# Appendix Section 1

*Compliance with CDBG National Objective, LMA, Including Income Surveys* 



#### U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Community Planning and Development

#### **Special Attention of:**

## NOTICE: CPD-19-02

All CPD Division Directors Grantees and Program Managers of the following CPD programs:

> Entitlement CDBG, State CDBG, Nonentitlement CDBG Grants in Hawaii, Insular Area CDBG, Disaster Recovery (CDBG-DR) and the Neighborhood Stabilization Programs (NSP1, NSP2, NSP3)

> > Issued: February 14, 2019 Expires: Until Superseded

Updates: CPD Notices 14-10, 14-11, and 15-05.

Cross References: 24 CFR 570.208(a), 24 CFR 570.483(b)(1) and CPD Notice 14-013.

SUBJECT: Low- and Moderate-Income Summary Data Updates

<u>APPLICABILITY</u>: The Community Development Block Grant Program (CDBG) program, including Entitlement CDBG Grantees, State CDBG Grantees, Nonentitlement CDBG Grantees in Hawaii, and the U.S. Insular Area CDBG Grantees; as well as CDBG-Disaster Recovery (CDBG-DR) Grantees, and Neighborhood Stabilization Program Grantees (NSP1, NSP2, and NSP3).<sup>1</sup>

<u>SUMMARY</u>: This Notice provides guidance on geographic datasets used for compliance purposes with CDBG, CDBG-DR and NSP grant requirements. The following sections are included in this Notice:

I. **Publication**. Announces the publication of the low- and moderate-income summary data (LMISD) based on the **American Community Survey 2011-2015 5-year estimates** (2015 ACS). These data will replace the prior LMISD based on the American Community Survey 2006-2010 5-year estimates (2010 ACS) for the purposes of demonstrating compliance with the CDBG National Objective of providing benefit to low- and moderate-income persons on an area basis ("Area Benefit" or LMA) and other purposes discussed this Notice;<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> This Notice refers to Low- and Moderate-Income (LMI) persons pursuant to 24 CFR 570.3; however, the NSP Program (NSP1, NSP2 and NSP3) allowed for National Objective compliance based on Low-, Moderate- and **Middle**-Income (LMMI) persons. For the purposes of this Notice, reference to LMI persons also includes middle-income persons where NSP grantees are concerned.

<sup>&</sup>lt;sup>2</sup> The LMA National Objective is described at 24 CFR 570.208(a)(1) and 570.483(b)(1). Grantees have the option of utilizing HUD's LMISD data, or survey data that are methodologically sound, for determination of an activity's LMA compliance. CPD Notice 14-013 provides guidance on methodologically sound surveys.

- II. Effective Date and Transition Policy. Announces an effective date of April 1, 2019, for use of the 2015 ACS LMISD to qualify LMA activities; and, provides a transition policy for circumstances when prior 2010 ACS LMISD may continue to be used;
- III. **How to Use the LMISD**. Explains the geographic format of these data and how to use the LMISD to demonstrate compliance for LMA activities;
- IV. Margin of Error. Announces the publication of margin of error (MOE) data for all geographies in the LMISD, including all census places and block groups, and provides instructions for use. Additionally, this Notice describes guidance regarding the confidence interval and acceptable MOE for local income surveys, based on the LMISD MOE; and,
- V. **Additional Geographic Data**. Announces that HUD will set a 5-year publication schedule for other geographic data used for reporting race/ethnicity, disability, and age of beneficiaries, as well as poverty data used to qualify certain activities for assistance.
- VI. **Reporting LMA Benefit**. Provides instruction for reporting LMA activities in the grantee reporting systems for the various programs.

# I. <u>PUBLICATION</u>:

This Notice announces the publication of new LMISD based on the 2015 ACS. These data replace the prior 2010 ACS LMISD<sup>3</sup> and must be used to demonstrate compliance with the LMA National Objective starting on **April 1, 2019**, except under limited circumstances described in this Notice.

These 2015 ACS LMISD data may be found online at

https://www.hudexchange.info/programs/acs-low-mod-summary-data/

Prior HUD-provided data may continue to be utilized in limited circumstances:

- Activities qualified in accordance with the Four-Part Test described in Section II.
- The most recent data available for the U.S. Insular Areas [American Samoa, Guam, Commonwealth of the Northern Marianna Islands, and the U.S. Virgin Islands] are from the 2010 Decennial Census Summary Files for Outlying Areas. Therefore, no changes are being made to the LMI data for the Insular Areas in this new data release. Additionally, these 2010 data do not include the margin of error MOE. Therefore, only Section V and Section VI of this Notice are applicable to the Insular Area Grantees.
- Rural Promise Zones and Appalachian Regional Commission Distressed Counties. According to Public Law 114-113, State CDBG grantees may demonstrate LMA compliance using the LMISD based on the 2000 Decennial Census, if the activity's service area is in a Rural Promise Zone or a county designated as "distressed" by the Appalachian Regional Commission. This variance is only applicable to federal CDBG funds appropriated in fiscal year 2017 through 2020, and prior years' uncommitted funds.

The LMISD has two types of publications:

<sup>&</sup>lt;sup>3</sup> CPD Notice 15-05 referred to the LMISD based on the 2006-2010 ACS 5-year Estimates or the 2010 ACS, as the "2014 ACS" in reference to the 2014 fiscal year of publication. Mention of "2014 ACS" in CPD Notice 15-05 shall be considered to be synonymous with mention of "2010 ACS" in this Notice.

- Base-data changes to the LMISD are currently scheduled to occur every 5 years. These data summarize low- and moderate-income by family for various geographies, including *block group* and *place* [see the "How to Use The LMISD" section for more information regarding these geographies]. Historically, the LMISD have been based on the 1990 Decennial Census, the 2000 Decennial Census, the 2010 ACS, and, with this Notice, the 2015 ACS. The next LMISD base-data change is scheduled to reference the 2016-2020 ACS 5-year estimates (2020 ACS), and will likely be published around 2023.<sup>4</sup>
- 2) **Fiscal year updates.** Every year, there are changes to the list of Entitlement CDBG grantees as communities' eligibility status change. Additionally, the geographic boundaries of existing grantees can change, especially within Urban County grantees of Entitlement CDBG. Therefore, on a fiscal year-basis, HUD publishes the list of *block groups* with the name of the *associated grantee*.
  - ✓ These data are generally only used for compiling a list of block groups associated with the grantee for determining the upper-quartile LMI percentage pursuant to 24 CFR 570.208(a)(1)(ii).
  - ✓ In these fiscal year updates, the *LMI percentage by block group* is NOT changing, however the *block groups associated with the grantee* may change.

## II. EFFECTIVE DATE AND TRANSITION POLICY

Effective Date for the 2015 ACS LMISD:

- **On and after April 1, 2019, grantees** *shall* **use the 2015 ACS LMISD**. Use of the prior 2010 ACS LMISD will only be allowed in limited circumstances described in this Notice.
- Available Now: Subsequent to the publication of the updated 2015 ACS LMISD data and prior to April 1, 2019, grantees *may* use the 2015 ACS LMISD or continue to use the 2010 ACS LMISD to qualify new LMA activities.<sup>5</sup>

**Transition Policy**: On and after April 1, 2019, in circumstances where the 2010 ACS LMISD demonstrate LMA compliance, but the 2015 ACS LMISD for that same geographic area do not demonstrate LMA compliance, a recipient may use the prior 2010 ACS LMISD to demonstrate areabenefit compliance by meeting the following *four-part test*. This policy is intended to prevent the disqualification of activities that are already underway.

#### The Four-Part Test

To qualify an LMA activity using the prior 2010 ACS LMISD, on and after April 1, 2019, the activity must meet all four of the following criteria.

(1) A documented **action** must have been made by the grantee before the effective date, April 1, 2019. Use *Table 1* on the next page to determine the **date thresholds** used for various types of actions.

(2) the documented action must describe a specific activity,

(3) the documented action must describe a specific funding amount for the specific activity, and

(4) the specific activity must have a clearly defined LMI service area.

Table 1: Date Thresholds for Various Types of Actions (the first of the four-part test).

<sup>&</sup>lt;sup>4</sup> The U.S. Census Bureau's and HUD's processing time for tabulation, processing, verification and publishing the LMISD can be about 2 year or 3 years following the data collection period.<sup>5</sup> Prior CPD Notices 14-10, 14-11 and 15-05 addressed the transition from the LMISD based on the 2000 Census to the 2010 ACS.

<sup>&</sup>lt;sup>5</sup> Prior CPD Notices 14-10, 14-11 and 15-05 addressed the transition from the LMISD based on the 2000 Census to the 2010 ACS.

Applies to:	State CDBG grantees and State CDBG-DR grantees when making awards to UGLGs through a Method of Distribution.	Entitlement CDBG grantees, NSP grantees, and CDBG-DR grantees when carrying out activities directly, making subgrants, or executing contracts.
Action: The grantee makes an award or obligation and fulfills all other requirements of the <i>four-part test</i> .	The date the grantee publicly announces its awards to UGLGs is before April 1, 2019.	The grantee obligates funds for the activity before April 1, 2019. Funds are considered obligated by a grantee on the date a subrecipient agreement is signed, or on the date the contract or other binding agreement is executed. (See the definition of "obligation" under 2 CFR 200.71.)
Action: Certain noncompetitive awards, formula allocations, and other awards or obligations made without prescribing a specific activity or service areas. If the award or obligation does not fulfill the <i>four-part test</i> , then the grantee must reference the date of another agreement that does fulfill the <i>four- part test</i> .	The <i>obligation date</i> of the UGLG's obligation of funds to a specific approved activity by contract, subaward, or other binding agreement must be before the April 1, 2019.	The <i>obligation date</i> of a subaward or a contract must be before April 1, 2019, consistent with the definition of "obligation" pursuant to 2 CFR 200.71.
Action: When a grantee operates a competition and the applications are required to include the other three parts of the <i>four-part test</i> .	The competition's <i>due</i> <i>date</i> for UGLG applications, as described in the Method of Distribution, must be before April 1, 2019.	The <i>obligation date</i> of a subaward or a contract must be before April 1, 2019, consistent with the definition of "obligation" pursuant to 2 CFR 200.71.
Action: When a grantee acts directly and does not execute agreements with other parties, but the other three parts of the <i>four-part</i> <i>test</i> have been met, i.e. a city incurring staff salary costs for activity delivery.	Not applicable	For Entitlement CDBG grantees and NSP grantees the date of the first activity delivery expenditure of CDBG funds must be before April 1, 2019. CDBG-DR grantees carrying out activities directly and not executing agreements with other parties, may only qualify new area- benefit activities using the prior LMISD data if the date of the first activity delivery expenditure of CDBG funds for the specific activity was before April 1, 2019, and ADDITIONALLY no earlier than April 1, 2018.

