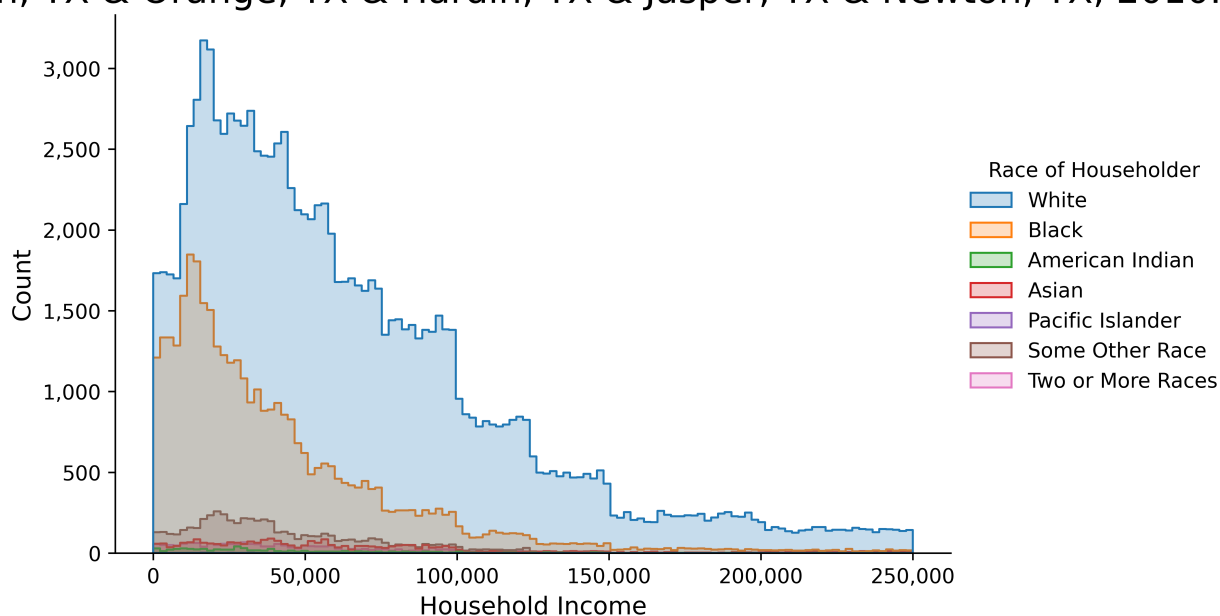Random Household Income distribution by Race of Householder,
Jefferson, TX & Orange, TX & Hardin, TX & Jasper, TX & Newton, TX, 2010.

Table of contents:

Project Overview: Summary of Project Details

Project Title: Detailed Household and Housing Unit Characteristics: Data and Replication Code Version 3

Principal Investigator: Nathanael Rosenheim: nrosenheim@arch.tamu.edu

Required Citations:
Rosenheim, Nathanael, Roberto Guidotti, Paolo Gardoni & Walter Gillis Peacock. (2021). Integration of detailed household and housing unit characteristic data with critical infrastructure for post-hazard resilience modeling. *Sustainable and Resilient Infrastructure*. https://doi.org/10.1080/23789689.2019.1681821

Rosenheim, Nathanael. (2022). "Detailed Household and Housing Unit Characteristics: Data and Replication Code." [Version 2] *DesignSafe-CI*. https://doi.org/10.17603/ds2-jwf6-s535

Project Description : People are the most important part of community resilience planning. However, models for community resilience planning tend to focus on buildings and infrastructure. This project provides a solution that connects people to buildings for community resilience models. The housing unit inventory method transforms aggregated population data into disaggregated housing unit data that includes occupied and vacant housing unit characteristics. Detailed household characteristics include size, race, ethnicity, income, group quarters type, vacancy type and census block. Applications use the housing unit allocation method to assign the housing unit inventory to structures within each census block through a reproducible and randomized process. The benefits of the housing unit inventory include community resilience statistics that intersect detailed population characteristics with hazard impacts on infrastructure; uncertainty propagation; and a means to identify gaps in infrastructure data such as limited building data. This project archives example data and python code files. Python is an open source programming language and the code files provide future users with the tools to generate a 2010 and 2020 housing unit inventory for any county in the United States. This project's method is reproducible, generalizable, and that the characteristics included provide a valid representation of the social and economic characteristics of a community's population in 2010 and 2020.

