APPENDIX A – DETERMINING THE LOW –TO-MODERATE INCOME PERCENTAGE OF THE PROJECT AREA

Each potential CDBG Program application must meet one of the three National Program Objectives (NPO). These NPOs are:

1. Benefit to low-to-moderate income (LMI) persons.
2. Aid in the prevention of slums and blight.
3. Meet a need having a particular urgency.

For the CDBG-Infrastructure (CDBG-I) program, each project must meet the first NPO: Benefit low-to-moderate-income persons (either indirectly or directly). Thus, the CDBG-I Program requires applicants to document and report the beneficiaries of each proposed application activity (except for administration) included in an application (i.e., public water improvements, public sewer improvements, limited housing rehab-water connections, limited housing rehab-sewer connections).

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

The LMI percentage for an eligible project area is at least 51%. This can be documented in one of two ways:

- Through surveying the households in the project area.
- Through the use of most recent HUD's LMISD (https://www.hudexchange.info/programs/cdbg/cdbg-low-moderate-income-data/)

Surveying Methodology

Step 1: Identify / Determine the Project Area and Benefiting Population / Households

Before an applicant can determine the LMI beneficiaries, the project area must first be established. The project area must be clearly defined and delineated, and the low-to-moderate income percentage must be at least fifty-one percent (51%) low-to-moderate income.

For CDBG-I projects, the project area may be determined by who is connected to the infrastructure, or who is served by the infrastructure. All of the residents in the project area must be served in some way by the project. The project area may be described using streets or roads as boundaries, or even topographic features such as streams or hills. A map is required of the project area, with the project area boundaries, street names, and house numbers if the project provides direct benefit to residents.

Once an applicant has identified the project area and the persons whom would benefit from a proposed activity, there are a number of acceptable methods that may be used to document the total beneficiaries the number and percentage of LMI beneficiaries.

Applicants proposing project activities for project areas with boundaries that are not contiguous with standard census geographic areas (place, census tracts, block groups, or blocks) must use the survey method to document the beneficiaries of the project.

Step 2: Select the Type of Survey

With all the benefiting population identified, an applicant must determine the type of survey. There are two types of surveys that can be done: census surveys and randomized surveys. Regardless of the survey type or method of surveying, consideration must be given to the needs of LEP residents, as well as residents with visual, hearing, or speech impairments/disabilities.

Census Surveys

Census surveys are surveys in which every address in the project area is surveyed. Census surveys are generally the most accurate type of survey, and should be conducted when the number of addresses in your project area is fewer than 100. If there are 100 or more addresses to survey, you may conduct a randomized survey. If two project areas are surveyed for the same project, the applicant shall enter the highest calculated LMI of the two areas in the scorecard. Also, if the application has a primary and alternative scopes of work within the project area, label the primary and alternative areas clearly throughout the application, in the public hearing, and on project maps. The primary area LMI percentage will be the LMI percentage the project will be scored on if income surveys questionnaires are used, no matter if surveys are census or randomized.

You are required to survey an area when the project area is smaller than the municipal boundaries, or smaller than the entire area of a census tract. You are required to survey an area where there is direct benefit (house connections) to low and moderate income households.

Surveys may yield higher low-to-moderate income percentages than what the American Community Survey data might suggest. Therefore, you might want to survey the area if you believe that the American Community Survey (ACS) data is not truly representative of the population in your project area.

Randomized Surveys

In randomized surveys, you select a subsample of the total number of addresses in your project area, using a carefully planned procedure. That subsample is then assumed to represent the characteristics of the larger population. The steps to select that subsample are outlined below:

1. Get a list of all the residential addresses in the project area, and number them one through however many residential addresses exist in the project area. Remember to treat apartments in

an apartment building as separate addresses, not as one address. Therefore, you would list out "3200 Main Street, Apt. 24", and 3200 Main Street, Apt. 26", etc., as separate addresses.

2. Determine your confidence level and your confidence interval. We require that your confidence level is no lower than 95 percent, and that your confidence interval is no more than five. See the definitions of these terms below.
    - The confidence interval (also called margin of error) is the plus-or-minus figure usually reported in newspaper or television opinion poll results. For example, if you use a confidence interval of 4 and 47% percent of your sample picks an answer you can be "sure" that if you had asked the question of the entire relevant population between 43% (47-4) and 51% (47+4) would have picked that answer.

    - 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 who would pick an answer 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.

    - When you put the confidence level and the confidence interval together, you can say that you are 95% sure that the true percentage of the population that is low to moderate income is between 43% and 51%. The wider the confidence interval you are willing to accept, the more certain you can be that the whole population answers would be within that range.