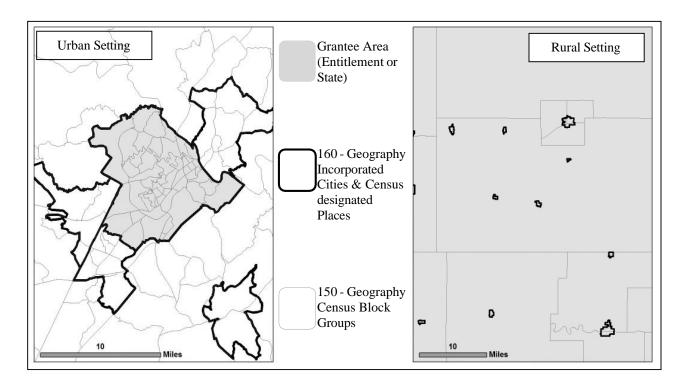
**Further Clarifications to the Four-Part Test:** 

- *Pre-award Costs*. CDBG funds may be used to pay approved pre-award costs IF the activity's service area qualified based on the LMISD in effect at the time the costs were incurred, not the LMISD in effect at the time of the award.
- Phased Activities and Multiple Contracts. If more than one contract or phase is needed to complete the scope of a single CDBG activity, the date of execution of the <u>first contract</u> or <u>first award</u> must be before April 1, 2019; AND, other dependent contracts may be executed on and after the effective date PROVIDED that those contracts are funded from CDBG funding available to the grantee prior to April 1, 2019 (and not later awards or later receipts of program income).
- Cost Overruns. If there is an unexpected increase in the cost of an area-benefit activity qualified on prior LMISD data, and there is no change in the scope, purpose, or service area of the activity, grantees may provide additional funding to cover the cost overrun even though it exceeds the amount awarded or obligated. This exception is limited to *unexpected* increases in the cost. If the scope, purpose, or service area of the activity changes, the activity must re-qualify based on the 2015 ACS LMISD on and after April 1, 2019.
- Acquisition of Real Property. An activity qualified on the prior LMISD and involving CDBGassisted property may be completed only if the requirements of the four-part test are met, and the planned-use of the property at the time of acquisition does not change. If the planned-use changes on and after April 1, 2019, the new activity must qualify based upon the 2015 ACS LMISD.
- *Certain Loan or Grant Programs*. Grantees may award or obligate funding to loan or grant programs rather than to discrete activities. The loan or grant program would then fund discrete activities, potentially including some designed to benefit area residents. Small main street revitalization programs or revolving loan programs are examples. In such cases, national objective compliance would be determined for each provision of assistance to a business or recipient as a grant or loan. Therefore, the obligation date of that loan or grant to the business or recipient would be used for the first of the four-part test.
- *Fungibility*: If an existing activity's funding source is changed after April 1, 2019 and the activity was qualified as area benefit under the 2010 ACS LMISD, the activity will not have to re-qualify under the 2015 ACS LMISD. "CDBG funds", pursuant to 24 CFR 570.3 and 24 CFR 570.481, include both grant funds and program income; therefore, annual grant funds and program income may be interchanged when funding an activity qualified on the prior LMISD, provided that the scope, purpose, or service area of the activity has not changed and the total amount awarded or obligated to an activity, prior to April 1, 2019, is not exceeded.
- LMISD-based Scoring Criteria: Some State CDBG grantees may use the LMISD to influence award amounts, either as a numerical part of calculating a formula allocation or as part of competitive application scoring. A problem can arise if an UGLG's award amount is determined based on the 2010 ACS LMISD, but that UGLG is unable to qualify a new LMA activity based on the 2015 ACS LMISD. Grantees using the LMISD in this manner should update their procedures to reflect the updated 2015 ACS LMISD. Some State CDBG grantees may need to amend the Method of Distribution in the Annual Action Plan to ensure that awards for areabenefit activities are being made to UGLGs that will be able to qualify an area benefit activity in accordance with the provisions of this Notice.

# III. HOW TO USE THE LMISD:

*Geographic Format.* HUD publishes LMISD using the geographies provided by the U.S. Census Bureau for the American Community Survey. HUD publishes LMISD at both the Summary Level 150 (*block groups*), and at the Summary Level 160 (*Places*, which includes incorporated cities and unincorporated, Census-designated places).

*Figure 1* below demonstrates how *block groups* and *places* differ in urban versus rural settings. *Block groups* are established to have between 600 to 3,000 people, which means that, as population density goes down, the geographic size of the *block group* increases and, as the density goes up, the size of the *block group* decreases. In towns with enough population density to have several *block groups*, the *block groups* are typically the most specific geography available; often resembling neighborhoods. However, in the less dense areas, *block groups* increase in size, potentially including more than one small town.



#### Figure 1. Block Groups and Places in Rural and Urban Settings

The *place* geography reflects the jurisdiction of a city, town, or other place. In rural settings, the *place* geography typically reflects UGLG jurisdictions and lends well to qualifying for area benefit for activities benefiting the whole town.

*Figure 2*, below, demonstrates how *block groups* and *places* can differ among Entitlement CDBG grantees, specifically, Urban Counties and Entitlement Cities. In Urban County settings, a grantee could use either *block groups* or *places* to represent service areas. However, in Entitlement Cities, the *place* geography typically reflects the entirety of a grantee's jurisdiction; therefore, *block groups* are likely to be the most specific geography available to coincide with neighborhood-level service areas.

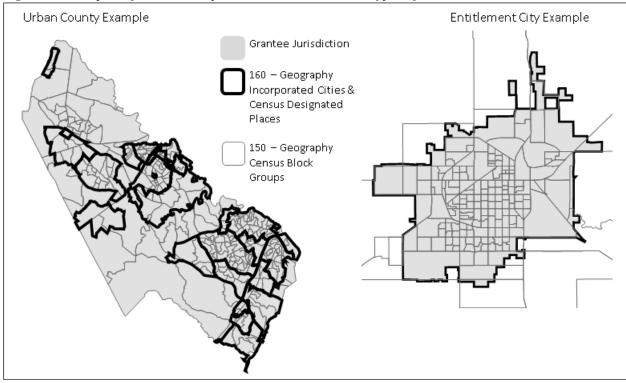


Figure 2. Examples of Block Groups and Places in Various Types of Entitlement Jurisdictions

*Compiling a Service Area from the LMISD.* Based on the type of activity, the grantee will choose a reasonable service area, and then refer to the LMISD for an equivalent geography. Grantees may choose to take additional steps to delineate service areas, such as requiring market studies. Activity service areas should be *reasonably* delineated based on the intended beneficiaries of the LMA activity. Once the service area has been reasonably delineated, the LMISD geographies that most closely correspond are chosen. The service area shall not be drawn to intentionally include LMI persons that would not benefit, nor shall it be drawn to intentionally exclude non-LMI persons that would benefit.

Grantees may combine geographies to best represent service areas, typically by combining two or more block groups. When using multiple geographies in the determination of LMA compliance of a service area, grantees are reminded that percentages shall not be averaged across multiple geographies. The proper calculation is as follows:

LMI % = (LMI Persons Geography A + LMI Persons Geography B + LMI Persons Geography C...) ÷ (LMI Universe Geography A + LMI Universe Geography B + LMI Universe Geography C...)

*Example*. A service area corresponds with two block groups. Block group 1 is 54.17% LMI with a population of 325 LMI persons of 600 total persons. Block group 2 is 50% LMI and has 1,500 LMI persons of 3,000 total persons. If 54.17% and 50.00% are averaged, which would be incorrect, the result is 52.09% LMI. However, the correct calculation per the formula above is 1,825 persons

Page 7 of 13

divided by 3,600 persons, resulting in 50.69% LMI [which HUD does not allow to be rounded up to 51%].

$$50.69\% LMI = (\ 325 + 1,500\ ) \div \\ (\ 600 + 3,000\ )$$

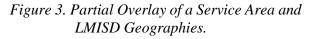
Grantees should not define a single service area by compiling a mix of *place* and *block group* data. These geographic layers have overlapping areas. If a service area was constructed by mixing *block group* and *place* data, residents would likely be double-counted.

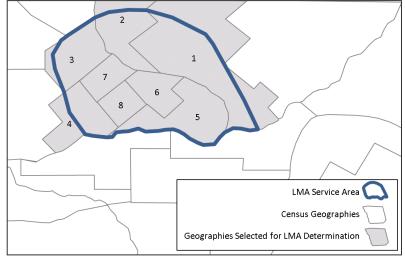
*When the Service Area Doesn't Match the LMISD Geographies*. If the available LMISD geographies provided do not reasonably correspond to the service area, it may not be appropriate to use the LMISD to qualify an LMA activity. Grantees may consider conducting a methodologically-sound local income survey to determine LMA compliance for the specific service area.

*No Prorating*. Grantees may not prorate the LMISD data when a given service area includes a portion of a geography from HUD's published datasets. The LMA determination shall be made based on the entirety of the data of the census geography which the service area both completely encloses and significantly overlaps. Using the standard LMISD geographies will usually result in a

change to a custom service area, which is acceptable, provided that the two areas reasonably correspond to one another.

*Example*. In *Figure 3*, the LMA service area completely encloses geographies 5, 6, 7 and 8; additionally, geographies 1, 2, 3 and 4 are partially overlain by the service area. The entirety of the data for all geographies 1 through 8 must be included in the determination of LMA compliance to use the LMISD. The grantee shall not prorate geographies 1, 2, 3, or 4.





*Advanced Users*. Grantees that utilize geographic information systems (GIS) to join LMISD data to map layers should download the 2010 versions of the Summary level 150 and 160 geographies from U.S. Census Bureau, which will continue to update decennially.<sup>6</sup> In addition, due to the possibility of annual changes in grantee jurisdictions and grantee participations in the entitlement program, it is recommended that GIS users annually download the updated grantee boundary map layers<sup>7</sup> and corresponding LMISD grantee summaries from HUD.