Funding Source: Award name and number:

Center for Risk-Based Community Resilience Planning : NIST-70NANB20H008, NIST-70NANB15H044 (http://resilience.colostate.edu/)

Southeast Texas Urban Integrated Field Lab: DE-SC0023216 (https://setx-uifl.org/)

Related Works:

Interdependent Networked Community Resilience Modeling Environment (IN-CORE) : https://incore.ncsa.illinois.edu/

Hazard Reduction and Recovery Center (HRRC): https://www.arch.tamu.edu/impact/centers-institutes-outreach/hazard-reduction-recovery-center/

Keywords: Social and Economic Population Data, Housing Unit, US Census, Synthetic Population

License: Open Data Commons Attribution License (https://opendatacommons.org/licenses/by/summary/)

DesignSafe-CI project identification number: Project-2961 - Available at: https://www.designsafe-ci.org/data/browser/public/designsafe.storage.published/PRJ-2961

Data Dictionary: Summary of Variables

Variable Name	Data Type	Length	Categorical	Variable Label
huid	String			Housing Unit ID
blockid	String	15		Block ID
bgid	String	12		2010 Census Block Group ID
tractid	String	11		2010 Census Tract ID
FIPScounty	String	5		County FIPS Code
numprec	Int			Number of Person Records
ownershp	Int		True	Tenure Status
race	Int		True	Race of Householder
hispan	Int		True	Hispanic Householder
family	Int		True	Family Household
vacancy	Int		True	Vacancy Type
gqtype	Int		True	Group Quarters Type
incomegroup	Int		True	Detailed Household Income Group
hhinc	Int		True	Five Household Income Groups
randincome	Float			Random Household Income
poverty	Int		True	Poverty Status

Variable Details and Notes

The following pages provide details on each variable. Where applicable notes provide links to verify data. Categorical variables include datails on category codes.

huid: Housing Unit ID

Variable characteristic	Variable details
variable type	string
total cases	186,407
valid cases	186,407
missing cases	0
unit of measure	Housing units
unit of analysis	Housing unit
unique values	186,407
minimum length	20
maximum length	20
example 1	B483610205001011H011
example 2	B482450001032000H042
example 3	B481990308004035H004
example 4	B482450109013006H005

Variable Notes: huid

1. Housing Unit ID is the Primary Key for the HU Inventory. Use HUID to sort data before Random Merge Order is assigned.

2. One Housing Unit could be an occupied house, a single unit in a multi-family structure, a vacant house or a group quarters with a number of persons.

3. The Housing Unit ID is a combination of the census block ID, the letter H and a cumulative counter for housing units in the block.

blockid: Block ID

Variable characteristic	Variable details
variable type	string
total cases	186,407
valid cases	186,407
missing cases	0
unit of measure	Housing unit in census block
unit of analysis	Geographic unit
unique values	10,705
minimum length	15
maximum length	15
example 1	481990305011031
example 2	482450019001028
example 3	483519502005106
example 4	482450012001067

Variable Notes: blockid

1. 2010 Census Block ID

bgid: 2010 Census Block Group ID

Variable characteristic	Variable details
variable type	string
total cases	186,407
valid cases	186,407
missing cases	0
unit of measure	Housing unit in census block group
unit of analysis	Geographic unit
unique values	349
minimum length	12
maximum length	12
example 1	483610215025
example 2	482450055002
example 3	482419503001
example 4	482450003081

Variable Notes: bgid

1. 12 Character String that contains 2010 census block group ID.

2. Foreign Key with Block Group Data for population dislocation model.

tractid: 2010 Census Tract ID

Variable characteristic	Variable details
variable type	string
total cases	186,407
valid cases	186,407
missing cases	0
unit of measure	Housing unit in census tract
unit of analysis	Geographic unit
unique values	116
minimum length	11
maximum length	11
example 1	48245011201
example 2	48245001900
example 3	48361021100
example 4	48361022300

Variable Notes: tractid

1. 11 Character String that contains 2010 census tract ID.

