survey should apply to a sub-population only. Consult the specific funding agency to ensure the area or universe is identified appropriately.

D. Sample Size

A sample size is a number of households that have been randomly selected from an area. Random selection of an adequate-sized sample ensures that it is representative of the area from which it has been drawn. By sampling a portion of the households residing within the area being served by the system, estimates may be made about the incomes of all residents of that area. Please refer to TABLE A for more detail.

E. Total Household Income

Total Household Income is all taxable and nontaxable income earned by all members of the household for the latest tax year (example: survey in 2013 would be for tax year 2012). Income includes (but is not limited to) wages, business, retirement, supplemental security, public assistance, disability, unemployment and investment income, VA payments, alimony and so forth. Income received by children under the age of 15 for work such as baby sitting, paper routes, or lawn mowing does not need to be included.

Step One: Appoint a Survey Coordinator from an Entity or Organization

The first step of a survey process is to appoint a Survey Coordinator from a survey entity or organization to oversee the survey process. The Coordinator must contact the funding agency before conducting the survey to ensure that the survey method is acceptable and then after the survey to confirm the effort yields statistically valid results. Surveys typically take planning, coordination, and effort over a period ranging from several days to several months depending on the size of the population or target area to be surveyed. It is recommended that the Coordinator leads the process and provides oversight through all steps, from beginning to end.

Most funding agencies require an applicant to use a third party or other resource available, like a volunteer (not related with the system), a university or consultant. The applicant must contact the funding agency to determine requirements specific to the program, and to determine whether the third party is approved by the funding agency to conduct the survey. It is equally important to obtain a commitment from the person selected to see the process through; to be clear about expectations of the job; and to establish effective communication channels with local elected officials.

Step Two: Define Survey Area

This step of the survey process is designed to yield a definition of the survey area. Completion of this step is dependent on identifying the physical boundaries of the geographic area to be surveyed, and the households that exist within the defined geographic area.

A. Identify geographic boundaries of the survey area.

The survey area must conform to geographic boundaries of, and must be done for the entire area being served by the system, unless an applicant demonstrates that survey should apply to a sub-population or service area being improved. Consult the specific funding agency to ensure the area or universe is identified appropriately.

B. Identify households within the survey area.

To complete the process of defining the survey area, all households in the area being served by the system must be identified. A list of each household living in an area, their address and telephone number should be available from the applicant.

After all households have been identified, the Survey Coordinator must assign a household sampling number to each household within the survey area. This method for identifying the households in an area must be developed to draw a sample size.

Step Three: Select Survey Sample From The Households Within The Area

Once the survey area has been defined, the next step is to select a survey sample of households within the survey area. To complete this step, it is necessary to: determine the appropriate sample size; determine unoccupied homes; establish a process to replace unreachable and other non-response households; and draw the survey sample.

A. Determine sample size needed to generate the minimum number of required responses.

The next step is to determine the sample size needed to generate the minimum number of responses required for the income survey. If the minimum number of responses is not obtained, the survey will not be considered valid.

To help determine sample group size, use Table A, "Required Sample Sizes For Areas of Various Sizes." Listed in Column A are the area sizes. Listed in Column B are the sample group sizes or the minimum number of needed responses. A hypothetical 400 household neighborhood is used to illustrate the use of this table. Under "Number of Households in the Area," locate line 399 to 650 households. The number of complete responses required in the sample is 152 (400 X 38%).

TABLE A

Required Sample Sizes For Areas of Various Sizes

Column A	Column B	Column C
Number of Households in <u>the Area</u>	Required Sample Size as Percentage Needed to <u>Validate the Survey</u>	Equivalent Sample Size Range to <u>Validate the Survey</u>
1-49	93%	1-45
50-55	90%	45-49
56-63	87%	49-55
64-70	85%	54-59
71-77	84%	60-65
78-99	80%	62-79
100-115	78%	78-90
116-153	72%	83-110
154-180	69%	106-124
181-238	67%	121-159
239-308	57%	136-176
309-398	50%	154-199
399-650	38%	152-247
651-1,200	25%	163-300
1,201-2,700	13%	156-351
2,701 or more	10%	270 or more

Source:

1) U.S. 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.

