



Texas Water Development Board Socioeconomic Survey Guidelines

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I. APPLICABLE PROGRAMS

These guidelines apply to the following Texas Water Development Board (TWDB) programs:

- Clean Water State Revolving Fund (CWSRF)
- Drinking Water State Revolving Fund (DWSRF)
- Economically Distressed Areas Program (EDAP)
- DWSRF and CWSRF Emerging Contaminants (EC)
- DWSRF Lead Service Line Replacement (LSLR)

II. INTRODUCTION

The TWDB provides funding for the above programs in the form of loan subsidies and grants for projects serving communities that qualify as disadvantaged. Qualifying for disadvantaged communities funding varies according to the TWDB program under which the entity is seeking funding. A qualifying requirement common to most TWDB programs offering disadvantaged communities funding is that the entity's service area (or in some cases project benefit area) must have an annual median household income (AMHI) which is no more than 75% of the State of Texas AMHI.

Under the CWSRF and DWSRF programs, there is an additional requirement related to household cost factors that must be met to determine eligibility for disadvantaged communities funding. See the Disadvantaged Communities Worksheet, which can be found in either the CWSRF or DWSRF Intended Use Plan solicitation packet for more information. The LSLR and EC Programs accept projects that are not more than 150% of the State AMHI.

If an entity is pursuing connection hook-ups under the EDAP program, family income for each proposed household connection must be provided. Please consult the [Survey Guidelines for EDAP Connection Assistance \(TWDB-0401\)](#) for guidance on performing a survey for EDAP Connection Assistance. Go to our Program Guidance & Manuals webpage and search by document name or number.

It is important to note that the results from a Socioeconomic Survey may only be used for Project Information Forms (PIF) and Abridged Applications after the results have been approved by the TWDB. The results cannot be used for a PIF or Abridged application already submitted to the TWDB.

A. Determining Eligibility

To determine whether an entity meets the AMHI requirements under a specific program, the TWDB relies on the most recent available American Community Survey (ACS) census data published by the U.S. Census Bureau. **The most recently released ACS 5-year estimates must be used for the AMHI requirement, and you should consult the PIF, Abridged Application, or solicitation notice for the current funding cycle in which you are applying to confirm the appropriate data set in use.**

However, if the most recent ACS data for an entity's service area is inadequate or unavailable, the entity may seek approval to conduct and use data obtained from a Socioeconomic Survey. The entity must make a written (email) request to TWDB to conduct a Socioeconomic Survey. If approved, the entity may conduct the survey.

B. Request to Conduct a Socioeconomic Survey

TWDB approval is required prior to conducting a socioeconomic survey and using socioeconomic survey data to determine disadvantaged status eligibility.

Submit a **written request** via email to TWDB to conduct a socioeconomic survey.

The request must include:

- The name and address of the entity;
- The authorized representative contact information;
- The consultant(s) representative contact information;
- A description of the project, and specifically note if the project is for first time service, and any issues or conditions that it is intended to resolve;
- The name of the TWDB funding program by which the project is proposed to be funded;
- Written email requests can be sent to the program specific email:
 - Clean Water State Revolving Fund CWSRF@twdb.texas.gov
 - Drinking Water State Revolving Fund DWSRF@twdb.texas.gov
 - Economically Distressed Areas Program EDAP@twdb.texas.gov
- The approximate number of occupied dwellings in the service area, including any area located outside the current service area to which service is being extended; and
- Documentation to support the entity's conclusion that the most recent ACS data (the ACS 5-year estimates) for its service area is inadequate or unavailable. This documentation must include a table and a map, as described below:

The **table must include** the following: ([see Example located in this document](#))

- Identifies all US Census boundaries that cover the entity's service area,
 - utilize the smallest geographic type (e.g. census tract or block group) for which the most recent census data is available and indicate the year for which the census boundaries were derived.
- The most recent available ACS data for the AMHI within each boundary,
- The most recent available ACS data for average household size within each boundary,
- The number of household water and/or sewer connections with each boundary,

- The percentage of total household water and/or sewer connections within each boundary,
- The calculated proportion of AMHI and average household size within each boundary, and
- The resulting total AMHI and average household size for all applicable US Census boundaries.