FIPScounty: County FIPS Code

Variable characteristic	Variable details
variable type	string
total cases	186,407
valid cases	186,407
missing cases	0
unit of measure	Housing unit in county
unit of analysis	Geographic unit
unique values	5
minimum length	5
maximum length	5
example 1	48241
example 2	48361
example 3	48351
example 4	48245

Variable Notes: FIPScounty

1. 5 digit County FIPS code. Every county in the US has a unique code.

numprec: Number of Person Records

Variable characteristic	Variable details
variable type	numeric (Int)
total cases	186,407
valid cases	186,407
missing cases	0
unit of measure	Persons
unit of analysis	Housing unit
range	minimum value: 0.00 to maximum value: 3,226.00
mean	2.34
median	2.00
standard deviation	12.59
10th percentile	0.00
25th percentile	1.00
50th percentile	2.00
75th percentile	3.00
90th percentile	4.00

Variable Notes: numprec

1. For occupied housing units the max numprec is 7.

2. Households with more than 7 people could have higher numprec values.

3. Housing units with numprec = 0 are vacant - not occupied housing units.

4. Housing units with numprec > 7 are group quarters. Numprec represents the number of people in the group quarters.

ownershp: Tenure Status

Variable characteristic	Variable details
variable type	categorical (Int)
total cases	186,407
valid cases	164,180
missing cases	22,227
unit of measure	Housing unit
unit of analysis	Household
range	minimum value: 1 to maximum value: 2

ownershp: Tenure Status - Categorical codes, labels and frequencies

Code	Label	Count of Housing units	Percent Housing units	Sum of Persons	Percent Persons
1	1. Owned or being bought (loan)	114,708	69.87%	298,805	71.45%
2	2. Rented	49,472	30.13%	119,418	28.55%

Variable Notes: ownershp

1. Based on 2010 Census SF1 Table H16 or 2020 Census DHC Table H12.

2. Tenure status is not applicable for vacant not occupied housing units.

3. Tenure status is not applicable for group quarters.

4. To verify results compare table to:

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALSF12010.H16
.

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALDHC2020.H12.

race: Race of Householder

Variable characteristic	Variable details
variable type	categorical (Int)
total cases	186,407
valid cases	164,180
missing cases	22,227
unit of measure	Person
unit of analysis	Householder
range	minimum value: 1 to maximum value: 7

race: Race of Householder - Categorical codes, labels and frequencies

Code	Label	Count of Housing units	Percent Housing units	Sum of Persons	Percent Persons
1	1. White alone	114,664	69.84%	283,347	67.75%
2	2. Black or African American alone	37,946	23.11%	96,373	23.04%
3	3. American Indian and Alaska Native alone	758	0.46%	2,193	0.52%
4	4. Asian alone	2,898	1.77%	9,412	2.25%
5	5. Native Hawaiian and Other Pacific Islander alone	52	0.03%	149	0.04%
6	6. Some Other Race alone	5,903	3.60%	21,262	5.08%
7	7. Two or More Races	1,959	1.19%	5,487	1.31%

Variable Notes: race

1. Race is based on the race of the householder.

2. Race of householder is not applicable for vacant not occupied housing units.

3. Race is missing for population living in group quarters.

4. Race is based on 2010 Census SF1 Tables H16 or 2020 Census DHC Table H12 by race.

5. To verify results compare table to:

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALSF12010.H6.
https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALDHC2020.H6.

hispan: Hispanic Householder

Variable characteristic	Variable details
variable type	categorical (Int)
total cases	186,407
valid cases	164,180
missing cases	22,227
unit of measure	Person
unit of analysis	Householder
range	minimum value: 0 to maximum value: 1

hispan: Hispanic Householder - Categorical codes, labels and frequencies

Code	Label	Count of Housing units	Percent Housing units	Sum of Persons	Percent Persons
0	0. Householder Not Hispanic	150,707	91.79%	372,489	89.06%
1	1. Householder Hispanic or Latino	13,473	8.21%	45,734	10.94%

Variable Notes: hispan

1. Hispanic is based on the ethnicity of the householder.

2. Hispanic is missing for vacant not occupied housing units.

3. Hispanic is missing for population living in group quarters.

4. Hispanic is predicted based on 2010 Census SF1 Tables H7, H15, and H16.

4. Hispanic is predicted based on 2020 Census DHC Tables H7, H11, and H12.

5. Hispanic totals will not match the US Census data, but they should be close.

6. To verify results compare table to:

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALSF12010.H7.