Advanced users that choose to reconstruct areas from the Summary level 150 geographies, specifically when those block groups overlay multiple grantee jurisdictions, should note the following: HUD creates the LMISD grantee summary block group file with duplicate block group records for each block group that overlays one or more grantee jurisdictions, thus associating that

<sup>&</sup>lt;sup>6</sup> Census map layers: www.census.gov/geo

<sup>&</sup>lt;sup>7</sup> CDBG Grantee jurisdictions: <u>https://egis.hud.gov</u>

block group with each of the grantees who share it. Therefore, when performing analyses on the block group data, it is important to address this by either removing duplicate records for the same block group or establishing one-to-many data relationships, as appropriate.

# IV. MARGIN OF ERROR.

If the service area does not qualify as LMA pursuant to this Notice, the grantee may conduct a methodologically sound local income survey to demonstrate otherwise. To assist grantees in making the decision whether to conduct a local income survey, **HUD is publishing the margin of error** (**MOE**) **data for all block groups and all places in the 2015 ACS LMISD.** HUD previously published the MOE only for Places with MOEs of 20 percent or more.

*The MOE does <u>not provide an expanded range for compliance</u>. For example, a service area of 50 percent LMI with a 2 percent MOE would still be just 50 percent LMI for compliance purposes. However, the 2 percent MOE would inform the grantee about the accuracy of the ACS data before undergoing the effort and cost of conducting a local income survey.* 

*MOE in Local Income Surveys*. HUD will consider the following criteria regarding margin of error and confidence intervals to be methodologically sound. In addition to informing the decision to do a local income survey, this Notice also transmits new policy regarding the standards for confidence intervals and MOEs of local income surveys. This Notice expands on CPD Notice 14-013, *Guidelines for Conducting Income Surveys to Determine the Percentage of LMI Persons in the Service Area of a CDBG-Funded Activity*, which recommended a 95 percent confidence interval. This Notice provides new interim guidelines related to margin of error and confidence interval, as HUD intends to publish an update to CPD Notice 14-013 in the near future.

## This Notice provides the following guidelines:

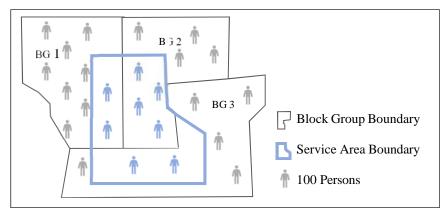
- 1. A local income survey's sample size shall be determined using not less than a 90 percent confidence interval, <u>and</u>
- 2. The maximum allowable MOE of the local survey shall be the lesser of 10 percent or the MOE of the HUD-provided data for the equivalent geography. For example, if HUD's data indicate an 8 percent MOE, the local survey will be required to have an MOE of 8 percent or less. If HUD's data indicate a 12 percent MOE, the local income survey would be required to have an MOE of 10 percent or less. If there is not an equivalent geography in the LMISD, the maximum MOE of the local survey shall be no more than 10 percent.

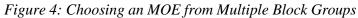
By replacing the *recommended* 95 percent, with a required minimum 90 percent confidence interval, the sample size of local surveys will be significantly reduced, thereby reducing the cost and level of effort associated with conducting local surveys. A 90 percent confidence interval is also equivalent to the ACS data.

The maximum MOE (10 percent or the equivalent LMISD MOE, whichever is smaller) establishes a standard that a local income survey must be "at least as good as" the 2015 ACS LMISD.

When service areas are compiled from multiple geographies, each geography will have a distinct MOE. In such cases, when determining the "equivalent geography's MOE" in item 2 of the policy above, use the single geography containing the largest number of residents of the activity's service area. For example, in *Figure 4* below, the grantee has determined a service area for an activity that overlaps with three block groups. Block group 2 has 400 residents living in the service area, while

block groups 1 and 3 each only have 200 residents living in the service area. Therefore, the MOE of the LMISD for block group 2 would be used to represent the service area. In this example, the maximum MOE allowable in a local income survey would be the lesser of: 10 percent or the MOE of block group 2.





#### V. ADDITIONAL GEOGRAPHIC DATA:

Geographic data are relevant to the CDBG program in more ways than area benefit.

The LMI job presumptions reference geographic data as well. This Notice clarifies that the 2015 LMISD ACS shall be referenced when determining compliance with 24 CFR 570.208(a)(4)(iv)(A)(2) and 24 CFR 570.483(b)(4)(iv)(A)(2), specifically that at least 70 percent of the residents of the census tract are low- and moderate-income persons.

Grantees may also use *poverty rate* data by census tract and block group when determining compliance with the LMI job presumptions pursuant to 24 CFR 570.208(a)(4)(v) and 570.483(b)(v). Additionally, grantees use *poverty rate* data to demonstrate compliance with the exemption from the aggregate standards for evaluating public benefit, pursuant to 24 CFR 570.209(b)(2)(v) and 570.482(f)(3). For these purposes, grantees may use the *poverty rate* data from the 2015 ACS data to be published by HUD, which will now be published by HUD on a 5-year schedule to align with LMISD publications. Alternatively, grantees may use more recent *poverty rate* data from a more recent ACS version as published by the Census Bureau.

HUD is also publishing data on *race*, *ethnicity* and *disability* based on the 2015 ACS for the purposes of reporting beneficiaries. Although ACS data are published annually, HUD will publish these data on the same schedule as the LMISD to provide consistency and reduce the administrative burden that would be associated with annual updates.

#### VI. <u>REPORTING LMA BENEFIT</u>:

**CDBG Grantee Reporting**. HUD's Integrated Disbursement and Information System (IDIS) allows grantees to provide data to demonstrate an activity's compliance with the LMA national objective. Grantees have the option of indicating whether data are derived from "Census" or "Survey".

Page 10 of 13

- ✓ Choose "Census" when using the HUD-provided LMISD. In a future release of IDIS, HUD intends to update this toggle switch to read "HUD-Provided Data".
- ✓ Choose "Survey" when using a local income survey.

*Choosing "Census."* At the time of publication of this Notice, IDIS functions for entitlements and states are distinct. Entitlement grantees choosing "Census" will be led to a screen that automatically populates the count of LMI persons and the LMI percentage based on the tract/block group entries. State grantees also enter the tract/block group codes, however, the entry of LMI persons and LMI percentage is manual.

*Choosing "Survey."* Both entitlement and state grantees choosing "Survey" will be led to the screen for entry of block groups, and manual entry of LMI persons and LMI percentage.

*Indicating the Dataset Used.* At the time of publication of this Notice, IDIS functions for Entitlements and States are distinct.

- <u>State grantees</u> are asked to use the *activity description* field to indicate the dataset referenced by typing either "2010 ACS" or "2015 ACS".
- <u>Entitlement grantees</u> choosing "Census" are given the option of selecting different versions
  of the LMISD. The following table provides the list of LMISD versions available in IDIS and
  the corresponding base data and fiscal year versions (see the "I. Publication" section for more
  information on these terms):

"LMISD Date" As Listed in IDIS	Base Data	Fiscal Years of Grantees	Implemented by CPD Notice
Pending 04/01/2019	2011-2015 ACS	FY 2018	This Notice
06/11/2018	2006-2010 ACS	FY 2018	14-10, 14-11 and 15-05
08/04/2017	2006-2010 ACS	FY 2017	14-10, 14-11 and 15-05
06/03/2016	2006-2010 ACS	FY 2016	14-10, 14-11 and 15-05
07/27/2015	2006-2010 ACS	FY 2015	14-10, 14-11 and 15-05
07/01/2014	2006-2010 ACS	FY 2014	14-10, 14-11 and 15-05
06/03/2014	2000 Census	FY 2014	07-01 and 07-02
09/01/2013	2000 Census	FY 2013	07-01 and 07-02
03/01/2012	2000 Census	FY 2012	07-01 and 07-02
06/01/2011	2000 Census	FY 2011	07-01 and 07-02
05/01/2010	2000 Census	FY 2010	07-01 and 07-02
07/01/2009	2000 Census	FY 2009	07-01 and 07-02
04/01/2008	2000 Census	FY 2008	07-01 and 07-02
05/01/2007	2000 Census	FY 2007	07-01 and 07-02
04/01/2007	2000 Census	FY 2007	07-01 and 07-02
09/30/2003	2000 Census	FY 2003	03-02, 03-03 and 04-09

Table 2. Versions of the LMISD Available in IDIS for Entitlement CDBG

Most grantees will be selecting the most current version for new activities; therefore, IDIS treats this as the default selection. On April 1, 2019, the 2015 ACS version will be added as the most current.

The LMI percentage by block group remains unchanged in each version with the same base data. However, Entitlement CDBG grantees should note that the upper quartile LMI percentage may change in a new fiscal year version of the same base data IF the jurisdiction has changed, either through changes to incorporated areas or changes to local governments' participation in an Urban County's CDBG program.

*Using Place Data.* Both options, "Census" and "Survey", prompt the user to enter the Census tract and block groups corresponding to the LMA service area. At the time of publication of this Notice, those fields only accept the tract/block group code format to be entered. It is HUD's intent to improve IDIS to allow the entry of place codes as well. In the meantime, grantees should indicate when place data has been used by:

- 1. Typing "Place Data Used" in the activity description field,
- 2. Check the box indicating the use of "Survey" data,
- 3. Enter the single most overlapping or centrally located tract/block group's code, followed by manually entering the population and LMI percentage of the Place geography.

For example, Spring Town is a small town in the middle of a very large block group, BG3, that extends into less populated, unincorporated areas. Spring Town's CDBG activity will benefit the town residents but not those outlying areas. Therefore, Spring Town would use the Place data instead. But, IDIS will only accept the entry of a tract/block group code. The grantee would check the "Survey" toggle in IDIS, note the use of Place data in lieu of block group data in the description, and enter the tract/block group code, but manually enter the population and LMI percentage for the Place instead. HUD's intent is to improve IDIS in the future to allow the entry of either place codes or tract/block group codes.

