

# Automatically Adjust Monetary Values in ACS data using IPUMS USA

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ISRDI, University of Minnesota- Twin Cities

IPUMS

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# Introduction to IPUMS

- A research center that provides US & international census & survey data
- Integrated documentation and standardized data across time and space
- Nine data collections offering data through the online data extract system
- Funding from NIH, NSF, Gates Foundation, and others to improve data accessibility
- Data and user support services free of charge

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**IPUMS**

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3922147617915271421539  
7119223769181436346197  
4365391595647153739484  
5827324681296329658825

# Introduction to IPUMS USA

- US Census microdata samples from 1850-2010
- US Census full count microdata from 1850-1940
- American Community Survey microdata from 2000-2021
- Puerto Rico Community Survey microdata from 2005-2021
- Many variable topics, including household-level economic characteristics and person-level income
  - Mortgage, rent, fuel cost, household income
  - Income from wages, retirement income, total income

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# Adjust Monetary Values Feature

- Pre-AMV feature
  - Manual inflation-adjustments required
  - Inflation done by data user
- Post-AMV feature
  - Automatic inflation-adjustments
  - Inflation done by IPUMS data extract system
  - Adjustments made to 2010 dollars using the Consumer Price Index for All Urban Consumers (CPI-U)



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# How to Use the AMV Feature - Website Demo!



**IPUMS**  
USA

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# Data Collections that Currently Offer the AMV Feature

## IPUMS USA – US Census and American Community Survey

- All samples
- Select household- and person-level variables

## IPUMS CPS – Current Population Survey

- Basic Monthly samples
- Select household and person-level variables

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# Where to Learn More and Future Directions

- To learn more, visit the IPUMS USA and CPS websites.
- Future expansion will include
  - Additional variables for both USA and CPS
  - Additional samples, including ASEC samples, for CPS
  - Additional data collections

[https://usa.ipums.org/usa/adjusted\\_monetary\\_values.shtml](https://usa.ipums.org/usa/adjusted_monetary_values.shtml)

[https://cps.ipums.org/cps/adjusted\\_monetary\\_values.shtml](https://cps.ipums.org/cps/adjusted_monetary_values.shtml)



IPUMS USA



IPUMS CPS

# IPUMS

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# Acknowledgements

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- Thank you to everyone on the AMV team who has contributed to the development of this feature.

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**IPUMS**

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# Questions

If you have any additional questions or feedback, please reach out to our user support team— [ipums@umn.edu](mailto:ipums@umn.edu)

**IPUMS**

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5827324681296329658825

# Why the CPI-U?

- The Consumer Price Index (CPI) is a measure produced by the Bureau of Labor Statistics to indicate the relative price of a set of goods and services across time in the United States.
- The CPI for all urban consumers (CPI-U) is the most widely used of price indexes.
- IPUMS has selected the CPI-U as the default price index because of its widespread use and availability across a long timespan.

## IPUMS USA

ABOUT

REGISTER

DONATE TO IPUMS

## DATA

BROWSE AND SELECT DATA

ANALYZE DATA ONLINE

IPUMS ABACUS

DOWNLOAD OR REVISE MY DATA

## SUPPLEMENTAL DATA

GEOGRAPHY & GIS

LINKED CENSUS DATA: 1850-1940

SLAVE SAMPLES: 1850-1860

FULL COUNT DATA: 1790-1840

FEDERAL STATISTICAL RDC

## DOCUMENTATION

USER GUIDE

SAMPLE DESCRIPTIONS

QUESTIONNAIRES

PUBLISHED CENSUS VOLUMES

FULL COUNT DATA

REVISION HISTORY

## SUPPORT

# U.S. CENSUS DATA FOR SOCIAL, ECONOMIC, AND HEALTH RESEARCH

IPUMS USA collects, preserves and harmonizes U.S. census microdata and provides easy access to this data with enhanced documentation. Data includes decennial censuses from 1790 to 2010 and American Community Surveys (ACS) from 2000 to the present.

**USE IT FOR GOOD -- NEVER FOR EVIL**

## CREATE YOUR CUSTOM DATA SET

Get Data

## ONLINE TOOL FOR ANALYSIS

Analyze Data Online

## WHAT IS IPUMS?

IPUMS provides census and survey data from around the world integrated across time and space. IPUMS integration and documentation makes it easy to study change, conduct comparative research, merge information across data types, and analyze individuals within family and community context. Data and services available free of charge.