An example table can be found in the guidance document Census Data Search ([WRD-284](#)) and in this guidance under Reference Forms and Additional Guidance.

The **map must include** the following:

- The boundaries of the entity's service area.
- The locations of household water and/or sewer connections, and
- All US Census boundaries that cover the entity's service area (including any area located outside the current service area to which service is being extended).

See Census Data Search ([WRD-284](#)) for more information on obtaining census data and an example table of the requested documentation under Prorated Table Examples.

Once TWDB staff has determined that the documentation provided by the entity supports the use of socioeconomic survey data instead of the most recent ACS data, **the entity will be notified in writing whether they are approved to proceed with conducting the survey.**

III. GUIDANCE FOR CONDUCTING A SOCIOECONOMIC SURVEY

After an entity receives TWDB approval to conduct a Socioeconomic Survey, the survey must be conducted following guidelines below.

A. Select an Independent Surveyor(s)

The survey must be conducted by an independent surveyor(s). An independent surveyor is a surveyor that has no interest, financial or otherwise, in the planning, design, and construction of the project for which disadvantaged communities funding is being sought. Selected surveyor(s) should hold the attention of respondents, ask questions as written, and accurately record responses. Fill out and submit a Surveyor Certification form ([WRD-283](#)) for each surveyor.

The independent surveyor(s) must not be an employee of the system (or entity), an elected official of the system (or entity), and must not live within the service area boundaries of the system. The TWDB reserves the right to disallow a surveyor from conducting the survey or invalidate the results of the survey if it is determined that the surveyor has an interest in the system or project.

B. Prepare a Map that Identifies the Service Area.

The map must identify the service area, including any area located outside the current service area to which the service is being extended. The map must indicate which households:

1. Are served by the system,
2. Were attempted to be surveyed, and
3. Completed the survey.

The map and information listed above must be of adequate quality to easy interpret and there must be a key/legend describing the points on the map.

C. Use a Survey Form to Obtain the Required Data.

Please use Survey Form for Obtaining Socioeconomic Data ([WRD-273](#)) to conduct the survey. You can create your own survey form, but it must include all the necessary data outlined in WRD-273. A copy of the completed survey forms must be submitted to TWDB.

D. Conduct the Survey.

a. The survey must be conducted in a timely manner.

All responses to the survey form must be provided within a ninety-day timeframe from the start of the survey.

Document when survey begins for TWDB submittal.

b. Consider publicizing the survey to improve overall responses.

Households are more likely to respond when surveyed if they are notified in advance of why, when, and how they will be contacted. Different options for publicizing the survey may include letters to residents, local newspaper notices, announcements at churches or civic organizations, flyers, and other media. It is appropriate to indicate in the notice that the community intends to apply for funding from the TWDB and that, as part of the application, the community must provide income information from the residents in the service area. It is not appropriate to say that, for the community to receive the desired funding, a survey must be conducted to show that most of the residents in the service area have low incomes. Survey respondents cannot be incentivized (i.e., no gift cards).

Provide all materials used to publicize the survey to the TWDB.

c. Use an effective survey method.

Listed below are different methods for conducting the survey. All methods should involve identifying the purpose of the survey to each potential respondent, soliciting participation from potential respondents who are qualified to represent the household, and recording responses accurately.

- Telephone Survey – Be sure to verify the address of the respondent when conducting a survey by telephone.
- Door-to-Door Survey
- Mail Survey
- QR Code/Website Survey – Caution! This method can only be used if every survey form is accounted for and traceable to an address within the survey area, and verification that respondent is in the household.
- Combination Survey – This method may be advisable in some situations. For example, when no one is home to answer a door-to-door survey, a note may be left requesting that the resident telephone the surveyor. Similarly, the surveyor may telephone a residence to schedule a time to come by to conduct the survey.