*Rural Promise Zones and Appalachian Regional Commission Distressed Counties*. State CDBG grantees reporting activities that take advantage of the exception to use the 2000 Census, pursuant to Public Law 114-113, shall indicate "survey" and use the *activity description* field to indicate the dataset referenced by typing "Public Law 114-113, Census 2000 data used."

**CDBG-DR and NSP Reporting**: In the Disaster Recovery Grant Reporting (DRGR) System, CDBG-DR and NSP grantees also have the option of indicating whether data are derived from "Census" or "Survey".

- ✓ Choose "Census" when using the HUD-provided LMISD.
- $\checkmark$  Choose "Survey" when using a local income survey.

Both options prompt the user to enter the Census tract and block group(s) corresponding to the LMI service area. However, entering the corresponding Census tract and block group(s) is optional, if the survey method is selected.

*Choosing "Census."* DRGR will be updated in early 2019 to allow grantees to select the 2010 ACS or 2015 ACS data set. Until then, selecting "Census" will default to the 2010 ACS data set. If a grantee has qualified an area benefit activity under the 2015 ACS prior to the DRGR update, grantees should: a) select "survey"; b) enter the LMI population data of the service area based on the 2015 ACS directly into DRGR; and c) enter "2015 ACS data" into the location description.

*Choosing "Survey."* Grantees choosing "Survey" must manually enter the LMI population. In addition, grantees must use the *Add Supporting Documentation* feature in DRGR to attach the survey data or LMI tabulations for the service area.

Page 12 of 13

Activities using the 2010 ACS. If a grantee uses the 2010 ACS LMISD to qualify an area benefit activity after the effective date, the grantees must attach documentation in DRGR demonstrating compliance with the transition policy of this Notice.

*Guidance for NSP Grantees' use of LMMI Data.* For NSP grantees using the 2010 ACS or 2015 ACS to qualify an area benefit activity (including households earning up to 120% AMI), grantees must:

- Select the Area Benefit Survey option in DRGR and enter the low- and moderate-income data into the required fields;
- ✓ Select the block groups (which only includes LMI data for households earning up to 80% AMI); and
- ✓ Use the Add Supporting Documentation feature to attach a table and demonstrate compliance with the LMISD LMMI tabulations for the service area.

*Guidance for use of Updated LMISD Summary level 160 (Place).* HUD will update DRGR to provide Summary level 160 (Incorporated Cities and Census-designated Places) in early 2019. In the meantime, grantees should select the Area Benefit Survey option in DRGR, select the Census Tracts and Block Groups that comprise the service area (*Identify Survey Geography*) and enter the low- and moderate-income data into the required fields. Grantees should also indicate when place data have been used by typing "Place Data Used" in the Activity Description field.

## QUESTIONS.

If you have any questions about the guidance provided in this memorandum, grantees should contact their HUD Field Offices.

HUD field staff should contact: Disaster Recovery and Special Issues Division, at 202-402-5059; State and Small Cities Division at (202) 708-1322; or Entitlement Division at (202) 708-1577.

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

# **Special Attention of:**

- CPD Field Office Directors
- Entitlement CDBG Grantees
- State CDBG Grantees

# Notice CPD-14-013

Issued: September 23, 2014

This Notice is effective until amended, superseded, or rescinded.

**Subject:** Guidelines for Conducting Income Surveys to Determine the Percentage of Low- and Moderate-Income (LMI) Persons in the Service Area of a Community Development Block Grant (CDBG)-Funded Activity.

# I: Purpose

This Notice describes guidelines (methodologies) for conducting income surveys 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. Section 105(c)(2)(A)(i) of the Housing and Community Development Act (HCDA) of 1974 (as amended) stipulates that an activity designed to address the needs of LMI persons of an area shall be considered to principally benefit LMI persons if "...not less than 51 percent of the residents of such area are persons of low and moderate income." 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 24 CFR 570.483(b)(1)(i) for the State program.

HUD provides the LMI Summary Data (LMISD) for grantees to use in determining compliance with the CDBG National Objective of providing benefit to LMI persons on an area basis.<sup>1</sup> The LMISD must be used "to the fullest extent feasible" unless a grantee believes that the data are not current or do not provide enough information regarding income levels in the entire service area.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Policy guidance regarding the 2014 LMISD for Entitlement Grantees and nonentitlement Hawaiian Grantees is located at: http://portal.hud.gov/hudportal/documents/huddoc?id=14-11cpdn.pdf; Policy guidance for the State CDBG program is located at: http://portal.hud.gov/hudportal/documents/huddoc?id=14-10cpdn.pdf <sup>2</sup>Information on how the LMISD is calculated is located at:

http://portal.hud.gov/hudportal/HUD?src=/program\_offices/comm\_planning/systems/census

The procedures described in this Notice are basic survey methodologies that will yield acceptable levels of accuracy. It is recommended that CDBG grantees use these methodologies or other comparable methods to ascertain that at least 51 percent of the residents of the service area of a CDBG-funded activity are LMI persons. If an Entitlement grantee chooses another survey method, the grantee is required to demonstrate that the method meets standards of statistical reliability that are comparable to the *American Community Survey* (ACS) [which has replaced the decennial census (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. State CDBG regulations at 24 CFR 570.483(b)(1)(a) require that the survey be methodologically sound.

# Confidentiality

If a grantee chooses to conduct a survey, the answers provided by respondents must be kept confidential. People are more likely to provide honest answers if the answers are to remain anonymous. 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 the respondents and follow applicable State and local laws regarding privacy and obligations of confidentiality.

# **II: Definition of Terminologies**

## CDBG Regulatory Definitions of Family, Household, and Income

States are subject to the definitions of income (low, moderate, etc.) at 24 CFR Part 5 however, they may establish their own definitions of income pursuant to 24 CFR 570.481(c), provided that such definitions are explicit, reasonable, and not plainly inconsistent with the HCDA of 1974 (as amended). Definitions of income established by the State for the purpose of complying with the area benefit National Objective must be included in the State's CDBG Implementation Manual. Entitlement grantees must follow the definitions at 24 CFR Part 5 and 24 CFR 570.3

- 1. 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; or
  - A group of persons residing together, and such group includes, but not limited to:
    - i. 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).

- ii. 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 livein aide is a person who resides with one or more elderly persons or nearelderly persons, or persons with disabilities).
- iii. 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.
- iv. 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.
- v. 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.
- vi. The remaining member of a tenant family.
- vii. A single person who is not an elderly or displaced person, or a person with disabilities, or the remaining member of a tenant family.
- 2. 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.
- 3. Entitlement grantees may select any one of the two definitions of income:
  - 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); or
  - (ii) 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. Pursuant to 24 CFR Part 5 and 24 CFR 570.3, low-income person refers to 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.) Unrelated individuals shall be considered as one-person families for this purpose.
- 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. Respondent refers to the person who is responding to the questionnaire or interview.
- 2. Rate of response is expressed as a percent; it is the number of households participating in a survey (number of responses) divided by the number of households in the sample.
- 3. Population refers to the group whose characteristics you seek to estimate.
- 4. Sample refers to a portion of the population under study. Samples are used to draw inferences about the population.
- 5. Sampling is the process of selecting a group of respondents from the population.
- 6. 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.
- 7. Representativeness refers to the quality of a sample having the same distribution of characteristics as the population from which it is selected.

# III: Determining the Service Area of a CDBG-Funded Activity

The service area is the entire 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 (boundaries of the) service area. The boundaries of the service area must be defined 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.

HUD will generally accept the service area determined by CDBG grantees unless there is substantial evidence to the contrary. In assessing such evidence, the full range of direct effects of the assisted activity will be considered. (The activities when taken as a whole must not benefit moderate income persons to the exclusion of low income persons.) Also, the area to be served by a CDBG-funded activity does not need to be coterminous with census tracts or other officially recognized boundaries, but it is critical that the service area be the entire area served by the activity [see 24 CFR 570.208(a)(1)(i) for the Entitlement program and 24CFR 570.483(b)(1)(i) for the State program].

## **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 service area are clearly defined and at least 51 percent of the residents are LMI persons. Factors to be considered in defining the service area include:

- 1. Nature of the activity: In determining the boundaries of the area served by a facility, one must consider whether the facility is adequately equipped to meet the needs of the residents. For example, a park that is expected to serve an entire neighborhood cannot be too small or have so little equipment (number of swings, slides, etc.) that it would only be able to serve a handful of persons at a time. Conversely, a park that contains three ball fields or a ball field with grandstands that can accommodate hundreds of spectators cannot reasonably be said to be designed to serve a single neighborhood. The same comparison would apply to the case of assisting a small two-lane street in a residential neighborhood 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.

For certain entitlement grantees, the percentage of LMI persons in the service area can be lower than 51 percent and the area can still qualify under the *exception criteria* provision (or *upper quartile criterion*).<sup>3</sup> The general rule requires that area benefit activities serve areas where the concentration of LMI persons is at least 51 percent. Section 105(c)(2)(A)(ii) of the HCDA provides an *exception* to the general rule for determining whether CDBG-assisted area benefit activities principally benefit LMI persons. The *exception criteria* 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. Grantees qualify for this exception when less than one-quarter of the populated census tracts in its jurisdiction contain at least 51 percent LMI persons. Data at the block group level are to be used to determine qualification under the exception criteria. The *exception criteria* do not apply to the State CDBG program.

<sup>3</sup>The exception criteria—24 CFR 570.208(a)(1)(ii)--is located at:http://www.ecfr.gov/cgi-bin/textidx?c=ecfr&sid=d60d662bd91f849ee36d0e524aac0781&rgn=div5&view=text&node=24:3.1.1.3.4&idno=24%20-%2024:3.1.1.3.4.3.1.9#se24.3.570\_1208

#### **State Program**

One aspect of service areas in non-entitlement areas is that a census tract may cover an entire city or there may be only two or three census tracts in an entire county. Therefore, 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. HUD's LMISD may be usable for only 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). The service area may be a sparsely populated rural area.
- 3. For such an area, a census of the entire population may be undertaken and the percentage of LMI persons calculated from the entire population of the service area, and not from the proportion of participants who responded to the survey. For example, if a small rural town 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.

# **IV: 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, grantees may use HUD's LMISD.

For the Entitlement program, 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 ACS for

areas of similar size to determine the percentage of LMI persons in the service area of a CDBGfunded activity. A statistically reliable survey entails the following:

- 1. The grantee must clearly document 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 non-respondents 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.