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALDHC2020.H7.

family: Family Household

Variable characteristic	Variable details
variable type	categorical (Int)
total cases	186,407
valid cases	164,180
missing cases	22,227
unit of measure	Household
unit of analysis	Household
range	minimum value: 0 to maximum value: 1

family: Family Household - Categorical codes, labels and frequencies

Code	Label	Count of Housing units	Percent Housing units	Sum of Persons	Percent Persons
0	0. Nonfamily Household	50,784	30.93%	65,460	15.65%
1	1. Family Household	113,396	69.07%	352,763	84.35%

Variable Notes: family

1. Family household is based on 2010 Census SF1 Table P18 and 2020 Census DHC P16 by race and ethnicity.

2. To verify results compare table to:

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALSF12010.P18
.

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALDHC2020.P16.

vacancy: Vacancy Type

Variable characteristic	Variable details
variable type	categorical (Int)
total cases	186,407
valid cases	186,407
missing cases	0
unit of measure	Housing unit
unit of analysis	Housing unit
range	minimum value: 0 to maximum value: 7

vacancy: Vacancy Type - Categorical codes, labels and frequencies

Code	Label	Count of Housing units	Percent Housing units	Sum of Persons	Percent Persons
0	0. NA Not Vacant	164,313	88.15%	436,890	100.00%
1	1. For rent	7,115	3.82%	0	0.00%
2	2. Rented, not occupied	265	0.14%	0	0.00%
3	3. For sale only	2,038	1.09%	0	0.00%
4	4. Sold, not occupied	1,028	0.55%	0	0.00%
5	5. For seasonal, recreational, or occasional use	3,573	1.92%	0	0.00%
6	6. For migrant workers	91	0.05%	0	0.00%
7	7. Other vacant	7,984	4.28%	0	0.00%

Variable Notes: vacancy

1. Based on 2010 Census SF1 Table H5 and 2020 Census DHC Table H5.

2. To verify results compare table to:

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALSF12010.H5.

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALDHC2020.H5.

Resilience

IN-CORE

HAZARD REDUCTION & RECOVERY CENTER
TEXAS A&M UNIVERSITY

gqtype: Group Quarters Type

Variable characteristic	Variable details
variable type	categorical (Int)
total cases	186,407
valid cases	186,407
missing cases	0
unit of measure	Housing unit
unit of analysis	Group quarters
range	minimum value: 0 to maximum value: 7

gqtype: Group Quarters Type - Categorical codes, labels and frequencies

Code	Label	Count of Housing units	Percent Housing units	Sum of Persons	Percent Persons
0	0. NA (non-group quarters)	186,274	99.93%	418,223	95.73%
1	1. Correctional facilities for adults	13	0.01%	13,343	3.05%
2	2. Juvenile facilities	8	0.00%	274	0.06%
3	3. Nursing facilities/Skilled-nursing facilities	29	0.02%	2,168	0.50%
4	4. Other institutional facilities	1	0.00%	7	0.00%
5	5. College/University student housing	4	0.00%	1,949	0.45%
6	6. Military quarters	1	0.00%	4	0.00%
7	7. Other noninstitutional facilities	77	0.04%	922	0.21%

Variable Notes: gqtype

1. Based on 2010 Census SF1 Table P42 and 2020 Census DHC Table P18.

2. Counts represent number of group quarters. Sum by numprec to get population counts.

3. To verify results compare table to:

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALSF12010.P42
.

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=DECENNIALDHC2020.P18.

incomegroup: Detailed Household Income Group

Variable characteristic	Variable details
variable type	categorical (Int)
total cases	186,407
valid cases	186,407
missing cases	0
unit of measure	2012 or 2022 INFLATION-ADJUSTED DOLLARS
unit of analysis	Household
range	minimum value: 0 to maximum value: 16

incomegroup: Detailed Household Income Group - Categorical codes, labels and frequencies

