To determine Disadvantaged Community eligibility in the Clean Water (CW) and Drinking Water (DW) State Revolving Fund (SRF) programs, the TWDB utilizes U.S. Census Bureau data, specifically the American Community Survey (ACS) 5-Year Estimates regarding Annual Median Household Income (AMHI), Total Population, Average Household Size and Unemployment Rate.

This data may be obtained through the TWDB's **American Community (ACS) 5-Year Estimates Memorandum** or **SRF PIF Guidelines** that can be found on our website or directly from the U.S. Census Bureau's Explore Census Data website at <u>data.census.gov</u>. TWDB will verify all Disadvantaged Community eligibility using project information submitted in the PIF and the corresponding ACS 5-Year Estimate data.

# How Do I Obtain Annual Median Household Income (AMHI) Data from the *Explore Census Data* Website?

• Go to <u>data.census.gov</u> and Click "Advanced Search".



• In the Search Box, type **B19013** to pull up the AMHI data (Median Household Income). Select the B19013 table.



• The table may display the ACS 1-Year Estimates. **This needs to be changed to ACS 5-Year Estimates**. Select the down arrow on the table and select the appropriate ACS 5-Year Estimates. If you are unsure of which ACS 5-Year Estimates that applies to the current State Fiscal Year (SFY) Intended Use Plan (IUP), go to the TWDB's American Community Survey (ACS) 5-Year Estimates Memorandum.

	B19013   MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2021 INFLATION-ADJUSTED DOLLARS) American Community Survey Universe: Households (2021: ACS 1-Year Estimates Detailed Tables)									
	Label	United Star								
	Madian hourshold income in the past 12 months (in 2021 inflation, adjusted dellars)									
	Median	nousenoid income in the past 12 months (in 2021 initiation-adjusted dollars)								
19013		× / 🌵 🝳 Advanced Search								
III Tables Maps	Pages									
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iew: 10   25   50 Down	nload Table Data									
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merican Community Survey	IN THE PAST	2021: ACS 5-Year Estimates American Indian and Alaska Native Detailed Tables								
2 MONTHS (IN 2021 INFLATION-ADJUS OLLARS)	IED	2021: ACS 5-Year Estimates Selected Population Detailed Tables								
View All 29 Products		2021: ACS 5-Year Estimates Detailed Tables								
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		2016: ACS 5-Year Estimates Detailed Tables								
		2015: ACS 1-Year Estimates Detailed Tables								
		2015: ACS 5-Year Estimates American Indian and Alaska Native Detailed Tables								
		P10012 MEDIAN HOUSEHOLD INCOME IN THE DAST 12 MONTHS (IN 2021 INELATION).								

• Find the ACS 5-year estimates that represents your service/project area by selecting "**Geos.**" This will allow you to refine the search area into State, County, Place (City), Tract, and Block Group. Make sure the correct ACS 5-year estimates is selected for the current SFY IUP. In the screenshot below it shows "2020: ACS 5-Year Estimates" from the drop-down menu as an example.

Americar B1901	n Communit <b>13</b>   MED	ty Surve	<sup>∍y</sup> HOU:	SEHOLI		DME IN	THE PA	ST 12 MON	THS (	IN 20	)20 IN	FLAT	ION-	-ADJUS
2020: AC	CS 5-Year E	stimates	s <mark>Detai</mark>	led Tables	✓ Ur	niverse: Ho	useholds							
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i Ava	ailable filters unavailable.	are limit	ed by y	our chosen	result in co	ombination	with selected	l filters. Some filte	rs may					
Most C	ommonly	Used	Geog	raphies										
Nation			$\odot$	State		$\bigcirc$	County		$\odot$					
Place			$\odot$	Zip Code Ta	bulation Are	a 🔊	Metropol	itan Statistical Area	$\odot$					
Tract			$\odot$	Block		$\bigcirc$	Block Gro	eup	$\odot$					

Many cities in Texas can be selected using "Place". If the project is more focused within a City or not adequately covered by a "Place", then use the Census Tracts and Block Groups.