    - For example, if you asked a sample of 1000 people in a city which brand of cola they preferred, and 60% said Brand A, you can be very certain that between 40 and 80% of all the people in the city actually do prefer that brand, but you cannot be so sure that between 59 and 61% of the people in the city prefer the brand.

3. Go to https://surveysystem.com/sscalc.htm. Enter your confidence level and confidence interval into the sample size calculator, as well as your total population size (the number of addresses in the project area). This website will generate the sample size you will be required to have in order to adequately measure your population. Document the total sample, the sample size needed for accurate randomized sampling, the confidence level, and confidence interval for your survey.

4. Go to http://stattrek.com/statistics/random-numbers-generator.aspx, and generate a randomized numbers table. To generate a randomized numbers table using this website:
    - Input how many random numbers you need. We suggest you request a number equal to the number of addresses in the project area population. For example, if you have 225 addresses in your project area population, then input 225 as the number of random numbers you need.
    - Input a minimum value. Consider the number of addresses in your population. If you have 200 addresses in your project area population, then choose a four-digit minimum number to input in the "minimum number" box.

- Input a maximum value. Make sure your maximum value is higher than your minimum value.
- For "allow duplicate entries", click the drop-down box for "false".
- Click calculate, and generate your random numbers table.
- Copy the random numbers able, and the specs listed at the bottom of the table, and paste it into a blank document. SUBMIT THE TABLE WITH YOUR RANDOMIZED SURVEY INFORMATION. FAILURE TO DO SO WILL INVALIDATE YOUR SURVEY, AND YOUR APPLICATION.

5. Using your randomized numbers table, close your eyes, and place the point of a pen or pencil on the random numbers table. Open your eyes, and determine what number your pen or pencil landed on, or came closest to. Circle that number.

6. Decide and then document, which direction you will move in. Move in any direction: up, down, left or right. Move to the next number, and, using your list of addresses determine which address will be next in your sample. Find your next address to sample, and place a number "2" next to it. And continue in that manner until you have chosen all of the addresses you need for your sample.

7. If you find that you run into no responses, document the no response and use this same method to choose another address to sample.

8. Submit to us:
   - the total number of addresses in the project size,
   - the sample size needed for randomized sampling,
   - the confidence interval,
   - the list of addresses you sampled from with the ordinal number assigned to it (i.e., 1,2,3,4, etc.), and
   - the randomized numbers table you used, with your starting number circled, and an arrow to indicate he direction you moved in the table,
   - Include copies of all the surveys.

9. We must receive all six of the above in order to be able to accept a randomized sample for your application. If we do not receive all six documents related to the development of the survey, the application will be considered incomplete. (see example narrative for documenting a randomized sample survey on last page).

Step 3: Determining Survey Method(s)

During the COVID-19 environment, we will allow four methods of gathering income surveys, instead of the previous one method of going door-to-door, to ensure the health and safety of all persons. These methods are discussed briefly below and in more detail (advantages and disadvantages) in HUD Notice CPD-14-013.

Regardless of the method of surveying used for determining LMI beneficiaries, consideration must be given to the needs of LEP residents, as well as residents with visual, hearing, or speech impairments/disabilities.

1. **Door-to-Door (Face-to-Face) Interviews**
    a. This is the most common and successful method for an interviewer to ask questions of the surveyee in a face-to-face encounter at the surveyee' s place of residence.
    b. The interviewer must have copies of the income survey and instructions in English and Spanish at each residence.
    c. The income survey is filled out either by the interviewer asking each question or giving the survey and instructions to the individuals at the residence to read and complete.
    d. Both the interviewer and surveyee must sign and date the survey. In addition, the interviewer should review survey before leaving to ensure all edits/corrections are initialed by both parties.

2. **Mail-In (Self-Administered)**
    a. This method involves mailing the survey form, a letter of explanation and a self-addressed stamped envelope to each household within the project area for completion and returning of the survey.
    b. Since the surveyee/respondent will be expected to complete the survey and return it, surveyors must create a plan for contacting and/or follow-up with households that do not respond to the survey.
    c. Be mindful of response rate and valid surveys requirements. Thus, follow-up letters, telephone calls, or going door-to-door may be necessary to obtain the adequate response rate.
    d. These surveys must be reviewed carefully, signed and dated by the reviewer and the surveyee. If there are errors, the reviewer must call the surveyee to get permission to correct the survey. In that case, document the call with date and surveyee's name and reviewer's initials on the survey form.