Surveyors should attempt to contact residents at a time when they are most likely to obtain a high rate of response and avoid contacting residents during a time that may yield biased results. For example, most people are more likely to be at home early in the evening or on weekends. Contacting residents only during the day from Monday to Friday may miss families with more than one employed member. Since these families could have higher household incomes than families with only one employed member, contacting residents during this timeframe may lead to the biased result of finding an excessively high proportion of low-income households.

Document survey methodology for TWDB submittal.

d. Adequate sampling of the service area must be met.

The survey must be conducted in a manner wherein the data collected is representative of the entire service area (or project area when allowed) including any area located outside the current service area to which service is being extended.

If it is not possible to survey every household, the surveyor should seek to conduct the survey in a manner that allows an adequate sample (**response rate % must be met**) of the households to complete a survey form. **Incomplete survey forms cannot be counted toward the response rate %.**

“Adequate sampling” of the service area for these purposes is defined as:

50 or Fewer Occupied Dwellings (≤50)

All occupied dwellings must be surveyed. A response rate of 75% or greater must be attained from the occupied dwellings.

51 - 100 Occupied Dwellings

A response rate of 60% must be attained from the occupied dwellings. Additionally, the sample of dwellings must be representative of the entire population of dwellings and household incomes.

101 - 200 Occupied Dwellings

A response rate of 50% must be attained from the occupied dwellings. Additionally, the sample of dwellings must be representative of the entire population of dwellings and household incomes.

200 - 300 Occupied Dwellings

A response rate of 35% must be attained from the occupied dwellings. Additionally, the sample of dwellings must be representative of the entire population of dwellings and household incomes.

Greater than 300 Occupied Dwellings (>300)

A response rate of 30% must be attained from the occupied dwellings. Additionally, the sample of dwellings must be representative of the entire population of dwellings and household incomes.

Document response rate % for TWDB submittal.

e. The survey must encompass a cross section of the household population.

The surveyor should ensure that the survey encompasses a cross section of the household population. Essentially, the northern, southern, eastern, western, and central areas of the service area should be represented with completed survey forms.

E. Review Survey Forms for Completeness.

Surveyor(s) should review each survey form for completeness and verify each response is recorded clearly. Incomplete or ambiguous responses should be clarified by re-contacting the respondent. As mentioned previously, incomplete survey forms will not count toward the response rate percentage.

F. Document Survey Results and Calculate AMHI

Average Household Size, and any other required data.

Surveyor(s) or Entity must review and tabulate survey results to calculate AMHI and other required data. See more detailed guidance under “Determining AMHI” section and “Determining Household Size” section.

G. Submit Documents to TWDB.

At completion of the survey, the following documents should be submitted to TWDB for review and approval:

- Narrative that includes when the survey began, how the survey was publicized and the survey methodology,
- Completed Survey forms ([WRD-273](#), or similar).
- Surveyor Certification form ([WRD-283](#)) for each surveyor.
- List of all survey responses including the surveyor name, household address, household income and number of residents for each household surveyed. When emailing your submittal, please include an Excel spreadsheet (or similar format) version of this list.
- Calculations for response rate percentage, determining AMHI, average household size (SRF-projects only) or any other data.
- Map that identifies the service area (including any area where service is being extended to), and identifies:
 - Which households are connected to your system
 - Which households were offered the survey, and
 - Which households completed the survey.

For entities seeking CWSRF or DWSRF funding, all survey documents must be submitted **14 days prior** to the relevant solicitation deadline. For example, if Project Information Forms are due March 1st, survey data results must be submitted to TWDB for review by February 16th for the entity to use the findings in their Project Information Form.

For entities seeking **EDAP funding**, all survey documents must be submitted by the deadline indicated in the TWDB survey approval letter.

Final Documents can be submitted to the TWDB via email to the appropriate email box listed below:

Email	Email to project specific inbox: <ul style="list-style-type: none">• CWSRF@twdb.texas.gov• DWSRF@twdb.texas.gov• EDAP@twdb.texas.gov
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IV. APPROVED SURVEY RESULTS

An approved survey may be considered valid for five (5) years from the date of the official approval notification. Attach the approval letter to all SRF PIFs or EDAP Abridged Applications you submit to TWDB.