EXAMPLE to obtain the AMHI for "Block Group 1, Census Tract 6713, Fort Bend County, Texas," select "**Geos**", then Block Group, then Texas, then Fort Bend County, then Census Tract 6713, then Block Group 1.

America <b>B190</b> 2020: A	American Community Survey B19013   MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS) 2020: ACS 5-Year Estimates Detailed Tables ~   Universe: Households														
Notes	Image: Second														
								1	Block Group	1, Censu	s Tract	6713,	Fort Bend	County, Tex	as
Label	Label Estimate Margin of Error														
Me	Median household income in the past 12 months (in 2020 inflation-adjusted dollars)							ed dollars)			45,0	88			±6,789

# How Do I Find the Geographic Areas from the *Explore Census Data* Website to Use for Disadvantaged Community Eligibility Calculations?

The geographic areas used to gather data from for your Disadvantaged Community eligibility calculations should match the project service area as closely as possible. In many cases, this will require using Census Block Group data instead of Census Place or County data.

To find the geographic areas that most closely match your project service area, follow the steps below:



• Go to <u>data.census.gov</u> and click "Maps".

TIP: For ease of use. click the double arrows on the "Filters" and "Results" windows to hide those windows and make the "Selection Map" window larger.



• In the "Selection Map" window, click the "Year" tab and select the appropriate year from the dropdown menu. In most cases, select the most recent year; this will align with the most recent ACS 5year estimates that are used for AMHI information in the SRF programs.

NOTE: It is very important to select the correct year, as the boundaries for the various Census areas change at least every 10 years.

For example:

- If you need to find data from the 2015 2019 ACS 5-year estimates, you will need to select "2019" in the "Year" tab
- If you need to find data from the 2018 2022 ACS 5-year estimates, you will need to select "2022" in the "Year" tab.

You will notice that some of the boundaries of Census Places, Census Tracts, Census Block Groups, and others will be different from 2019 to 2020 due to changes between the 2010 Census and the 2020 Census.



• Find your service area on the map by using the "+" and "-" buttons in the top right corner of the map to zoom in or zoom out, or using your mouse curser to click and drag the map to the correct location, or enter the city/county name int search bar.

TIP: It might be helpful to use a different base map, which shows more labels on the map. You can do this by clicking the "Basemap" tab and selecting the "Detailed" option.



- Once you have located the map over your service area, you can find the appropriate layer to display on the map. Layers that are typically most useful are:
  - County (the entire county)
  - Place (typically going to be incorporated towns and cities, but some unincorporated places are also included)
  - Census Block Group (typically smaller than Places) (TIP this layer may not show up in the selected year, you may need to select a new year to see this data).

• Click the "Layer" tab and select the layer from the drop-down menu you would like to use.

TIP: It is suggested that you look at both the Census Block Group layer and the Place layer to determine which will allow you to get the most accurate data for your project service area. When using the Census Block Group layer, you will typically be identifying multiple Census Block Groups that cover the project service area.

Selection Map		
Select Identify Lay	Year Basemap Boundaries Notes	
	2 Search	+
	Estimates Universe Place	
LEGEND	Estimates Universe Place/Balance within County	
Selected G	State-Place-County	1
Styles State	County Subdivision	
_	Estimates Universe County Subdivision P1   2020 DEC Re	districting Data (PL 94-171) 3 mi

• For Census Block Data, Click on any of the areas on the map and when the pop-up box appears, click "Select". This will highlight that area and then you can click another area, click "Select", and both areas will be highlighted.

Selection Map	
Select Identify Clear Geos Layer	1     Image: Constraint of the second s
LEGEND YEAR: 2	019 Block Group 1, X 1
Selected Geographies Styles State	1 2 View Profile Select
County View More ~	12 <sup>3</sup> 8.03 2 8.04

• Record which areas are selected, and these will be the areas that you will gather the AMHI, population and average household size from, as shown in the following steps of this document.