Code	Label	Count of Housing units	Percent Housing units	Sum of Persons	Percent Persons
0	0. NA vacant or group quarters	22,227	11.92%	18,667	4.27%
1	1. Less than $10,000	14,791	7.93%	33,687	7.71%
2	2. $10,000 to $14,999	10,931	5.86%	23,375	5.35%
3	3. $15,000 to $19,999	11,386	6.11%	25,570	5.85%
4	4. $20,000 to $24,999	9,621	5.16%	23,575	5.40%
5	5. $25,000 to $29,999	9,499	5.10%	23,290	5.33%
6	6. $30,000 to $34,999	9,016	4.84%	22,371	5.12%
7	7. $35,000 to $39,999	8,309	4.46%	21,258	4.87%
8	8. $40,000 to $44,999	8,516	4.57%	22,005	5.04%
9	9. $45,000 to $49,999	6,736	3.61%	17,345	3.97%
10	10. $50,000 to $59,999	12,839	6.89%	33,851	7.75%
11	11. $60,000 to $74,999	15,179	8.14%	40,560	9.28%
12	12. $75,000 to $99,999	20,049	10.76%	55,480	12.70%
13	13. $100,000 to $124,999	11,040	5.92%	30,413	6.96%
14	14. $125,000 to $149,999	6,437	3.45%	18,338	4.20%
15	15. $150,000 to $199,999	5,892	3.16%	16,211	3.71%
16	16. $200,000 or more	3,939	2.11%	10,894	2.49%

Variable Notes: incomegroup

1. Based on 2012 or 2022 5-year ACS tables B19001 and B19101.

2. This variable is designed to provide household income data that are comparable to income distributions by race, Hispanic and families. There are numerous assumptions associated with this variable. The random allocation of income to a physical location does not represent the actual income for the household. This information is designed to be aggregated.

3. Totals by household income group will not match to ACS data.

Resilience IN-CORE HAZARD REDUCTION & RECOVERY CENTER TEXAS A&M UNIVERSITY

4. Compare that the inventory counts fall within the ACS the 90% CI (confidence interval) of the estimate.

5. To verify results compare table to:

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=ACSDT5Y2012.B19001

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=ACSDT5Y2022.B19001

hhinc: Five Household Income Groups

Variable characteristic	Variable details
variable type	categorical (Int)
total cases	186,407
valid cases	186,407
missing cases	0
unit of measure	2012 INFLATION-ADJUSTED DOLLARS
unit of analysis	Household
range	minimum value: 0 to maximum value: 5

hhinc: Five Household Income Groups - Categorical codes, labels and frequencies

Code	Label	Count of Housing units	Percent Housing units	Sum of Persons	Percent Persons
0	0. NA vacant or group quarters	22,227	11.92%	18,667	4.27%
1	1. Less than $15,000	25,722	13.80%	57,062	13.06%
2	2. $15,000 to $24,999	21,007	11.27%	49,145	11.25%
3	3. $25,000 to $74,999	70,094	37.60%	180,680	41.36%
4	4. $75,000 to $99,999	20,049	10.76%	55,480	12.70%
5	5. $100,000 or more	27,308	14.65%	75,856	17.36%

Variable Notes: hhinc

1. Based on 2012 or 2022 5-year ACS tables B19001 and B19101.

2. Based on incomegroup variable - with 5 groups versus 16.

randincome: Random Household Income

Variable characteristic	Variable details
variable type	numeric (Float)
total cases	186,407
valid cases	164,180
missing cases	22,227
unit of measure	2012 INFLATION-ADJUSTED DOLLARS
unit of analysis	Household
range	minimum value: 0.00 to maximum value: 249,993.00
mean	59,095.17
median	45,016.00
standard deviation	49,558.58
10th percentile	10,739.90
25th percentile	22,017.00
50th percentile	45,016.00
75th percentile	82,813.00
90th percentile	124,567.30