2) United States Department of Agriculture Rural Development. Guidance regarding the appropriate use of income surveys in evaluating Water and Waste Disposal loans and grants.

B. Establish a process to replace unreachable and other non-responsive households within the sample.

The sample sizes listed in Table A indicate the number of interviews that must be completed, not necessarily the number of households that will need to be contacted. To be considered a completed interview for income survey purposes, the interview must include complete and accurate information on the respondent's income level.

Table B indicates the usual rates of response that can be expected from a variety of survey instruments. For example, when conducting a door-to-door survey in a 400 household neighborhood, a sample of 169 to 203 households (152 divided by .90 or .75) should be drawn to obtain 152 completed interviews. Over sampling is one way to deal with unreachable households, unoccupied homes and other non-response situations.

TABLE B
Expected Response Rates For
Different Types of Surveys

<u>Expected Survey Type</u>	<u>Rate of Response</u>
Mail	25 - 50%
Mail, with letter follow-up	50 - 60%
Mail, with telephone follow-up	50 - 80%
Telephone	75 - 90%
Door-to-Door	75 - 90%

C. Draw Samples.

To acquire a good sample of the area, every household in the area needs to have an equal chance of being included in the sample. To ensure an equal chance, a random sample may be drawn using a random numbers table or Microsoft Excel generated random numbers.

It is advisable to over-sample when unreachable households, unoccupied homes and other non-responsive situations are encountered. They may be replaced with households in the over-sample list in the order replacements were selected. For example, if a list of 200 households is drawn in an effort to obtain 152 interviews, the first household written off as “unreachable” should be replaced by the 153rd household in the sample.

Take note that statistically valid results will be obtained if households are not too quickly written off as unreachable. If a door-to-door survey is being conducted, two or more passes through the area (at different times) should be attempted. With a telephone survey, attempt three calls before replacing a household.

Step Four: Select Survey Method

The Survey Coordinator should decide which survey method or combination of survey methods is best for an area, considering the number of people available to assist, the size of the sample needed, and the means available for identifying households to interview. Any survey method selected should provide a means for households with limited English proficiency (LEP) to respond to the survey. Please refer to the Department of Justice website <http://www.justice.gov/crt//lep/resources/resources.html> or from 65 CFR 50123 for the specifics of this requirement.

- A. A telephone survey** is relatively easy to conduct. The interviewer places a telephone call to a previously determined household, introduces himself, identifies the head of the household or a knowledgeable person, proceeds with the interview, and accurately records the answers.
- B. A door-to-door survey** takes more time to conduct because of the “leg work” needed to obtain interviews. First, the interviewer should introduce themselves, and then make contact

with someone who is qualified to speak for the household (i.e., head of household, spouse of the head of household, or someone in the household who is mature and knowledgeable about household income.) Next, the interviewer identifies the purpose of the survey, solicits participation from the respondent, and accurately records the answers.

Small systems often use a door-to-door survey because the area being served by the system is easily defined.

- C. A mail survey** may be the easiest to conduct, but often yields a low rate of response, which means a low degree of accuracy. To conduct a mail survey, the Survey Coordinator needs a list of all the addresses in the area being served by the system; a questionnaire; stamped, self-addressed return envelope; and postage. Consideration must be given to multiple unit residences, such as apartment buildings, which may have only one billing address but represent several households to be surveyed. With mail surveys, at least one follow-up letter or telephone call may be needed to produce the required number of responses.
- D. A combination survey** may be advisable in some situations. For example, when no one is home to answer a door-to-door survey, a note may be left requesting that the occupants telephone the interviewer. Similarly, the interviewer may telephone a household to schedule an interview time. A letter may be mailed to residents of the target area informing them of the date a survey will occur and a time an interviewer(s) will be in the area.

Step Five: Income Survey Questionnaire

The income survey questionnaire is designed to ask only the critical questions about income and the relationship of the respondent to the area being served by the system. See Attachment 1, page 12.