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.

# V: 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 24 CFR 570.208(a)(1)(vi) for the Entitlement program and 24 CFR 570.483(b)(1)(i) for the State CDBG program. 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 choice of the type of survey method depends on the demographic composition of the service area. If the grantee chooses an electronic (i.e., web-based) survey, the assumption is that residents of the service area all have access to the Internet. If people do not have internet service at home, an additional burden is placed on them on how to respond to the survey. The rate of response is likely to decrease when respondent burden increases. Regardless of the type of survey method, consideration must be given to the needs of residents with limited English

proficiency as well as residents with visual/hearing/speech impairments. The steps in conducting surveys are as follows:

# **Step 1: Select the Type of Survey**

Decide which survey method to use (i.e. telephone, door-to-door, mail, or web-based 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.

## **Step 2: Develop the Questionnaire**

If you choose to conduct a mail questionnaire, use standard 12-point print and do not include 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 induce 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 burdensome questions—i.e., questions with no correct answers. Such questions increase respondent burden.

# **Step 3: Select the Sample**

The grantee should:

- Define the service area: The definition must include the boundaries of the service area and the size of the population for which the percentage of LMI persons is to be determined
- 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 to obtain responses before selecting replacements,
- 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, it is strongly recommended that you select and train your interviewers. The quality of the survey results depends on how well the survey is conducted. Even in small studies involving a single researcher-interviewer, it is important to organize the interviewing process before beginning the formal process. Make sure the interviewers are 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; consider writing or telephoning to let people know in advance that you are coming. Make multiple attempts to establish contact and reschedule another interview if the initial contact has not resulted in an interview. Replace the families you have written off as "unreachable."

## **Step 5: Analyze the Results**

Complete the LMI Worksheet and record the calculated percentage of LMI persons.

## **Step 6: Document and Save Your Results**

- Save the completed questionnaires—preferably in a confidential manner. 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.

# VI: Procedures for Conducting a Methodologically-Sound Survey

## **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, (c) web-based surveys, and (d) 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

A questionnaire is a set of questions sent by mail accompanied by a letter of explanation and a self-addressed stamped envelope for returning the questionnaire. The respondent is expected to complete the questionnaire, put it in the envelope and return it. To overcome people thinking a questionnaire is too burdensome, researchers often send a self-mailing questionnaire that can be folded in a certain way so that the return address appears on the outside. That way, 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. Also, provisions must be made for collecting responses from visually-impaired residents
- 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)
- People are more likely to give an inaccurate answer or provide the answer they think you want

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.

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

Face-to-face (door-to-door) interviews are where 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 induce bias responses
- Interviewer is required to go to the respondent's location
- Residents who prefer anonymity may be reluctant to respond
- 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 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) Web-based Survey

A web-based survey is a data collection method whereby the questionnaire is administered online (i.e., through the internet). The questionnaire in a web-based survey may be the same as the questionnaire in mail surveys; the only difference is that rather than send it to the respondent by mail, the questionnaire is administered online.

# Advantages

- Respondent identity can be readily protected (unlike in paper questionnaires)
- Can be used to collect a large amount of data in major urban areas in a relatively short amount of time
- The privacy afforded by the computer makes it easier for respondents to provide honest answers to very personal questions
- No travel is required if respondent has internet at home
- Respondents are able to complete the questionnaire at their convenience within the time limit
- Responses can be automatically validated
- Automatic validation of responses enables the researcher to proceed directly to data analysis
- Surveys can be designed to accommodate those with visual, speech or hearing impairments, and can be translated into other languages to accommodate those with Limited English Proficiency

## Disadvantages

- Low-income families may not have internet at home and may be unwilling to go to a public library in order to respond to the survey therefore, it may be difficult getting a representative sample of the target population
- Also, the lack of internet at home and unwillingness to go to a public library to use the internet to participate in the survey may lead to a low response rate
- Easiest for people to disregard due to telemarketing fatigue
- It is costly to incorporate features that allow participants to respond only once
- Not easy to do follow-ups so as to improve response rate
- Equipment malfunction such as browser freeze or server crash may cause participant not to finish the process resulting in missing data
- A web survey is practically impossible in areas devastated by natural disasters
- Lack of control over who is completing the web survey

# (d) 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 interviewers 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 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
- Provisions must also be made for collecting responses from hearing or speaking-impaired residents.
- May not be able to reach residents who, due to cultural norms, do not use telephones

Since there are advantages and disadvantages to each approach, a grantee may use multiple methods to ensure equal access to and hence maximize response rates

# **Step 2: Developing a Questionnaire**

Constructing a questionnaire 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 A). 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 Multiracial; and the following ethnic categories: Hispanic, Latino, or not Hispanic or Latino.

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+	

**TABLE A - Illustration of Income Cards** 

Information about the racial and ethnic composition of the service area may be obtained directly from ACS 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 570.490(a)(1) 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 since more than one family can be living in one household).

#### **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? <u>Yes</u>, <u>No</u> (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 &

 Alaskan Native & Black/African American \_\_\_\_\_\_, Other Multi-racial \_\_\_\_\_\_.

 (Present the card showing various categories).

#### **Step 3: Selecting the sample**

The selection of a sample of families to interview involves a series of steps. Begin by defining the population whose characteristics are to be estimated. Then, determine how many families in that group must be sampled in order to accurately estimate the overall characteristics. Next, make some allowances for families that may not be readily available for the interview. Finally, select the families to be interviewed. This section discusses each of these steps.

## **Defining the Population**

If you (i.e., staff of the grant recipient) 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, a county, or defined by some other boundary. But before you can obtain a sample, you must clearly define what area you want the sample to represent. For example, assume that the population is a neighborhood with 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 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 their telephone number. Then, you would devise a procedure to randomly select the families you want to interview. 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 (no longer available in all communities) may be adequate, but keep in mind that you will miss people without landlines 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 instead of 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 a city of 100,000 or 50,000. For this reason, the size of the population 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 -).

Total Number of	Sample Size: Number of Families			
Families in the Service Area	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		

#### Table B – Sample Sizes at 95% Confidence Level

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 B, are hypothetical numbers. If the total number of families in your service area does not match any of

the numbers in Table B, 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 B, at the same confidence level, sample size decreases as confidence interval increases. A confidence interval provides a range of values which contain the population parameter of interest. The confidence interval estimate gives an indication of how much uncertainty there is in the estimate. The narrower the confidence interval, the more precise is the estimate. 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. For any given population, the sample size will be larger at a confidence interval of 4 than at a confidence interval of 5. A small sample size may decrease the extent to which the sample is representative of the population.

## **Unavailable Persons and Other Non-responses**

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 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. As a matter of policy (with the intent to preserve the credibility of the results of the survey), non-respondents are classified as non-LMI persons. 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 100% survey (referred herein as 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 random 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. If you encounter 'unreachables' you should replace them with the next family in the list, in the order they were selected.

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. 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 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, advance notice may be needed. A notice in a local newspaper or announcements at churches or civic organizations let people know that you will be conducting a survey to determine the income levels of the area. Citizens can also be informed through local government websites and/or email listserve used for sending announcements to residents. Also, neighborhood associations and civic organizations may have websites or email listserve that can be used for publicity If people are notified in advance how, why, and when they will be contacted, 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 question as 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**

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 respondents 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, 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.

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. Interviewers should try again, at a different time to reach anyone in the initial sample who is missed by the initial effort.

Generally, avoid selecting interview times that 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.

In making contact with a member of the family, the interviewer first has to determine that the person being interviewed has sufficient knowledge and competence to answer the questions being asked. The interviewer 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 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 follow this procedure. This replacement procedure is not random and thus will ensure 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 the interviewer's initial appearance. The interviewer needs to dress professionally and in a manner that will be comfortable to the respondent. The initial appearance of the interviewer to the respondent sends simple messages—the interviewer is trustworthy, honest, and non-threatening.

The interviewer is standing at the doorstep and someone has opened the door, even if only halfway. The interviewer needs to smile and be brief. State why (s)he is there for and suggest what (s)he would like the respondent to do. For example, instead of saying "May I come in to do an interview?" the interviewer 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. The interviewer should have this part of the process memorized so (s)he can deliver the essential information in 20-30 seconds at most. The interviewer should state his (or her) name and the name of the organization (s)he represents; and show his or her identification badge. If the interviewer has a three-ring

binder or clipboard with the logo of the organization or sponsor, (s)he should have it out and visible. The interviewer should assume that the respondent will be interested in participating in the study—assume that (s)he will be doing an interview here.

If the respondent indicates that the interview should go ahead immediately, the interviewer needs an opening sentence that describes the study. Keep it short and simple. 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 other questions are included in the questionnaire and the questions on income are placed at the end, it is possible that a willing respondent may end the interview before getting to the critical questions on income. If it appears that the respondent is about to terminate the interview, it is recommended that the interviewer immediately tries to get an answer to the critical income question(s).

# Editing

Interviewers should turn their completed surveys over to the staff person (henceforth expert) for analyzing the data. That expert 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 the expert may still discern errors that need correction during data tabulation and analysis.

# **Step 5: Determining the Results**

After collection and editing, the data are analyzed in two steps: (1) tabulate the responses from the questionnaires and calculate an estimated proportion of low-and moderate-income persons; and (2) determine 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, SPSS, etc. 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

	nter the Estimated total number of families in the ervice area	1	
2. Ei	nter the total number of families interviewed	2	
	nter the total number of persons in the families nterviewed	3	
in	nter the total number of persons in the families nterviewed who are low- and moderate-income ersons	4.	
5. D	vivide Line 4 by Line 3	5.	
	Cultiply Line 5 by 100. This is the percentage of MI persons in the service area	6	

#### Analysis

If you have done everything correctly, 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 is 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 LMI residents is correct. First, compare the average size of LMI 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 LMI families and above LMI have an average of 3.4 people, you can be pretty sure that your results are reliable.

Since the purpose of the CDBG program is to principally benefit LMI persons, as a matter of policy, rounding is NOT to be used in determining whether an area meets the 51 percent threshold for the national objective compliance for an area benefit activity. For example, 50.99 percent cannot be rounded to 51 percent.