Variable Notes: randincome

1. Household income top coded at $250,000.

2. Based on 2012 or 2022 5-year ACS tables B19001 and B19101.

3. Missing cases are vacant housing units or group quarters. The US Census does not collect income data for populations living in group quarters.
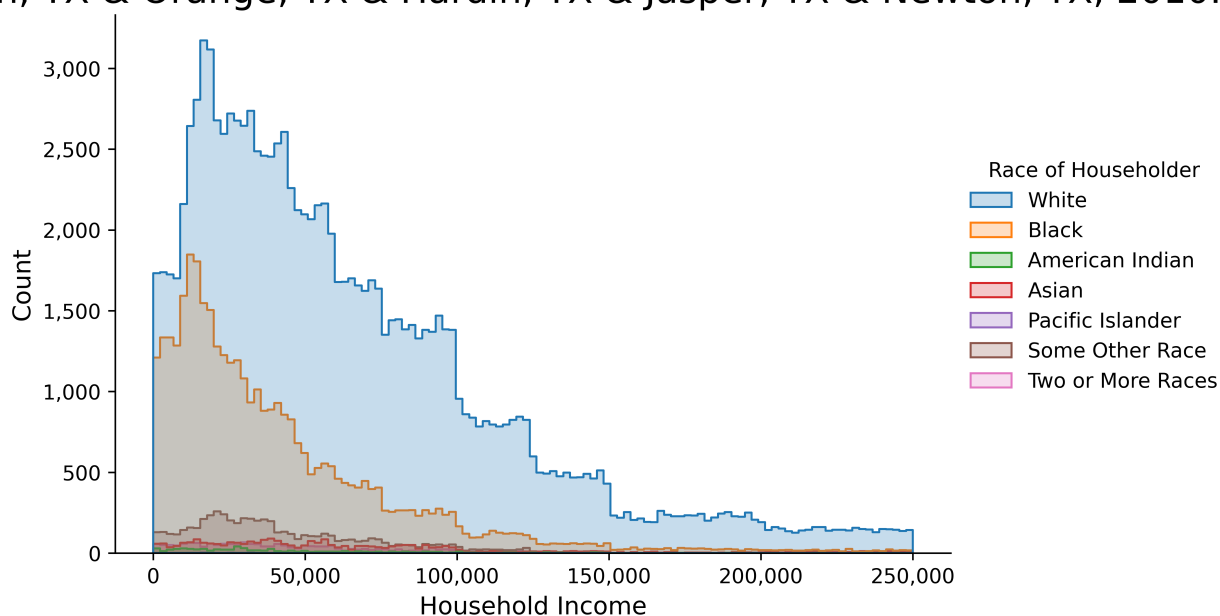
4. To verify results compare median income to:

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=ACSDT5Y2012.B19013

https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=ACSDT5Y2022.B19013

poverty: Poverty Status

Variable characteristic	Variable details
variable type	categorical (Int)
total cases	186,407
valid cases	164,180
missing cases	22,227
unit of measure	Household
unit of analysis	Household
range	minimum value: 0 to maximum value: 1

poverty: Poverty Status - Categorical codes, labels and frequencies

Code	Label	Count of Housing units	Percent Housing units	Sum of Persons	Percent Persons
0	0. At or above poverty level	135,866	82.75%	336,211	80.39%
1	1. Below poverty level	28,314	17.25%	82,012	19.61%

Variable Notes: poverty

1. Based on 2012 or 2022 US Census Poverty Thresholds

https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html

https://www2.census.gov/programs-surveys/cps/tables/time-series/historical-poverty-thresholds/thresh12.xlsx

https://www2.census.gov/programs-surveys/cps/tables/time-series/historical-poverty-thresholds/thresh22.xlsx