V. CALCULATIONS GUIDANCE

The Surveyor(s) or the Entity can complete the calculations based on the results of the survey. Calculations for the SRF program include AMHI and Average Household Size. For the EDAP program, please see “Survey Guidelines for EDAP Connection Assistance” ([TWDB-0401](#)) and the Glossary (herein) for calculating Adjusted AMHI (AAMHI).

A. Determining AMHI

To calculate the AMHI, arrange the survey results in either ascending or descending order. Then identify the household income in the middle of the range (i.e., the median number). If there is no middle number (i.e., even number of survey respondents), calculate the average of the two middle numbers. See the following examples.

Example of odd number of respondents.

Incomes in Ascending Order		Incomes in Descending Order	
	\$10,500		\$14,500
	\$11,000		\$14,000
	\$11,500		\$13,500
	\$12,000		\$13,000
AMHI □	\$12,500	AMHI □	\$12,500
	\$13,000		\$12,000
	\$13,500		\$11,500
	\$14,000		\$11,000
	\$14,500		\$10,500

Example of even number of respondents.

Incomes in Ascending Order		Incomes in Descending Order	
	\$10,500		\$15,000
	\$11,000		\$14,500
	\$11,500		\$14,000
	\$12,000		\$13,500
Median □	\$12,500	Median □	\$13,000
	\$13,000		\$12,500
	\$13,500		\$12,000
	\$14,000		\$11,500
	\$14,500		\$11,000
	\$15,000		\$10,500

$$\text{AMHI} = (\$12,500 + \$13,000)/2 = \$12,750$$

These calculations must be submitted to the TWDB.

B. Determining Average Household Size

This data is required by entities seeking SRF funding only. Calculation of the average household size requires the surveyor or entity to list the survey results and divide the sum by the number of responses. These calculations must be submitted to the TWDB.

VI. GLOSSARY

American Community Survey (ACS) – A large, continuous demographic survey conducted by the Census Bureau that provides accurate and up-to-date profiles of America's communities every year. Questionnaires are mailed to a sample of addresses to obtain information about households (i.e. about each person and the housing unit itself). The survey produces annual and multi-year estimates of population and housing characteristics and produces data for small areas, including tracts and population subgroups. Questionnaires are mailed to populations of 65,000 or more for the annual survey, greater than 20,000 for the 3-year survey, and the entire country for the 5-year survey.

Block Group – A statistical subdivision of a census tract. A block group consists of all tabulation blocks whose numbers begin with the same digit in a census tract. For example, for Census 2000, block group 3 within a census tract includes all blocks numbered from 3000 to 3999. Block groups generally contain between 300 and 3,000 people, with an optimum size of 1,500 people.

Census Tract – A small, relatively permanent statistical subdivision of a county or statistically equivalent entity, delineated for data presentation purposes by a local group of census data users or the geographic staff of a regional census center in accordance with US Census Bureau guidelines. Designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions at the time they are established, census tracts generally contain between 1,000 and 8,000 people, with an optimum size of 4,000 people. Census tract boundaries are delineated with the intention of being stable over many decades, so they generally follow relatively permanent visible features. However, they may follow governmental unit boundaries and other invisible features in some instances; the boundary of a state or county (or statistically equivalent entity) is always a census tract boundary.

Economically Distressed Area – As applied to the EDAP program, an area in which:

- water supply or sewer service is inadequate to meet minimal needs of residential users as defined by TWDB rules;
- financial resources are inadequate to provide water supply or sewer service that will satisfy those needs; and
- an established residential subdivision was located on June 1, 2005, as determined by the TWDB.

Household – A household is a residential structure, including a single-family house, mobile house, duplex, or apartment.

Household Income – The sum of money income received in the prior calendar year by all household members 15 years old and over, including household members not related to the householder, people living alone, and other non-family household members. Included in the total are amounts reported separately for wage or salary income; net self-employment income; interests, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income.