DATA CART

YOUR DATA EXTRACT

8 VARIABLES  
20 SAMPLES

[VIEW CART](#)

[HOME](#) | [SELECT DATA](#) | [MY DATA](#) | [SUPPORT](#)

CHANGE  
SAMPLES

SELECT HARMONIZED VARIABLES

HOUSEHOLD ▾

PERSON ▾

A-Z ▾

SEARCH 🔍

☒ HARMONIZED VARIABLES ⓘ

☐ SOURCE VARIABLES

DISPLAY  
OPTIONS

[HELP](#) ⓘ

SUPPORTED BY: [NATIONAL INSTITUTES OF HEALTH](#), [NATIONAL SCIENCE FOUNDATION](#), [ANCESTRY](#), [STAT/TRANSFER](#), AND [UNIVERSITY OF MINNESOTA](#)

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# IPUMS USA

HOME | SELECT DATA | MY DATA | SUPPORT

## DATA CART

YOUR DATA EXTRACT

11 VARIABLES  
20 SAMPLES

[VIEW CART](#)

CHANGE  
SAMPLES

### SELECT HARMONIZED VARIABLES

HOUSEHOLD ▾

PERSON ▾

A-Z ▾

SEARCH 🔍

☒ HARMONIZED VARIABLES ⓘ

☐ SOURCE VARIABLES

DISPLAY  
OPTIONS

[HELP](#) ⓘ

AN "X" INDICATES THE VARIABLE IS AVAILABLE IN THAT DATASET.

### [+](#) INCOME VARIABLES -- PERSON [\[TOP\]](#)

Add to cart	Variable	Variable Label	Type	Codes	2021 acs	2016 acs	2011 acs	2006 acs	2000 1pct	1990 1pct	1980 1pct	1970 met2	1970 met1	1960 1pct	1950 1pct	1940 1pct	1930 1pct	1920 1pct
<a href="#">+</a>	<a href="#">INCTOT</a>	Total personal income	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	.	.	.
<a href="#">+</a>	<a href="#">FTOTINC</a>	Total family income	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	.	.	.
<input checked="" type="checkbox"/>	<a href="#">INCWAGE</a>	Wage and salary income	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	.	.
<a href="#">+</a>	<a href="#">INCBUSFM</a>	Business and farm income	P	<a href="#">codes</a>	.	.	.	.	.	.	.	.	.	X	X	.	.	.
<a href="#">+</a>	<a href="#">INCBUS</a>	Non-farm business income	P	<a href="#">codes</a>	.	.	.	.	.	X	X	X	X	.	.	.	.	.
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<input checked="" type="checkbox"/>	<a href="#">INCSS</a>	Social Security income	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	.	.	.	.	.
<input checked="" type="checkbox"/>	<a href="#">INCWELFR</a>	Welfare (public assistance) income	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	.	.	.	.	.
<a href="#">+</a>	<a href="#">INCINVST</a>	Interest, dividend, and rental income	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	.	.	.	.	.

## DATA CART

## ADD MORE VARIABLES

## CREATE DATA EXTRACT

ADD MORE SAMPLES

### Clear Data Cart

[illegible]

# EXTRACT REQUEST ([HELP](#))

SAMPLES:	20	<a href="#">(show)</a>	<a href="#">Change</a>
VARIABLES:	13	<a href="#">(show)</a>	<a href="#">Change</a>
DATA FORMAT:	.dat (fixed-width text)		<a href="#">Change</a>
STRUCTURE:	Rectangular (person)		<a href="#">Change</a>
ESTIMATED SIZE:	3226.1 MB		<a href="#">How to reduce extract size</a>

## OPTIONS

SELECT DATA QUALITY FLAGS	Include data quality flags for selected variables.
SELECT CASES	Include only specified cases (for example, persons age 60 and older).
ATTACH CHARACTERISTICS	Attach data from mother, father, spouse or household head as a new variable (for example, education of mother).
CUSTOMIZE SAMPLE SIZES	Specify the number of cases to include from each sample in your extract.
ADJUST MONETARY VALUES	Attach new monetary variable(s) adjusted to constant values using a pricing index (e.g., CPI-U)





The following variables in your cart are eligible to be adjusted across time into constant dollars. [Click here for more information about this index.](#) Select the variables you want to adjust, which will then appear as a

SUBMIT



# EXTRACT REQUEST ([HELP](#))

SAMPLES: 20 ([show](#)) [Change](#)

VARIABLES: 15 ([hide](#)) [Change](#)

Type	Variable	Label
H	<a href="#">YEAR</a>	Census year
H	<a href="#">SAMPLE</a>	IPUMS sample identifier
H	<a href="#">SERIAL</a>	Household serial number
H	<a href="#">CBSERIAL</a>	Original Census Bureau household serial number
H	<a href="#">HHWT</a>	Household weight
H	<a href="#">CLUSTER</a>	Household cluster for variance estimation
H	<a href="#">STRATA</a>	Household strata for variance estimation
H	<a href="#">GQ</a>	Group quarters status
P	<a href="#">PERNUM</a>	Person number in sample unit
P	<a href="#">PERWT</a>	Person weight
P	<a href="#">INCWAGE</a>	Wage and salary income
P	<a href="#">INCWAGE_CPIU_2010</a>	Wage and salary income [standardized using CPIU_2010]
P	<a href="#">INCSS</a>	Social Security income
P	<a href="#">INCWELFR</a>	Welfare (public assistance) income
		Welfare (public assistance) income [standardized using CPIU_2010]