A. Income Questions

Since questions about income are personal, people are often reluctant to answer them. This is especially true if the reason for the question is not understood. One way to handle this problem is to structure the interview process to first explain why income information is needed, and then to ask the essential income questions. Please refer to Attachment 1: Income Survey Questionnaire.

Step Six: Publicize Survey Process

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 a survey will be conducted to determine the income levels of the area. People will be more likely to cooperate, if they know in advance how, why and when the survey will be conducted.

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 funding assistance 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 have low incomes.

Step Seven: Recruit and Train Survey Staff

A. Recruit staff

Survey Coordinator may hire professional interviewers or volunteer persons from local community groups as long as they are not connected to the system. Colleges that offer courses on civics, public policy, or survey research may be willing to assist as a means of providing their students with practical experience and credit.

It is best to choose interviewers who can make respondents feel comfortable, who will hold the attention of the respondent, ask the questions as they are written, follow respondent selection procedures, and accurately record the responses.

B. Train staff

Interviewers should read the questions exactly as they are written. If the respondent does not understand the question or gives an unresponsive answer, the interviewer should repeat the question exactly as written. Questions should be read in the order in which they are written. The respondent's answers should be recorded neatly and accurately as they are provided. Before proceeding to the next interview, the interviewer should edit the questionnaire to be sure that every answer is clear and accurately recorded. This simple check helps to avoid the need to re-contact the respondent for clarification.

Step Eight: Conduct Interviews

Interviewers should attempt to contact respondents at a time when they are most likely to get a high rate of response. Telephone interviews are conducted early in the evening when most people are home. Door-to-door interviews also may be conducted early in the evening or on weekends. Attempts should be made at different times to reach anyone in the original sample who is missed by the initial round of interviews.

The interviewer should avoid selecting a time or method that will yield biased results. For example, interviewing only during the day from Monday to Friday probably will miss families where both the husband and wife work. Since these families could have higher incomes than families with only one employed member, poor timing may lead to the biased result of finding an excessively high proportion of low-income households.

Remember, interviewers also should follow the set procedures for replacing unreachables and non-respondents as discussed above in Step 3. Once the interview is done, the interviewer must write the sampling number equivalent of the respondent in the “Sampling #” box located at the top left hand corner of the completed questionnaire. This will serve as the tracking number for survey coordinator.

Step Nine: Evaluate Questionnaires

Interviewers should return completed surveys to the Survey Coordinator. The Survey Coordinator should ensure that each survey is complete and that each question is answered clearly. Incomplete or ambiguous responses can be clarified by re-contacting the respondent.

The survey coordinator must then complete the “Evaluation” box located at the top right hand corner of each of the questionnaires with LMI symbol representing the status of the respondent. Refer to the CDBG Income Limits, which are updated annually, and can be accessed at www.commerce.wa.gov/cdbg.

Step Ten: Record Survey Results

A. Recording MHI data for non-CDBG programs:

For the purposes of determining eligibility for the non-CDBG program, the survey coordinator should record gross income data on a spreadsheet and arrange all the income survey results from lowest value to highest value.

B. Record LMI data for CDBG program:

The survey coordinator should organize and record LMI survey data for purposes of determining eligibility for the CDBG program. Use Table D to complete the Income Survey Worksheet on page 13.

TABLE D
To Compare the Distribution of
Household Size by Household Income for CDBG Program

Household Size ---	Households with Low- and Moderate-Incomes		Persons in Households with Low- and Moderate-Incomes ---	Households <u>above</u> Low- and Moderate-Incomes		Persons in Households <u>above</u> Low- and Moderate-Incomes ---	Number of Persons In Households ---
	Number (B)	Percent (C)	Number (D) A x B = D	Number (E)	Percent (F)	Number (G) A x E = G	Number (H) D + G = H
1	_____	%	_____	_____	%	_____	_____
2	_____	%	_____	_____	%	_____	_____
3	_____	%	_____	_____	%	_____	_____
4	_____	%	_____	_____	%	_____	_____
5	_____	%	_____	_____	%	_____	_____
6	_____	%	_____	_____	%	_____	_____
7	_____	%	_____	_____	%	_____	_____
8	_____	%	_____	_____	%	_____	_____
9 or more	_____	%	_____	_____	%	_____	_____
Totals	_____		_____	_____		_____	_____
Total Number of Households Interviewed (Add B and E totals)					_____		

Table D can be accessed online at www.infracfunding.wa.gov/.