# How Do I Obtain Average Household Size Data from the *Explore Census Data* Website?

- In the Search Box, type in **B25010** to pull up average household size data.
- Select "Geos" to refine your geographical area. Make sure the correct ACS data is selected from the drop-down menu (Tip: ACS data should match what was used in the AMHI data, ACS 5-Year Estimates).

Americar <b>B250</b> 2020: AC	n Community Sur 10   AVERA CS 5-Year Estima	rvey GE HOUSEH( tes Detailed Tables	OLD SIZE OF	OCCUPIEI	D HOUSING g units	UNITS B	Y TEN	URE		
Notes	Geos Years	Topics Surveys	123 🔊 Codes Hide	Transpose	≁ Margin of Error	<b>Q</b> Restore	Excel	CSV ZIP	Print	и Мар
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	Availa be una	ble filters are limi available.	ited by your cho	sen result in c	combination wit	th selected f	filters. S	ome filter	rs may	
	Most Con	nmonly Used	Geographie	S						
	Nation		> State		$\bigcirc$	County			$\bigcirc$	
	Place		> Zip Cod	e Tabulation A	rea 🕥	Metropolita	an Statist	tical Area	$\bigcirc$	
	Tract		Block		$\odot$	Block Grou	p		$\bigcirc$	

EXAMPLE: to obtain the average household size for "Block Group 1, Census Tract 6713, Fort Bend County, Texas," Select "**Geos**", then Block Group, then Texas, then Fort Bend County, then Census Tract 6713, then Block Group 1.

American Community Survey B25010   AVERAGE HOUSEHOLD SIZE OF OCCUPIED HOUSING UNITS BY TENURE 2020: ACS 5-Year Estimates Detailed Tables  Universe: Occupied housing units												
Image: Second												
	Block Group 1, Census Tract 6713, Fort Bend County, Texas											
Label	Estimate	Margin of Error										
✓ Average household size												
✓ Total:	-2.91	±0.49										
Owner occupied	3.49	±0.67										
Renter occupied	2.75	±0.55										

#### How Do I Obtain Total Population Data from the Explore Census Data Website?

- In the Search Box, type in **B01003** to pull up total population data.
- Select "Geos" to refine your geographical area. Make sure the correct ACS data is selected from the drop-down menu.
- To determine what ACS 5-Year Estimates to use for current population and prior population in the current SFY IUP, refer to TWDB's American Community Survey (ACS) 5-Year Estimates Memorandum on the website. *Example below shows the "2020: ACS 5-Year Estimates" used for the current population and the "2016: ACS 5-Year Estimates" used as the prior population.*

America <b>B010</b> 2020: 4	an Comm <b>)03</b>   - \CS 5-Yea	IUNITY S	urvey L POPU ates Detai		<b>\</b> ✓   Uni	iverse: To	otal population							
L Notes	© Geos	T Years	Topics	Surveys	<u>123</u> Codes	<b>X</b> Hide	<b>T</b> ranspose	≁∕ Margin of Error	Q Restore	<b>XE</b> Excel	SV	ZIP	Print	Ві Мар
	Block Group 1, Census Tract 6713, Fort Bend County, Texas													
Label Estimate						e	M	argin of Error						
Tot	al				2,420	0		±758						

America B010 2016: A	American Community Survey B01003   TOTAL POPULATION 2016: ACS 5-Year Estimates Detailed Tables v Universe: Total population													
E Notes	Notes Geos Years Topics Surveys Codes Hide Transpose Margin of Error Restore Excel CSV ZIP Print More Data Map													
			Block Gr	oup 1, Cen	sus Tract	6713, For	t Bend Count	y, Texas						
Label Estimate Margin of Error							argin of Error							
Tot	Total 2,702 ±42													

# How Do I Obtain Unemployment Rate Data from the *Explore Census Data* Website?

- In the Search Box, type in **B23025** to pull up unemployment rate data.
- Select "**Geos**" to refine your geographical area. Make sure the correct ACS data is selected from the drop-down menu.
- To determine Unemployment Rate, divide the Civilian Labor Force: Unemployed by the Civilian Labor Force: Total. In the example below, you will divide 122 (Unemployed) by 1,285 (Civilian labor force total) and multiply by 100 to get a 9.49% unemployment rate.