## **Step 6: Documenting the 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. The grantee should therefore maintain documentation of the survey. The contents of that documentation are as follows:

- 1. Keep the completed surveys. This will show that the grantee actually conducted the survey (and 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. The questionnaires can be saved as documentation, but the privacy of the respondents must be maintained.
- 2. Saving the cover sheets separately provides a record of who was contacted. If there is a need to subsequently verify any data, one could contact the respondents noted on the cover sheet and ask them whether, in fact, they had spoken to a particular person on a particular date to discuss matters related to community development. The privacy of the respondents' original responses is still 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 used to select families from the list for interviewing. Note that this is different from keeping just the cover sheets, as it documents not just who was interviewed, but also who was not interviewed and how they were selected. If the method used is a door-to-door sample without starting from a universe of families, the procedures used to select the sample, including instructions to interviewers for replacing sampled families who were not interviewed should be documented.
- 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 copy of the data; and when tabulating, retain any spreadsheets or tables containing raw data.

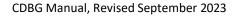
If you have any questions regarding this Notice, please contact your CPD Field Office. Field Offices should contact Neba Funiba, State and Small Cities Division (SSCD), Office of Block Grant Assistance, 451 7<sup>th</sup> Street, SW, Room 7184, Washington, DC 20410. Mr. Funiba's phone number is (202) 402-4553.

# CDBG SAMPLE FORM INCOME SURVEY FORM

Income surveys are used to document Low/Moderate Income Area (LMA) Benefit when American Community Survey (ACS) data is not applicable. This document should be used in conjunction with the CDBG Income Survey Methodology guidance for jurisdictions that wish to conduct an income survey and submit an Income Survey Report to DED for approval. Applicants are not required to use this form, but if a jurisdiction creates its own form, it must include, at a minimum, all the income data points found in DED's Sample Form.

Income surveys are allowed by DED and HUD as an alternate method of determining sufficient Low/Moderate Income Area benefit needed to document that a proposed eligible activity will meet the national objective of Low/Moderate Income benefit, according to 24 CFR 570.483(b)(I)(i).

Collection of additional demographic information assists in accurate completion of requirements related to CDBG Semi-Annual Project Status Reports.



# INCOME SURVEY FORM – COVER SHEET

#### TRACKING CODE: Click or tap here to enter text.

DATE: <u>Click or tap here to enter text</u>. CITY/COUNTY OF: Click or tap here to enter text. ADDRESS: Click or tap here to enter text. NAME OF INTERVIEWER: Click or tap here to enter text. CERTIFICATION: Click or tap here to enter text.

# INCOME SURVEY FORM - CONFIDENTIAL

TRACKING CODE: Click or tap here to enter text.

## Dear Resident,

The City/County of <u>Click or tap here to enter text.</u> is conducting a survey to gather essential information to support an application for grant funding from the Nebraska Department of Economic Development (DED) Housing and Community Development (HCD) Division. The City/County needs income and demographic information in order to apply for HCD grants. The grant funds can provide vital services that could benefit the entire community, including public infrastructure, community facilities, neighborhood improvements, and other activities.

We would appreciate if you would fill out the form as accurately as possible. **Please note that a high response rate is needed for this survey to be valid.** If you have questions regarding this survey, please contact <u>Click or tap here to enter text.</u> for more information.

<u>All information included on this questionnaire is confidential.</u> Confidentiality is protected by not including names on any of the forms. No specific identifying information will be kept and the questionnaires will be tallied as a group.

- 1. How many families currently reside at this address? <u>Click or tap here to enter text.</u> If more than one family, each family must complete a <u>separate</u> questionnaire.
- 2. How many persons are in your family, including yourself? <u>Click or tap here to enter text.</u> If you are single with no dependents, write "1".
- 3. Using the table below, identify the current, total gross annual income of all your family members by discling ABOVE or BELOW under the appropriate column. *Including any related, dependent persons over age 65 or working dependent children over age 18. Include gross wages before deductions, public assistance, unemployment benefits, social security, pension, alimony, net income from owning or operating a farm or business and any other source of income received regularly.*

Total Gro	oss Annua	l Income b	y Family S	ize				
Family	1	2	3	4	5	6	7	8
Size	PERSON	PERSON	PERSON	PERSON	PERSON	PERSON	PERSON	PERSON
	ABOVE	ABOVE	ABOVE	ABOVE	ABOVE	ABOVE	ABOVE	ABOVE
INCOME LIMIT	\$	\$	\$	\$	\$	\$	\$	\$
	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW

# DEMOGRAPHIC INFORMATION - FOR HEAD OF HOUSEHOLD

- Please check the ethnic group to which you belong:
   □ Hispanic or Latino
   □ Not Hispanic or Latino
- 5. Please check the racial group to which you belong:

White	Black/African American
Asian	American Indian/Alaskan Native
Native Hawaiian/Other Pacific Island	American Indian/Alaskan Native & White
Asian & White	Black/African American & White
Am. Indian/Alaskan & Black/African Am.	Other Multi-Racia

- 6. Is the Head of Household Female?□ Yes □ No
- Do you own or rent the home you live in □ Own □ Rent
- 8. Is Head of Household 62 years or older? □ Yes □ No
- 9. Is any family member in the household disabled/handicapped?
   □ Yes
   □ No

# Thank you for your participation.

Please return this form to the surveyor or place it in the postage-paid return envelope and mail it back.

# CONDUCTING AN INCOME SURVEY CDBG GUIDANCE

Income surveys are used to document Low- and Moderate-Income Area (LMA) Benefit when American Community Survey (ACS) data is not applicable. This document provides guidance to conduct an income survey and submit an income survey worksheet (Application Guidelines, Exhibits Chapter, Exhibit E-1 or E-2) to DED for approval.

Income surveys are allowed by DED and HUD as an alternate method of determining sufficient Low- and Moderate-Income Area (LMA) benefit needed to document that a proposed eligible activity will meet the national objective of Low- and Moderate-Income benefit on an area basis, according to 24 CFR 570.483(b)(I)(i).

# Introduction

Generally, the applicant should conduct an income survey 6-8 months prior to the application deadline. The purpose of this income survey is to determine whether or not the project will meet the CDBG National Objective of Low- and Moderate-Income Persons through the subcategory of LMA.

This document describes guidelines (methodologies) for conducting income surveys to determine whether or not a Community Development Block Grant (CDBG)-funded activity designed to benefit an area qualifies as primarily benefiting Low and Moderate Income (LMI) persons. Section 105(c)(2)(A)(i) of the Housing and Community Development Act (HCDA) of 1974 (as amended) stipulates that an activity designed to address the needs of LMI persons of an area shall be considered to principally benefit LMI persons if "at least 51% of the beneficiaries of the CDBG program will belong to households that earn 80% or less than the area's Median Family Income (as determined by HUD)". Further, the applicant/grantee must also ensure that the activities proposed, when taken as a whole, will not benefit moderate-income persons to the exclusion of low-income persons.

Income surveys may be best practice where available US Census data for local government entity is below the 51% LMI threshold and US Census/ACS data is near the 51% threshold and/or local socio-economic factors have significantly changed since the last US Census/ACS. The decision could be based on area change(s) in either population or income as shown by data that is more recent than the US Census/ACS:

- Economic changes such as plant openings or closings (i.e. causing substantial income increases or large-scale job losses in an area);
- Non-economic changes such as natural disasters; and/or
- Recent demographic changes not reflected in the current data (e.g. changes in population migration)

It can also be necessary to complete an income survey if the service area of the proposed CDBG-funded activity does not conform to the Census Block or Tract Groups. Applicants may want to consider hiring a professional surveyor to conduct surveys of large areas.

All income surveys must state the reason why the survey was conducted. Per DED CDBG Policy Memo 19-01, prior DED guidance allowed for an UGLG to use income surveys for a period of four years from the program year from which the applicant seeks funding. This provision is revised to account for MOE requirements: where MOE is available, an income survey must comply with HUD CPD 19-02 and once DED funds an activity, the income survey may be acceptable for up to four years. DED reserves the right to rescind any acceptance of an income survey based on HUD guidance or where its methodology is determined unsound.

Where DED funded activities using said income survey in the last four years or where an income survey is underway, the UGLG must review and provide DED with documentation of its compliance with HUD CPD 19-02, specifically as it relates to MOE: the maximum allowable MOE of the local survey must be the lesser of 10 percent or the MOE of the HUD-provided data for the equivalent geography.

**Save your data.** Applicants carrying out an income survey must carefully document their process. If awarded CDBG-funds, the completed surveys (including sampling procedures and replacements, where applicable), list of families receiving the survey instrument, list of respondents (in a form that does not identify their responses), and other documentation must be retained on file for 10 years after project closeout. Set up a file system and identify the steps involved and roles and responsibilities of staff working on the survey.

DED will not accept income surveys that do not describe and illustrate in detail the methodology used to conduct the survey, including:

- Reason for conducting an income survey;
- A copy of the survey instrument used;
- Five sample surveys; and
- If using Random Sample method, an explanation of how random sampling was achieved.

Plan on translation services for the survey, when you know there are families in the survey universe that are not proficient in English.

Use the income survey worksheet (Application Guidelines, Exhibits Chapter, Exhibit E-1 or E-2) as a reference.

# Census Survey vs. Random Sample Survey

The applicant will have to ensure that the population of the survey includes the collection of those families that will benefit from the proposed activity. There are two types of surveys that the applicant can use: the Census Survey, which spans the entire population; or the Random Sample Survey, which is done on a subset of a population chosen randomly. NOTE: The "population" below refers to the total population within the service area, which may or may not be the total population of the community.

## **Census Survey**

- Recommended for populations with 200 households or fewer.
- Requires a very high response rate (near 100%) because it includes the entire population that will benefit from the proposed activity.

#### Random Sample Survey

- Recommended for populations with more than 200 households.
- Representative of entire population.
- Carefully determine sample size to represent service area.

### Families vs Households

When conducting an income survey, the applicant must be sure to use Families as the targeted population. In regard to the survey, Family and Household are defined as:

**Family** – includes, but is not limited to, regardless of marital status, actual or perceived sexual orientation, or gender identity, a single person or any group of persons residing together with or without children and irrespective of age, relationship, or whether or not a member of the household has a disability. A child who is temporarily away from the home because of placement in foster care is considered a member of the family. See CPD Notice 14-013 for further clarification.