Step Eleven: Summarize and Analyze Survey Results

A. Determining LMI for CDBG program:

The Income Survey Worksheet (See Attachment 2, page 13) is used to summarize and analyze the results of an income survey, establishing a percentage of LMI households in the area being served by the system.

B. Determining LMI for non-CDBG programs:

The Income Survey Worksheet (See Attachment 3, page 13) is used to summarize and analyze the results of an income survey, establishing a percentage of LMI households income in the area being served by the system.

For A and B above, use the CDBG Income Limits to determine LMI level. Refer to the CDBG Income Limits, which are updated annually, at www.commerce.wa.gov/cdbg.

For B above, if the survey results and tabulation indicate that Line 8 in Attachment 3 is less than 51 percent, the applicant will not qualify for a reduced interest rate.

C. Determining MHI:

Using the survey data of incomes listed from the lowest income value to highest value, the middle income value (if n is odd) or the average of the two middle values (if n is even) represents the MHI.

Step Twelve: Retain and Submit Documentation Of Survey Process And Results

Maintain survey documentation consisting of completed questionnaires, a list of respondents, a description of the sampling procedures, and survey tabulations.

A. Retain completed surveys. These serve as documentation that the survey was conducted, the proper questions asked, and that the sample was adequate. To maintain confidentiality, save the cover sheets separately from the survey questions. If necessary, they can be matched later for verification.

B. Retain a list of households of the original sample and a list of households actually interviewed. Compile a list of households that were in the original sample and those households that were actually interviewed. The process used to replace unreachable or other non-respondent households should also be noted.

C. Retain sampling procedures. Written documentation should describe the method used to select sample households.

D. Retain data. Data may be retained on a disk, a spreadsheet or a table.

E. Submit data, documentation of survey process and results to the funding program for verification.

**Attachment 1
Income Survey Questionnaire**

This survey for the _____ is being conducted to determine the jurisdiction's eligibility for grant funding, or qualifying for enhanced loan terms.

Income Survey Questionnaire

(Sampling #. Official Use Only)

(Evaluation. Official Use Only)

1. How many people live in this household? _____

(The number of people in the household should equal the number of people who lived in the residence for at least six months of the year)

2. What was the household's total income during _____ ? _____

Total Household Income is all taxable and nontaxable income earned by all members of the household for the latest tax year (example: survey in 2012 would be for tax year 2012). Income includes (but is not limited to) wages, business, retirement, supplemental security, public assistance, disability, unemployment and investment income, VA payments, alimony and so forth. Income received by children under the age of 15 for work such as baby sitting, paper routes, or lawn mowing does not need to be included.

Comments:

Note: The community may want to consider asking additional questions at the time the income survey is conducted, to gather additional information. Below are samples of optional questions:

- Does this household receive its utility from _____ (name of the system)?
- Does this household own or rent this house?
- List the top two facility/infrastructure (i.e. roads, sewer, water, library, parks, etc.) improvements that you think would improve your community
- Indicate your age bracket – 65+ years of age or less than 65 years of age
- Indicate your employment status – employed / unemployed, and part-time / retired

Attachment 2 Income Survey Worksheet For CDBG Program

To complete the worksheet, follow the instructions provided on each line. The Survey sample size (line 2) must be adequate size and sufficiently random to provide a statistically valid database and represent the project's service area. The Attachments can be accessed online at www.infracfunding.wa.gov/.

1.	Enter the current estimated total number of households in the service area.	1.	
2.	Enter the total number of households interviewed. (Refer to Table D)	2.	
3.	Enter the total number of persons in the households interviewed (total of column H in Table D).	3.	
4.	Enter the total number of persons living in the low- and moderate-income households interviewed. (Refer to Table D, total of column D)	4.	
5.	Divide Line 3 by Line 2. (This is the average size of households interviewed.)	5.	
6.	Divide Line 4 by Line 3, and multiply the resulting decimal by 100. (This is the approximate percentage of persons in the service area who have low- and moderate-incomes.) List this percentage on your CDBG application's Project Summary Form.	6.	