VII. REFERENCE FORMS AND ADDITIONAL GUIDANCE

The Texas Water Development Board (TWDB) [Program Guidance & Manuals](#) noted in this instructional document may be accessed through the TWDB Financial Assistance webpage.

Search by either the document number or name.

- Socioeconomic Survey Guidelines ([WRD-285](#))
- Census Data Search ([WRD-284](#))
- Surveyor Certification ([WRD-283](#))
- Survey Form for Obtaining Socioeconomic Data-English ([WRD-273E](#))
- Survey Form for Obtaining Socioeconomic Data-Spanish ([WRD-273S](#))

<https://www.twdb.texas.gov/financial/instructions/index.asp>



The screenshot shows the Texas Water Development Board's website. The header includes the TWDB logo and navigation links: Home, Board, Financial Assistance, Water Planning, Groundwater, Surface Water, Flood, and Drought. The main heading is 'Program Guidance & Manuals' followed by 'Guidance and Forms Library'. Below this, there is a search bar and a table listing documents. The table has columns for Document Number, Type, and Document Description. The documents listed are:

Document Number	Type	Document Description
WRD-285	Guidance	Socioeconomic Survey Guidelines
WRD-284	Guidance	Census Data Search
WRD-283	Form	Surveyor Certification
WRD-277	Form	Cost & Pricing Information, State Projects
WRD-273S	Form	Survey Form for Obtaining Socioeconomic Data-Spanish
WRD-273E	Form	Survey Form for Obtaining Socioeconomic Data-English

You can also access further Socioeconomic Data/Survey information on the TWDB's State Revolving Fund Project Information Forms webpage at the bottom under [Additional Guidance](#).

Texas Water Development Board

A. Survey Checklist

	Completed
a. Receive notification from the TWDB with approval to conduct a socioeconomic survey.	
b. Prepare a map of the service area and determine which households to survey.	
c. Determine survey method(s).	
d. Prepare survey form.	
e. Publicize information about the survey.	
f. Recruit and train surveyor.	
g. Conduct survey.	
h. Check survey forms for completeness and re-contact respondents if necessary.	
i. Document results of survey and calculate AMHI and any other required data.	
j. Submit required survey documents to TWDB.	

B. Prorated Table Example from [WRD-284](#):

Prorated Table Example for U.S. Census Data: Total Population, AMHI, and Household Size at the Block Group Level:

A	B	C	D	E	F	G	H	I	J		
US Census Tract	Block Group	Pop. 2021	AMHI	Average Household Size	Number of Household Connections	Household Connections as a % of Total Household Connections	Entity's Current Population (ExF)	Entity's AMHI (DxG)	Entity's Average Household Size (ExG)	County	Source
x523	1	1,279	\$29,712	2.94	200	12.33%	588	\$3,664	0.36	ABC	ACS 5 -Year Estimates
x523	2	5,079	\$60,399	3.5	66	4.07%	231	\$2,458	0.14	ABC	ACS 5 -Year Estimates
x524	1	4,683	\$43,149	3.19	1,000	61.65%	3,190	\$26,602	1.97	ABC	ACS 5 -Year Estimates
x524	4	1,439	\$45,781	2.96	356	21.95%	1,054	\$10,048	0.65	ABC	ACS 5 -Year Estimates
Total					1,622	100.00%	5,063	\$42,772	3.12		

How to Understand the Table:

- On the above example table, Columns A, B, C, D, and E were obtained from the U.S. Census data. You can find this data on the ACS 5-year Estimates Data spreadsheet TWDB provides or the U.S. Census Bureau website.
- Columns F and G (related to the household connections) are provided by the entity.
 - Add up the total number of household connections.
 - Divide the total by each Census Tract/Block Group and multiply by 10.
 - Example in this table: $1,622/200 = 0.1233$; $0.1233 \times 100 = 12.33\%$.
- Columns H, I, and J are calculations based on data within the table.
 - Column H = Column E multiplied by Column F.
 - Column I = Column D multiplied by Column G.
 - Column J = Column E multiplied by Column G.