3. **Web-Based Surveys**
    a. A web-based survey is administrated online through Google Forms, Survey Monkey, or another online surveying method. The survey must ask the same questions as a door-to-door or mail survey.
    b. Written notification to households within the project area must be done and why they need to respond to the survey. Also, post-notifications in the project area to ensure individuals are aware of the on-line surveys.
    c. A Spanish version of the web-based survey must be available.
    d. Surveyors using web-based surveys, must create a plan for contacting and/or follow-up with households without internet.
    e. The surveyor, or the person administering the web-based survey, will fill out a survey form, using the submitted data, for each household in the project area. The survey form should have "collected by web-based survey" or something similar and sign and date the survey and when the data came in via the internet.

f. Be aware if the necessary response rate is not met via web-based surveys, another method will be needed.

4. Telephone Surveys

a. A telephone interview with each household in the project area to gather the necessary data to fill out the income survey form. The surveyor/interviewer must ensure the surveyee/interviewee is someone from the household in question whom is competent and knowledgeable enough to answer the questions on the survey form.
b. Written notification to households within the project area must be done and why they need to respond to the survey. Also, post-notifications in the project area to ensure individuals are aware of the telephone surveys.
c. The surveyor/interviewer will fill in the survey form with the information received over the phone, for each household in the project area. The survey form should have "collected by tele-phone survey" or something similar and sign and date the survey to reflect when the telephone call was done.
d. As with web-based surveying, surveyors need to create a plan for contacting those households without telephones or have unlisted numbers.
e. Be aware if the necessary response rate is not met via telephone surveys, another method will be needed.

Step 4. Conduct the Survey and Complete the Required Survey Form

The Division has provide sample survey forms and instructions in English and Spanish on our website at https://deq.nc.gov/about/divisions/water-infrastructure/i-need-funding/application-forms-and-additional-resources#cdbg-i-additional-forms

The sample surveys must be slightly modified to include the income limits for the county the applicant resides in (e.g., income limited for Catawba County will be used for the Town of Maiden). The newest income limits are provided annually by HUD in July.

Be mindful that individuals may be hesitant to disclose their household's income, so a thorough explanation as to why this information is being request is crucial. It is strongly encouraged the applicant notifies the project area beneficiaries either through public notices in the local newspaper, signs or flyers within the project area or within their utility statements, public meetings within the project area. The outreach should convey why their information is important.

Please read and follow the survey instruction posted online.

Step 5. Income Survey Summary Tabulation Sheet

Once an applicant has completed the income survey, the data must be placed in a comprehensive summary tabulation Sheet (Income Survey Summary). The Income Survey Summary should be printed out in a 11 × 17 or a size that can be readable (no smaller than 10 font). Unused columns can be hidden or deleted to make table readable. The home addresses shall be in the same order of the attached income surveys.

A sample income survey summary can be found at https://deq.nc.gov/about/divisions/water-infrastructure/i-need-funding/application-forms-and-additional-resources#cdbg-i-additional-forms.

Above Income

Addresses where there is no answer/response (no one comes to the door or denies a response) are considered above income. Those addresses must be documented as "Above Income" on the survey form, on the survey summary/tabulation sheet and must be assigned the average household size using the information for the applicant. The applicant must use the most recent data profile from the American Community Survey (ACS) for their community. This information can be found at: https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/.

Response Rate & Vacancies

The response rate to a census survey must be at least 75 percent. If there is not a 75% response rate, then the application will be considered incomplete.

In a survey, each address that answers the survey, whether over income or low/mod income, is considered a response. Sometimes the response is a "no thank you;" in that case, the address is considered over income, and the number of persons at the address is estimated by referring to average per household. The applicant must use the most recent data profile from the American Community Survey (ACS) for their community. This information can be found at: https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/ for the community the project is located in.

The vacancy rates will be considered during the application review. For example: Line rehabilitation work on Maple Street. The street has five homes, one home is LMI and four homes are vacant, indicating 100 % LMI, 100 % response rate, and 80% vacant rate.

Vacant properties are not counted in the LMI calculation. However, project must list and show the vacancies in the survey summary/tabulation sheet and on the project area map. Also, provide the survey form for that address, and state "vacant" on the survey form. If there are questions whether an address is vacant or not, find documentation for public sources (local water department, post office, etc.) to make the determination and include in Tab 3.

Step 6. Project Area Map

Develop a project area map that is/has:

- At a readable scale;
- With geographic coordinates;
- Boundaries clearly marked;
- If a subarea of a town or county, street names must be clearly visible;
- All surveyed housing units, vacant, and non-responses marked; and
- If there are direct beneficiaries, indicate houses with street numbers.