**Household** – all persons occupying the same housing unit regardless of their relationship to each other.

# Establishing the Service Area

The service area or target area boundaries must be determined <u>prior</u> to conducting the income survey. Boundaries are defined by the proposed project, for example: a street-paving project that benefits a portion of the community, a fire station that serves the community and rural unincorporated areas in two or more counties, or a rural water district that serves the community and a portion of the surrounding rural area.

Defined, **Service area** is the area that will benefit from the completion of the CDBG project (e.g. sidewalk improvements). We also use another term in some CDBG categories that further defines the service area as a "target area".

**Target area** – contiguous and substantial. Generally, substantial means a concentration of 100 or more families and <u>primarily residential</u> in character. A contiguous target area is generally delineated along block lines and by natural/man-made boundaries, such as streets, highways, railroads, and streams. Alleys and lot lines do not delineate target area boundaries exclusively. The entire community is considered the target area if there are less than 100 families. All target areas will be reviewed for direct effects of the assisted activity to LMI persons and other persons inside or outside the target area as well.

The target area for a county is a contiguous and substantial area of concentrated families or the entire unincorporated area. County applications exclude the incorporated areas, unless the county is a lead applicant in a joint application submitted in conformance with *Section 1.03(3)* or the appropriate section of the CDBG Application Guidelines.

Target area must be appropriately designed to coincide with the project service area. Separate activities may suggest different target areas or a combined target area to be most effective.

#### Application – Establishing the Service Area

Town A identifies that a new fire station will decrease emergency response time to better serve the community. They have identified the proposed fire station's service area as a portion of the city that can be seen within the red marked area.



#### Survey Methodology

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 choice of the type of survey method depends on the demographic composition of the service area. If the applicant chooses an electronic (i.e., web-based) survey, the assumption is that residents of the service area all have access to the Internet. If people do not have internet service at home, an additional burden is placed on those individuals on how to respond to the survey. The rate of response is likely to decrease when respondent burden increases. Regardless of the type of survey method, consideration must be given to the needs of residents with limited English proficiency as well as residents with visual/hearing/speech impairments.

#### Step 1: Select the Type of Survey

Decide the appropriate type of survey (i.e. Census Survey or Random Sample Survey) and the most suitable survey method to use (i.e. telephone, door-to-door, mail, or web-based questionnaire). Such decisions are based upon the project activities, your available staff, size of the needed sample, and the means available for identifying samples for the survey.

Applicants may identify families in a service area by using one of the methods listed below. *Reminder: eliminate business entities and services from your list of families.* 

- 1. Utility service lists (may exclude rental residents);
- 2. Telephone directories (may exclude people who either don't have phones or who exclusively use cell phones);
- 3. Tax rolls (identify the property owner, may exclude rental residents);
- 4. Door-to-door interviews; etc.

For additional guidance, about selecting a survey type including advantages and disadvantages to each type, see HUD CPD Notices <u>14-013</u> and <u>19-02</u>.

#### Application – Survey Methodology

In Town A we obtained a utility service list for the mapped area, and after eliminating businesses and services from the list, we identified 450 families<sup>1</sup> in our service area.

#### Town A Service Area Survey List

Customer Name	Address
Adams, John	1234 Main Street, Town A, NE 68111
Arenal, Palmer	456 Elm Street, Town A, NE 68119
Axel Plumbing	100 Pacific Avenue, Town A, NE 68113
Baddha, Zeynep	345 N. 7 <sup>th</sup> Avenue, Town A, NE 68811
<del>Banksy's Print Shop</del>	<del>108 Center Street, Town A, NE 68108</del>

#### Step 2: Develop the Questionnaire/Survey Form

Generally, follow these guidelines:

- The questions in the questionnaire should be short, simple and efficient. Keep the language as simple as possible.
- Avoid leading questions and <u>avoid bias</u>. Do not induce 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 DED when in doubt.).
- Avoid burdensome questions (i.e. questions with no correct answers).
- Clearly define concepts within questions (i.e. outline definition of family vs. household).
- Avoid references to CDBG and low-income people
- If you choose to conduct a mail questionnaire, use a standard 12-point font (e.g. Arial or Calibri) and do not include too many questions on one sheet of paper.

At a minimum, the survey must include questions regarding:

- Family size
- Total family income

In order to gather data on low-to-moderate income families, you must use the HUD Section 8 income limits. This data can be found at <u>https://www.huduser.gov/portal/datasets/il.html</u>. These income limits must be used in the income survey instrument, search under the appropriate year for your service area jurisdiction (by county) and use the 80% income limits.

Reference or use the Income Survey Sample Form for your survey instrument.

For additional guidance, about developing a survey instrument including sample questions, see HUD CPD Notices <u>14-013</u> and <u>19-02</u>.

<sup>&</sup>lt;sup>1</sup> A family includes all persons living in the same household who are related by blood, marriage, or adoption. If another individual lives at the same address who does not meet this criteria, then that individual is a separate family and would complete a separate survey form/questionnaire.

Application – Using Income Limits	
Navigate to the HUD Section 8 Income Limits a	nd search for the appropriate jurisdiction.
INCOME LIMITS	
DATASET / INCOME LIMITS	Other Datasets <del>-</del>
weulan i anniy income esumates and i all Market Kent area deliniuons for each.	metropolitan area, parts of some metropolitan areas, and each non-metropolitan county.
2017 2016 2015 2014 2013 Year -	Click here to search for the appropriate area by State and
Query Tool Data FAQs	County.
Effective 04/14/2017.	
Access Individual Income Limits Areas	

This system provides complete documentation of the development of the FY 2017 Income Limits (ILs) for any area of the country selected by the user. Official ILs, available in pdf and excel formats at this link, may differ slightly from those calculated in the documentation system, and should be used for ALL official purposes.



In our example, we entered "Nebraska" and "Adams County" and below are the results:

FY 2017 Income Limit	Median Income	FY 2017 Income Limit	Persons in Family							
Area	Explanation	Category	1	2	3	4	5	6	7	8
Adams County		Very Low (50%) Income Limits (\$) Explanation	24,300	27,750	31,200	34,650	37,450	40,200	43,000	45,750
	\$69,300	Extremely Low Income Limits (\$)* 14,600 16,650 20,420 <b>24,600</b> 2 Explanation	28,780	32,960	37,140	41,320				
	(	Low (80%) Income Limits (\$) Explanation	38,850	44,400	49,950	55,450	59,900	64,350	68,800	73,200

#### FY 2017 Income Limits Summary

The above sample includes the income limits for Adams County. Be sure to use the income limits specific to your county/counties when creating your survey instrument. Use the 80% Income Limits.

In our example, we developed a survey that defines family and income and asks size of family and if the family's gross income level is <u>ABOVE</u> or <u>BELOW</u> a specific dollar limit depending on family size and the appropriate income limits. (See Appendix, Section 1. – Income Survey Sample Form.)

### Step 3: Determine the Sample Size

Depending on the sample size, a census survey (less than 200 families) or random sample survey (more than 200 families) will need to be conducted. Carefully, review the guidance below; there is separate guidance depending on the type of survey being conducted.

#### RANDOM SAMPLE SURVEY

The applicant should:

- 1. **Define the service area.** The definition must include the boundaries of the service area and the size of the population for which the percentage of LMI persons is to be determined.
- 2. **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. Sound oversampling helps ensure you obtain an adequate number responses.
   Oversample by 20%. Oversampling will provide additional randomly selected families in the event you obtain a "non-respondent" from your initial sample.
- 4. 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 to obtain responses before selecting replacements.
- 5. **Avoid Bias.** 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.

For additional guidance about selecting the sample, including how to define the population within the service area, confidence intervals, dealing with non-responses, etc., see HUD CPD Notices <u>14-013</u> and <u>19-02</u>.

#### Application: Random Sample Survey – Determine the Appropriate Sample Size

Determine the appropriate sample size for your service area by using a sample size calculator.

Go to <a href="https://www.surveymonkey.com/mp/sample-size-calculator/">https://www.surveymonkey.com/mp/sample-size-calculator/</a>

- 1. Enter a **confidence level of <u>90%</u>**.(HUD CPD-19-02 mistakenly calls this a "confidence interval".)
- 2. For Margin of Error (MOE), enter the lessor of 10 percent or the HUD-provided data MOE for your equivalent geography.
- 3. For Population, enter the <u>number of FAMILIES</u> (or households based on the list used to determine total number in the service area).
- 4. Click "Calculate".

Recall Town A example: In Town A we obtained a utility service list for the mapped area, and after eliminating businesses and services from the list, we identified 450 families in our service area. Also assume that the HUD-provided data for Town A had MOE of +/- 9.0. Since 9.0 percent is less than 10 percent, we must use the HUD-provided data MOE.

From the screenshot below, you can see that the sample size calculator says that Town A should use a sample size of 71 families.

Population size 😮	Confidence level (%) 😮	Margin of error (%) 🔮
450	90 -	9.0
	Sample size	

Application: Random Sample Survey – Oversampling

In our Town A example, a total of 71 surveys need to be completed, however, it is acceptable to oversample by 20%. Thus, we may choose a sample up to 86 (in our example)

(71\*.2=14.2; 15+71=86). (or 71\*1.2=85.2 – rounded to 86)

Oversampling will provide additional randomly selected families in the event you obtain a "non-respondent" from your initial sample.

*Our goal is to obtain responses from the original randomly chosen families (first 71 chosen). Applicant must develop methods for follow-up for non-response:* 

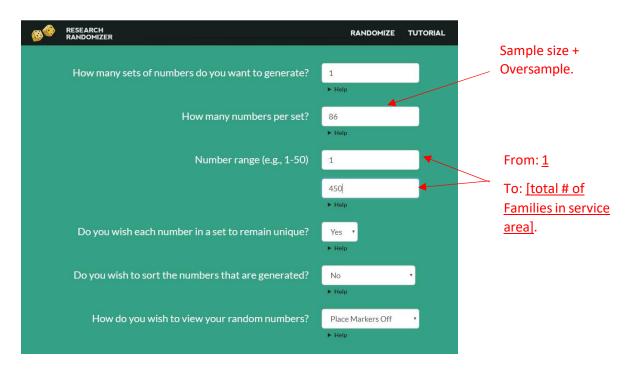
- Telephone Call
- Door-to-Door

*If follow-up is unsuccessful, then the first family that is a non-respondent would be replaced by the 72nd family on the list, the second family would be replaced by the 73rd family, etc.* 

#### Application – Random Sample Selection

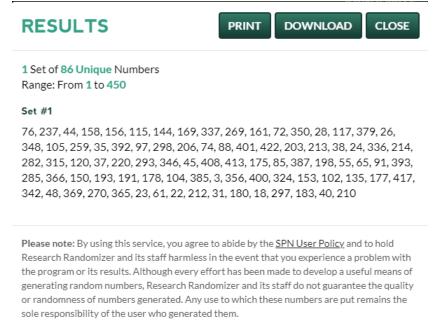
To randomly select the sample, numbers must be assigned to the entire population in the service area. Using whichever resource determined as the most accurate for the population of the service area, create a list and number that list. In our Town A example, we numbered our entire utility list of 450 families from 1-450.