American Community Survey          B23025       EMPLOYMENT STATUS FOR THE POPULATION 16 YEARS AND OVER         2020: ACS 5-Year Estimates Detailed Tables       V         Universe: Population 16 years and over												
Image: Notes       Image: Second												
Block Group 1, Census Tract 6713, Fort Bend County, Texas												
Label	Estimate	Margin of Error										
➤ Total:	1,630	±371										
➤ In labor force:	1,285	±325										
<ul> <li>Civilian labor force:</li> </ul>	1,285	±325										
Employed	1,163	±341										
Unemployed	122	±87										
Armed Forces	0	±14										
Not in labor force	345	±150										

# My Project Includes More Than One Geographical Area, How Do I Include All Relevant Areas in My Data Search?

• Select "**Geos**" to refine the geographical area. Select all relevant areas. Make sure the correct ACS data is selected from the drop-down menu. See example below.

America <b>B190</b> 2020: A	erican Community Survey          I9013   MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS)         20: ACS 5-Year Estimates Detailed Tables <ul> <li>Universe: Households</li> <li>Universe: Households</li> <li>Universe: Households</li> </ul>															
Notes	Geos	Years	Topics	) Surveys	<u>123</u> Codes	<b>X</b> Hide	<b>T</b> ranspose	+∕_ Margin of Error	Q Restore	Excel	SV	ZIP PI	int Ma	] p		
	1	Block (	Group / T	Texas / Fo	ort Bend	County,	Texas / Ce	nsus Tract 6713	3, Fort Bend	County	, Texas	s /	×	Census Trac	Block Group 1, Census Tract	ł
Label	Select Block Group X Estimate Estimate															
Me	Qs	Search B	Block Gro	oup										89,508	44,83	34
	6	Availat unavai	ole filters lable.	are limit	ed by yo	our chos	en result in	combination wi	ith selected	filters. S	Some f	ilters ma	y be			
	🗌 A	II Block (	Groups w	vithin Cer	nsus Tra	ct 6713,	Fort Bend (	County, Texas								
	🗸 В	lock Gro	up 1, Cer	nsus Trad	ot 6713,	Fort Ben	d County, T	Texas								
	🗹 В	lock Gro	up 2, Ce	nsus Tra	ct 6713,	Fort Ber	nd County,	Texas								

• Once you have selected all relevant areas, download the document by selecting "Excel."

American Community Survey B19013   MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS) 2020: ACS 5-Year Estimates Detailed Tables v   Universe: Households											
Image: Notes     Image: Surveys     Image: Surveys<	or Restore Excel CSV ZIP Print Map										
	Block Group 1, Census Tract Block Group 2, Census Trac Block Group 1, Census Tract										
Label	Estimate Estimate Estimate	е									
Median household income in the past 12 months (in 2020 inflation-adjusted dollars)	45,088 89,508 44,83	4									

• Open the Excel document and go to the Data tab. Your data will look like the example below (next page).