Valid Surveys

New surveys are good for eighteen (18) months prior to the application submission deadline and the applicant must use the most current HUD Income limits OR within the eighteen (18) months prior to the application.

- Example: September 2021 round applicants must use 2021 Income limits, or 2020 Income limits if the applicant completes the Income Surveys before the most updated 2021 Income limits have been released by HUD (**updated 2021 income limits will be released by HUD in June or July 2021 and will be available on our website here: https://deq.nc.gov/about/divisions/water-infrastructure/i-need-funding/application-forms-and-additional-resources#cdbg-i-additional-forms)

During the FY2021 application round only, surveys from the FY2020 application round may be used to meet the required LMI. This allowance is for those unsuccessful applications coming in for reconsideration for the FY2021 round. Previous scoresheets, with reviewer comments, can be obtained to review any survey comments that may assist with increasing an application's overall LMI score. Older surveys from other applications round will not be allowed.

On a survey form, each question must be answered. If not applicable, the answer must be N/A or Zero (0) for questions inquiring a number for answer. **If an incorrect number of persons or income level was circled, a correction will be valid only if both the surveyor and the person providing the information write their initials and date by the corrections made.**

If the answer is not legible or has multiple circles on the table, the survey will be considered over income, and the average per household will be used for that specific area impacting the applicant calculated LMI.

The survey must have the date on the first page and last page and both signatures must be included, interviewer and the surveyee providing the information. If the form is missing a date or a signature, the survey will be considered over income, and the average per household will be used for that specific area impacting the applicant calculated LMI.

Low-to-Moderate Income Public Housing

If the project area includes a low-moderate-income public housing, the manager of the complex must list each address, and indicate the number of people, as well as the gender, race, and whether there are any elderly or disabled residents or any female-headed households in each unit.

The Applicant, defined as the chief elected official, will be required to certify the spreadsheet in a letter as being an accurate representation of the residents' income in the low-to-moderate income housing complex. Submit the spreadsheet and the letter along with any other surveys that prove the low-to-moderate income status of the residents of the project area in Tab 3.

Using the American Community Survey Data

For certain projects, census data from the American Community Survey may be used to determine the low-to-moderate income percentage of your project area population.

For low-to-moderate income census data on an area-wide, tract or block group level, refer to the most recent ACS 5-Year Low- and Moderate-Income Summary Dataset located here: https://www.hudexchange.info/programs/acs-low-mod-summary-data/. HUD typically updates the dataset annually in April for each new FY.

Projects that May Use Area-Wide Data

The project you are proposing must serve the entire project area. Examples of projects like this would be a rehabilitation of a wastewater treatment plant, the replacement of the main raw water line leading from the river to the water plant, and the upgrade of a water treatment plant.

It is also permissible to add census blocks together to determine the LMI percentage of an area not defined by municipal boundaries. The key is that **the project you are proposing must serve the entire project area.**

Definitions of CDBG Regularly Terms

Family

Pursuant to 24 CFR 5.403, family includes but not limited to the following, regardless of actual or perceived sexual orientation, gender identity, or marital status:

- A single person, who may be an elderly person, displaced person, nearly-elderly person, or any other single person;
- Unrelated individuals shall be considered as one-person families; or

- A group of persons residing together, and such group includes, but not limited to:
  - A family with or without children (the temporary absence of a child from the home due to placement in foster care shall not be considered in determining family composition and family size).
  - An elderly family—a family whose head (co-head), spouse, or sole member is a person who is at least 62 years of age. It may include two or more persons who are at least 62 years of age living with one or more live-in aides. (A live- in aide is a person who resides with one or more elderly persons or near- elderly persons, or persons with disabilities).
  - A near-elderly family—a family whose head (co-head), spouse, or sole member is a person who is at least 50 years of age but below the age of 62, living together; or one or more persons who are at least 50 years of age but below the age of 62 living with one or more live-in aides.
  - Disabled family—a family whose head (including co-head), spouse, or sole member is a person with disabilities. It may include two or more persons with disabilities living together, or one or more persons with disabilities living with one or more live-in aides.
  - A displaced family—a family in which each member, or whose sole member, is a person displaced by governmental action, or a person whose dwelling has been extensively damaged or destroyed as a result of a disaster declared or otherwise formally recognized pursuant to Federal disaster relief laws.
  - The remaining member of a tenant family.
  - A single person who is not an elderly or displaced person, or a person with disabilities, or the remaining member of a tenant family.