Attachment 3 Income Survey Worksheet For Non-CDBG Programs

1.	Enter the estimated total number of households in the entire area being served by the system.	1.	
2.	Enter the total number of households interviewed. (Refer to Table C (D))	2.	
3.	Enter the total number of low-income (50%) households interviewed. (Refer to Table C, column A)	3.	
4.	Enter the total number of moderate-income (51% - 80%) households interviewed. (Refer to Table C, column B)	4.	
5.	Enter the total number of low- and moderate-income households interviewed (Line 3 + Line 4).	5.	
6.	Enter the total number of households interviewed in which the income was above the low- and moderate-income level. (Refer to Table C, column C)	6.	
7.	Divide Line 3 by Line 2 and multiply by 100. (This is the percentage of households interviewed that have low-incomes)	7.	
8.	Divide Line 5 by Line 2. (This is the percentage of households interviewed that have low-and moderate-incomes)	8.	

Appendix A: For More Information

Funding Program	Drinking Water State Revolving Fund (DWSRF) & Clean Water State Revolving Fund (CWSRF)	Public Works Trust Fund (PWTF)	USDA Rural Development (RD)	Community Development Block Grant (CDBG)
Contact Information	<p>DWSRF-(Public Works Board & DOH partnership)</p> <ul style="list-style-type: none"> Department of Commerce, Public Works Board Ann Campbell (360) 725-3153 Ann.campbell@commerce.wa.gov http://www.pwb.wa.gov Department of Health Karen Klocke (360) 236-3116 / 1-800-521-0323 dwsrf@doh.wa.gov http://www.doh.wa.gov/ehp/dw <p>CWSRF - Department of Ecology Daniel Thompson- (360) 407-6510 daniel.thompson@ecology.wa.gov http://www.ecy.wa.gov</p>	<p>Department of Commerce Public Works Board</p> <p>Ann Campbell (360) 725-3153 Ann.campbell@commerce.wa.gov http://www.pwb.wa.gov</p>	<p>USDA RD</p> <p>Gene Dobry (360) 704-7733 Eugene.dobry@wa.usda.gov http://www.rurdev.usda.gov/wa/</p>	<p>Department of Commerce CDBG</p> <p>Kaaren Roe (360) 725-3018 Kaaren.roe@commerce.wa.gov http://www.commerce.wa.gov/cdbg</p>
Differences in Income Survey Requirements	<p>Purpose: To determine median household income (MHI) for the loan fund's Affordability Index (AI) calculation.</p> <p>Alternative MHI data sources:</p> <ul style="list-style-type: none"> Other funding source's approved MHI determination Recent Census or American Community Survey (ACS) data <p>Survey income question: Household income amount.</p> <p>Acceptable Timeframe: Income surveys must be conducted within past 3 years and meet funding agency's guidelines CWSRF – Income surveys previously conducted will be adjusted by Ecology</p> <p>Third-party surveyor: Required and must be approved prior to conducting survey.</p>	<p>Purpose: To determine median household income (MHI) for the loan/grant fund.</p> <p>Alternative MHI data sources:</p> <ul style="list-style-type: none"> Recent Census or American Community Survey (ACS) data 	<p>Purpose: To determine median household income (MHI) for the loan/grant fund.</p> <p>Alternative MHI data sources:</p> <ul style="list-style-type: none"> Recent Census or American Community Survey (ACS) data 	<p>Purpose: To determine percent of low and moderate income (LMI) persons in service area. LMI percent must be at least 51% for area benefit CDBG grant funds.</p> <p>Alternative LMI data sources: HUD's LMI percent calculations based on Census and ACS data</p> <p>Survey income question: Household size and if household income amount is above or below LMI income limit.</p> <p>Acceptable Timeframe: Surveys conducted after Jan 2001 with population change worksheet may be accepted, until HUD releases its 2010 Census LMI data (late 2013).</p> <p>Third-party surveyor: Recommended but not required. Survey methodology must be approved prior to conducting survey.</p>