2. Based on household size and random income, assuming random income represents household income in the past 12 months.

3. To verify results compare table to:

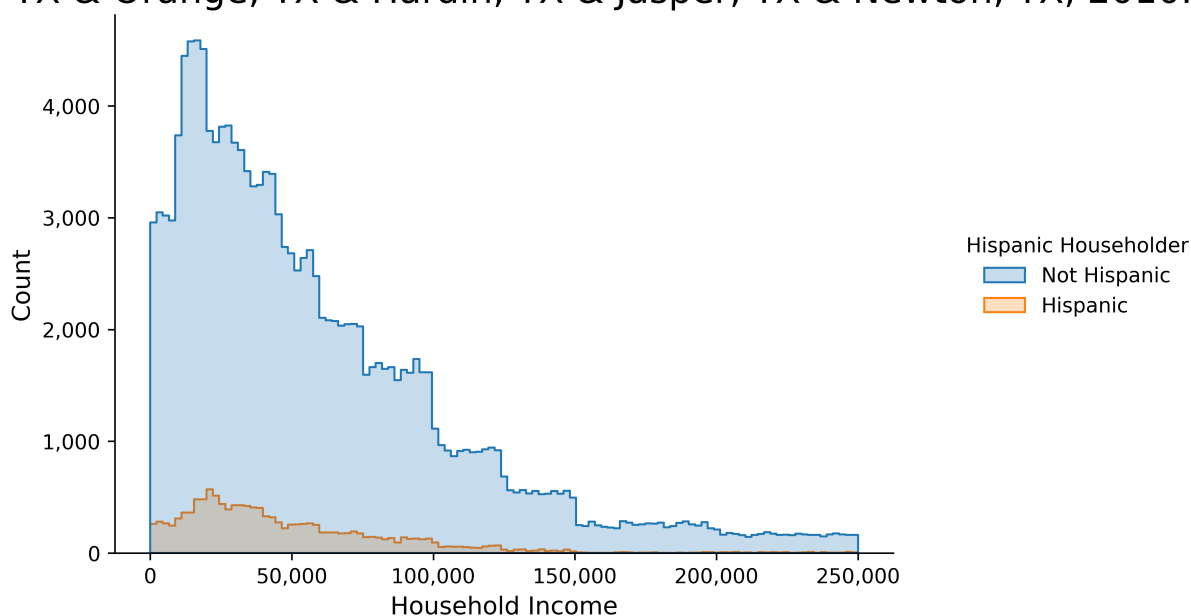https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=ACSDT5Y2012.B17021
https://data.census.gov/cedsci/table?g=0500000US48245,48361,48199,48241,48351&tid=ACSDT5Y2022.B17021
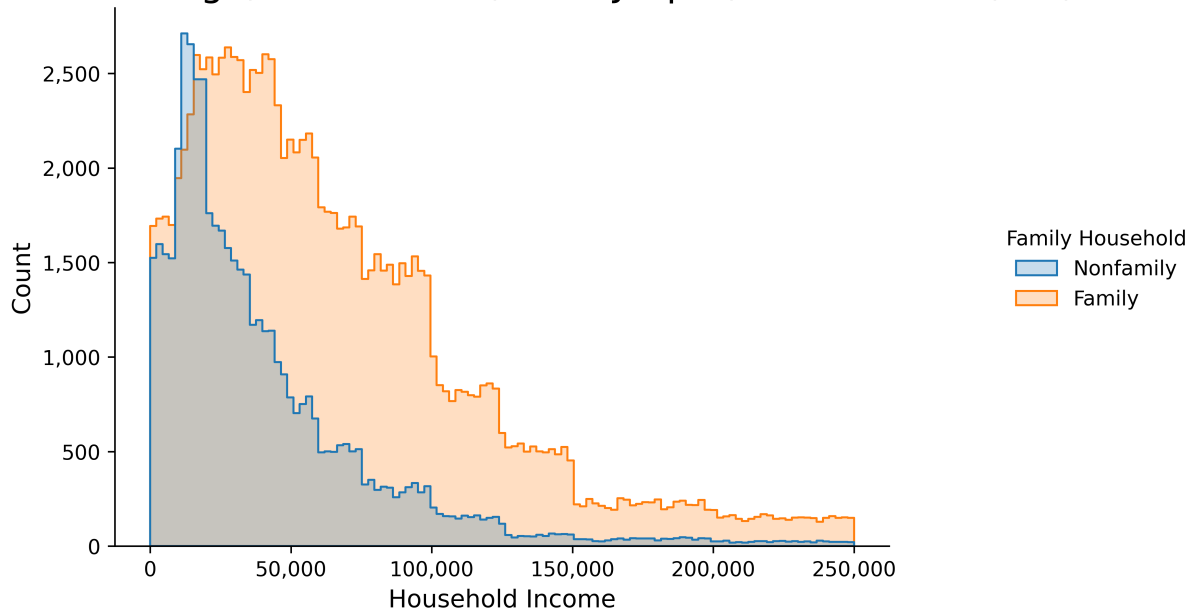
Explore Data - Figures

Random Household Income distribution by Race of Householder, Jefferson, TX & Orange, TX & Hardin, TX & Jasper, TX & Newton, TX, 2010.

Random Household Income distribution by Hispanic Householder, Jefferson, TX & Orange, TX & Hardin, TX & Jasper, TX & Newton, TX, 2010.

Random Household Income distribution by Family Household,
Jefferson, TX & Orange, TX & Hardin, TX & Jasper, TX & Newton, TX, 2010.