Household

Pursuant to 24 CFR 570.3, household means all persons who occupy a housing unit. A household may consist of persons living together or any other group of related or unrelated persons who share living arrangements, regardless of actual or perceived sexual orientation, gender identity, or marital status.

Seasonal Residents

Seasonal (or part-time) residents (e.g., migrant farmers who reside in manufactured homes) 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 seasonal residents would be considered an incidental benefit. Seasonal residents may participate in income surveys for CDBG-funded activities such as installation of sewer lines and sewage treatment plants, etc.

The ACS defines residency in terms of "current residence" – a unit is defined as the current residence of a household if the household is living in the unit for at least two months upon receipt of the survey, even

if the household lives somewhere else for most of the year. In contrast, the long form uses a "usual residence" rule, i.e., the place where a person lives and sleeps most of the time. The differences in the definition of residence have consequences for vacancy and homeownership estimates.

For seasonal homes, the seasonal residents must answer the survey, in the case of no response, the survey will be considered above income and it cannot be count as a vacant property.

See Notice CPD-14-013 - Issued: September 23, 2014
(https://www.hudexchange.info/resources/documents/Notice-CPD-14-013-Guidelines-for-Conducting-Income-Surveys-LMI-CDBG-Activity.pdf)

Application Requirements

The CDBG-I Program has set the following survey requirements for applications. These requirements must be included in Tab 3 of the application so CDBG-I staff can verify eligibility.

1. The project area map with required elements.

2. Survey methodology used to survey the project area to ensure a sound approach was used in obtaining the LMI. The survey methodology should include:
    a. Narrative of surveying type and method(s) used, etc.
    b. A copy of online survey form, if applicable.
    c. A copy of survey notifications, if applicable.
    d. Randomized survey documentation as noted in that section, if applicable.

3. Hardcopies of all surveys (both sides of form) must be included – signed and dated (including both response, non-responses, and vacant). An electronic form or a survey that is only one-sided will not be accepted.

4. The tabulation Sheet (Income Survey Summary) should be printed out in a 11 × 17 or a size that can be readable (no less than 10-point font). Unused columns can be hidden or deleted to make table readable. All surveys must be numbered to match the tabulation sheet (Income Survey Summary). The home addresses shall be in the same order of the attached income surveys.

5. Beneficiaries residing in low-moderate-income public housing units are to be documented by submitting the public housing spreadsheet and the certified letter (signed by applicant). See section "Low-to-Moderate Income Public Housing" for data needed in spreadsheet.

6. If applicable, copy of the prequalification response if using area-wide LMI data for an application during the FY 2021 funding around.

7. If applicable, a copy of the ACS 5-Year Low- and Moderate-Income Summary Dataset for the applicant.

Questions

If you have questions about defining or surveying your project area, call DEQ CDBG-Infrastructure staff.

Example Narrative for Documenting a Randomized Sample Survey

The Town of Greensburg serves 715 addresses with public water. The water plant serves the entire town. The plant was built in 1970 and has an aging chlorine feed system that has failed three times in the last year. First, we numbered each of the 715 addresses as 1 to 715. Then, we determined our sample size, confidence interval and confidence limits by going to http://www.surveysystem.com/sscalc.htm, and selecting the confidence limit of 95%, and the confidence interval of 5. We then input the number of addresses in the Town of Greensburg, 715, into the "population" box, and clicked enter. We needed to do 250 surveys in Greensburg to get a representative sample of the Greensburg population.

Next, we went to http://stattrek.com/statistics/random-numbers-generator.aspx to develop a randomized numbers table. On this website, we clicked on the Stat Tools Tab at the top of the page. This brought up the Random Numbers Table interactive tool that developed the random numbers table that we needed.

In the Random Numbers Table interactive tool, we determined how many random numbers we will need. For the Town of Greensburg, we requested a 715 random number table by inputting "715" in the box asking "how many numbers?".

Next, we determined a minimum and a maximum value for the table. For 715 addresses, we used a minimum value of 1000, and a maximum value of 2000, and selected "false" for the question "duplicate entries?".

We used the last three numbers of the first random number we selected using the technique in the example above. The first random number ended in "359", so we went to our numbered address list and selected address number 359. The next random number moving to the right ends in 214, so we selected address number 214. We continued that process until we had 250 randomly selected addresses to survey.

Included in this tab are: the surveys we conducted, the survey tabulation sheet, the list of addresses with the ordinal number assigned to each address, and the randomized numbers we used, with the first number selected circled and the direction we moved marked.