- Use a random number generator to produce the desired number of random numbers
- It is recommended the applicant uses a random number table or uses the random number generators at <u>www.randomizer.org</u> or <u>www.random.org</u>.



For our Town A example, we wanted 86 numbers (to include our oversample) between 1 and 450.

Once the survey is carried out we will take the first 71 numbers (to match our original sample) on the randomized list and use the corresponding numbers on our numbered utility list (i.e. the first surveys will go out to families #76, #237, #44, and so on)



#### CENSUS SURVEY

As a reminder, if conducting a census survey, all families must be contacted. NOTE: Even when conducting a census survey, per <u>HUD CPD-19-02</u>, the margin of error (MOE) must be the lessor of 10 percent of the HUD-provided data MOE for the geography.

#### Application: Census Survey – Determine the Margin of Error

Determine the margin of error for your Census survey sample (assuming you were not able to contact every single family) for your service area by using a margin of error calculator.

*Go to the Survey Monkey Margin of Error Calculator*, <u>https://www.surveymonkey.com/mp/margin-of-error-</u> calculator/?ut source=mp&ut source2=sample size calculator.

- Enter a confidence level of <u>90%</u>. NOTE: HUD CPD-19-02 mistakenly calls this a "confidence interval".
- 2. For Population, enter the **<u>number of FAMILIES</u>** (or households based on the list used to determine total number in the service area).
- 3. For Sample Size, enter the **number of FAMILIES with COMPLETED interviews.**
- 4. Click "Calculate".

Recall Town A example: In Town A we obtained a utility service list for the mapped area, and after eliminating businesses and services from the list, we identified 450 families in our service area. Also assume that the HUD-provided data for Town A had MOE of +/- 9.0. Since 9.0 percent is less than 10 percent, we must use the HUD-provided data MOE.

To do a Census Survey, we would have to contact all 450 families. Assuming you were not able to reach everyone and that some people opted not to participate, you only collected surveys from 435 families. Using the margin of error calculator, you can see that the margin of error for this Town A census is 1%, which is well below the HUD-provided data MOE of 9.0%.

Population size 📀	Confidence level (%) 📀	Sample size 📀
450	90 -	435

#### Step 4: Publicizing the Survey

To promote citizen participation, publicize when, how, and why the survey will be conducted. Arranging advance notice regarding the survey can significantly increase your response rate. By publicizing the survey, people tend to be less hesitant to disclose information. Any publication must be worded so that it does not bias the results. You may provide limited information regarding the reason for conducting the survey:

- Do not instruct respondents that the goal is to demonstrate a certain pre-determined result. You may tell people that a current estimate of incomes in the service area is necessary in order to apply for grant funds.
- Do not state you are conducting a survey to find out how many low-to-moderate income people are in the area.

#### Application – Publication

*In our example, we advertised in the local paper and public meetings.* 

#### Step 5: Maintain Confidentiality and Conduct the Survey

Emphasis must be made to survey participants that their answers will be kept confidential. 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/form. If the cover sheets and questionnaires are both numbered, they can be matched if necessary. It is suggested that the applicant make reasonable efforts to protect the privacy of those surveyed and follow applicable State and local laws regarding privacy and obligations of confidentiality. However, all of the information, including confidential survey forms, must be maintained by the applicant for monitoring purposes.

If you choose to conduct an interview survey, it is strongly recommended that you select and train your interviewers. The quality of the survey results depends on how well the survey is conducted. Even in small studies involving a single researcher/interviewer, it is important to organize the interviewing process before beginning the formal process. Make sure the interviewers are comfortable with the questions.

The training process includes the following major topics:

- 1. Describing the entire survey
- 2. Identifying the sponsor of the survey
- 3. Providing the interviewer with a working knowledge of survey research
- 4. Explaining the survey sampling logic and process
- 5. Explaining interview bias
- 6. 'Walking through' the interview process
- 7. Explaining respondent selection process
- 8. Explaining scheduling and supervision
- 9. Explaining follow-up for non-response

Make contact with the residents of the service area; consider writing or telephoning to let people know in advance that you are coming. Make multiple attempts to establish contact and reschedule another interview if the initial contact has not resulted in an interview. Replace the families you have written off as "unreachable."

Avoid potential sources of bias when conducting the survey:

- 1. Telephone survey
  - a. May not reach people with only a cell phone, if you are using entries from a telephone book
- 2. Web/electronic survey
  - a. Assumes everyone has internet
- 3. In person survey
  - a. See number 5
- 4. Surveying in person or calling between the hours 8 5 pm will miss anyone who regularly works those hours. The same if you only reach out during the evenings or on weekends. This could introduce bias into your results, creating a non-random sample.

For additional guidance about conducting an interview, see <u>HUD CPD Notice 14-013</u>.

#### Application: Random Sample Survey – Conducting the Survey

In our Town A example, we mailed the survey with the June utility bills to the families identified in our random sample and oversample (i.e. we mailed 86 surveys). We did not receive all of the surveys back from our original sample (the first 71 families that were selected by the random number generator), therefore we re-sent surveys to those individuals on the original random sample list.

Where we did not receive the surveys from the original sample in our second attempt of contact, we went to their homes to collect the surveys. If we were still unable to contact the family on the third attempt, we replaced those surveys with the oversample.

To illustrate, if we didn't receive five of the surveys back from our original 71, then we replaced those with the 72nd, 73rd, 74th, 75th, and 76th randomly generated number (in our example that would be 61, 22, 212,...). We then used the family surveys associated with those numbers to replace the non-respondents.

Even though we received 10 of the "oversample" surveys back, we will only include the ones necessary for replacement in numerical order (in this case the first five oversampled surveys).

#### Step 6: Analyze the Results

Complete the income survey worksheet (Application Guidelines, Exhibits Chapter, Exhibit E-1 or E-2) and record the calculated percentage of LMI persons.

Use the collected data to complete the LMI worksheet.

Tabula	ited Incon	ne Survey	Results						
Family Size	1 PERSON	2 PERSON	3 PERSON	4 PERSON	5 PERSON	6 PERSON	7 PERSON	8 PERSON	TOTAL
# ABOVE	12	30	17	18	11	9	6	4	107 FAMILIES
INCOME LIMIT	\$38,850	\$44,400	\$49,950	\$55,450	\$59,900	\$64,350	\$68,800	\$73,200	378 PEOPLE 598
									PEOPLE
# BELOW	18	17	26	37	20	14	8	10	150 FAMILIES

As we can see 150/257 families in our community are LMI. This can be calculated for individuals by multiplying the number of families by the number of individuals the family which gives us 378/598 (= 63.2%) LMI individuals. This is outlined on the Low- and Moderate-Income Reporting Worksheet.

*If the calculated LMI percentage is in the range of 51%-54% for a random sample survey, further analysis is necessary.* 

- Compare average size of LMI families to the average size of above LMI families (these numbers should be proximal).
- Compare the percentages of LMI families to percentages of above LMI families for each family size (use table below).
- Identify and compare mean, median, and mode of LMI and above LMI families.

Table for Comparir	ng the Distribution o	of Family Size by Fam	nily Income	
Number of Persons	Families w/ Low	v-Mod Incomes	Families Above L	ow-Mod Incomes
in Family	Number	Percent	Number	Percent
One				
Тwo				
Three				
Four				
Five				
Six				
Seven				
Eight				
Nine or more				
Total		100%		100%

## Step 7: Document and Save Your Results

Save the completed questionnaires—preferably in a confidential manner. 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.

# More Information about Margin of Error (MOE), Confidence Level, and Confidence Interval

Margin of Error (MOE)	Margin of error tells you how many percentage points your results could differ from the real value.
Confidence Level	Confidence level tells you how sure you are that your estimate falls within your confidence interval. IMPORTANT: in CPD 19-02, note that what HUD refers to as a "confidence interval" is actually a confidence level
	interval" is actually a <b>confidence level</b> .
Confidence Interval	Confidence interval is intrinsically related to MOE and confidence level. It gives a range of values as your estimate of an unknown quantity and is accompanied by a specific level of confidence (i.e., how sure you are that you are right).
	<ul> <li>Tells you how much uncertainty there is within a statistic.</li> <li>Uses the MOE to calculate the range of values in which you are reasonably sure (shown by the confidence level) that you are correct.</li> </ul>

#### Example using HUD Guidelines (see <u>CPD-19-02</u>):

- 1. Must use a 90% confidence level
- 2. Margin of error must be the lessor of 10 percent of the MOE of the HUD-provided data for the equivalent geography.

One of Town A's major plants, Nebraska Cogs, closed six months ago. Town A would have reason to believe that closing of Nebraska Cogs' would have driven up their LMI population since the ACS was conducted. They might choose to complete an income survey to better represent their current circumstances. Using the 2011-2015 LMISD data, HUD calculated that Town A had 135 low to-moderate income persons and a population of 275. According to these estimates, 49.1% of Town A's population is low-to-moderate income with a margin of error of +/- 9.8. HUD uses a confidence level of 90 percent. In plain terms, this means that if the survey was repeated, 90 percent of the time our results would fall between 39.3% to 58.9% of Town A's population being low-to-moderate income.

MOE	Confidence Level	Confidence Interval
+/- 9.8%	90%	It is a certainty that 90% of the time, the results from a sample would
		fall in the range of 39.3% to 58.9%. (49.1 "-9.8" and 49.1 "+9.8")