Key Terms and Definitions

American Community Survey (ACS): "The American Community Survey (ACS) is a nationwide survey designed to provide communities a fresh look at how they are changing. The ACS replaced the decennial census long form in 2010 and thereafter by collecting long form type information throughout the decade rather than only once every 10 years." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_AmericanCommunitySurveyACS).

Census block: "A statistical area bounded by visible features, such as streets, roads, streams, and railroad tracks, and by nonvisible boundaries, such as selected property lines and city, township, school districts, and county boundaries. A block is the smallest geographic unit for which the Census Bureau tabulates decennial census data... Over 11 million blocks were identified for the 2010 Census." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Censusblock).

Census block group: "A statistical subdivision of a census tract, generally defined to contain between 600 and 3,000 people and 240 and 1,200 housing units, and the smallest geographic unit for which the Census Bureau tabulates sample data. A sub-division of a census tract (or, prior to 2000, a block numbering area), a block group is a cluster of blocks having the same first digit of their four-digit identifying number within a census tract." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_BlockGroupBG).

Census tract: "A small, relatively permanent statistical subdivision of a county delineated by a local committee of census data users for the purpose of presenting data. Census tracts nest within counties, and their boundaries normally follow visible features, but may follow legal geography boundaries and other non-visible features in some instances, Census tracts ideally contain about 4,000 people and 1,600 housing units." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Censustract).

Decennial census: "The census of population and housing, taken by the Census Bureau in years ending in 0 (zero)." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Decennialcensus).

Ethnicity: The U.S. Census Bureau adheres to the U.S. Office of Management and Budget's (OMB) definition of ethnicity. There are two minimum categories for ethnicity: Hispanic or Latino and Not Hispanic or Latino. OMB considers race and Hispanic origin to be two separate and distinct concepts. Hispanics and Latinos may be of any race." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Ethnicity).

Family Household: "A family includes a householder and one or more people living in the same household who are related to the householder by birth, marriage, or adoption. All people in a household who are related to the householder are regarded as members of his or her family." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Familyhousehold).

Household: "A household includes all the people who occupy a housing unit (such as a house or apartment) as their usual place of residence. A household includes the related family members and all the unrelated people, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit, or a group of unrelated people sharing a housing unit such as partners or roomers, is also counted as a household. The count of households excludes group quarters." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Household).

Household Income: "The sum of the income of all people 15 years and older living in the household." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Householdincome)

Householder: "The person, or one of the people, in whose name the home is owned, being bought, or rented." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Householder).

Housing Unit: "A house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters.

Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Housingunit).

Group Quarters: "The Census Bureau classifies all people not living in housing units as living in group quarters. A group quarters is a place where people live or stay, in a group living arrangement, that is owned or managed by an entity or organization providing housing and/or services for the residents... Group quarters include such places as college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities, and workers' dormitories." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_GroupQuartersGQ).

Income: "'Money income' is the income received on a regular basis (exclusive of certain money receipts such as capital gains and lump-sum payments) before payments for personal income taxes, social security, union dues, medicare deductions, etc. It includes income received from wages, salary, commissions, bonuses, and tips; self-employment income from own nonfarm or farm businesses, including proprietorships and partnerships; interest, dividends, net rental income, royalty income, or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); any cash public assistance or welfare payments from the state or local welfare office; retirement, survivor, or disability benefits; and any other sources of income received regularly such as Veterans' (VA) payments, unemployment and/or worker's compensation, child support, and alimony." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Income).

Nonfamily Household: "A nonfamily household consists of a householder living alone (a one-person household) or where the householder shares the home only with people to whom he/she is not related (e.g., a roommate)." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Nonfamilyhousehold).

Race: "The data on race were derived from answers to the question on race. The U.S. Census Bureau collects race data in accordance with guidelines provided by the U.S. Office of Management and Budget (OMB), and these data are based on self-identification. The racial categories included in the census questionnaire generally reflect a social definition of race recognized in this country and not an attempt to define race biologically, anthropologically, or genetically. In addition, it is recognized that the categories of the race question include race and national origin or sociocultural groups. OMB requires that race data be collected for a minimum of five groups:White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or other Pacific Islander. OMB permits the Census Bureau to also use a sixth category - Some Other Race. Respondents may report more than one race." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Race).

Tenure: "Refers to the distinction between owner-occupied and renter-occupied housing units." (U.S. Census Bureau Glossary: https://www.census.gov/glossary/#term_Tenure).