		ACSDT5Y2020.B1	9013-2022-11-09T170615	×	
F	ile <mark>Home</mark> Insert Page L	ayout Formulas	Data Review V	/iew Help Acroba	at
P	Calibri	→ 11 → A <sup>^</sup>	A <sup>*</sup>   = = =   ≫	→ ab Wrap Text	Gen
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A	$1  \bullet  :  \times  \checkmark  f_x$				
	A	В	с	D	E
1		Block Group 1, Census Tract 6713, Fort Bend County, Texas	Block Group 2, Census Tract 6713, Fort Bend County, Texas	Block Group 1, Census Tract 6714.01, Fort Bend County, Texas	
2	Label	Estimate	Estimate	Estimate	
	Median household income in the past 12 months (in 2020 inflation-				1
3	adjusted dollars)	45,088	89,508	44,834	
4					
5					

TIP: Before downloading each data set, remove the "Margin of Error" from your data set. When the "+/- Margin of Error" button is highlighted in blue, that means that the Margin of Error field in on. To turn off, click that button and the blue highlight will go away, meaning the Margin of Error field is off.

American Community Survey         B25010   AVERAGE HOUSEHOLD SIZE OF OCCUPIED HOUSING UNITS BY TENURE         2020: ACS 5-Year Estimates Detailed Tables       V         Universe: Occupied housing units									
Notes Geos Years Topics	123123SurveysCodesHideTrans	Aspose Margin of Error Restor	e Excel CSV ZIP Print						
	Block Group 1, Census Tract	Block Group 2, Census Trac	Block Group 1, Census Tract						
Label	Estimate	Estimate	Estimate						
<ul> <li>Average household size</li> </ul>									
✓ Total:	2.91	3.62	2.81						
Owner occupied	3.49	3.41	3.02						
Renter occupied	2.75	4.54	2.44						

#### **Prorated Tables - Examples**

For projects that serve more than one geographic area, with information from multiple census tracts or block groups, a prorated data table must be used to display the data found. The retrieved data must be organized in table format and prorated according to the percentage of household connections.

See the following examples for more information on preparing prorated data tables: 1) Prorated U.S. Census Data for Total Population, AMHI, and Household Size; 2) Change in Population; and 3) Unemployment Rates.

#### 1) Prorated U.S. Census Data– Total Population, AMHI, and Household Size at the Block Group Level

А	В	С	D	E	F	G	н	I	J		
US Census Tract	Block Group	Pop. 2021	АМНІ	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		

Notes:

- 1. On the above example table, Columns A, B, C, D, and E were obtained from the Census data.
- 2. Columns F and G (related to the household connections) are provided by the entity.
- 3. Columns H, I, and J are calculations based on data within the table.
- 4. This table can serve as documentation to support a request for a Socioeconomic Survey (See WRD-285).

2)	Prorated U.S. Census Data -	<ul> <li>Change in Popu</li> </ul>	l <b>ation</b> at the <u>Blo</u>	ck Group Level

A US Census Tract	B Block Group	C Pop 2017	D Pop 2021	E % Change in population 2017 to 2021	F Average Household Size	G Number of Current Household Connections	H Household Connections as a % of Total Household Connections	l % Change in Population 2017 to 2021(ExH)	County	Source
x523	1	1,240	1,279	3.15%	2.94	200	12.33%	0.39%	ABC	ACS 5 -Year Estimates
x523	2	5,106	5,079	-0.53%	3.5	66	4.07%	0.02%	ABC	ACS 5 -Year Estimates
x524	1	4,683	4,683	-9.09%	3.19	1,000	61.65%	-5.60%	ABC	ACS 5 -Year Estimates

x524	4	1,439	1,439	2.79%	2.96	356	21.95%	0.61	ABC	ACS 5 -Year Estimates
Total						1,622	100.00%	-4.62%		

3) Prorated U.S. Census Data – Unemployment Rates at the Census Tract Level

А	_ B		С	D	E	F		
	ra nemp			Number of	Household Connections as			
US	lloyr ate		Average	Current	a % of Total	Unemployment		
Census	ner		Household	Household	Household	Rate		
Tract	ıt		Size	Connections	Connections	(CxE)	County	Source
								ACS 5 -Year
x523		6.2%	3.20	266	16.40%	1.0%	ABC	Estimates
								ACS 5 -Year
x524		5.7%	3.00	1,356	83.60%	4.8%	ABC	Estimates
Total				1,622	100.00%	5.8%		