



# IPUMS

## Census and Survey Microdata Dissemination Partnership

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# IPUMS.ORG



# IPUMS Overview & Data Usage

Optimizing Data for Research

Partnering in Data Dissemination





**IPUMS INTERNATIONAL**

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**DATA**

- [BROWSE AND SELECT DATA](#)
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**SUPPLEMENTAL DATA**

- [GEOGRAPHY & GIS](#)
- [FERTILITY, MORTALITY, MIGRATION](#)
- [RESEARCH DATA ENCLAVE](#)

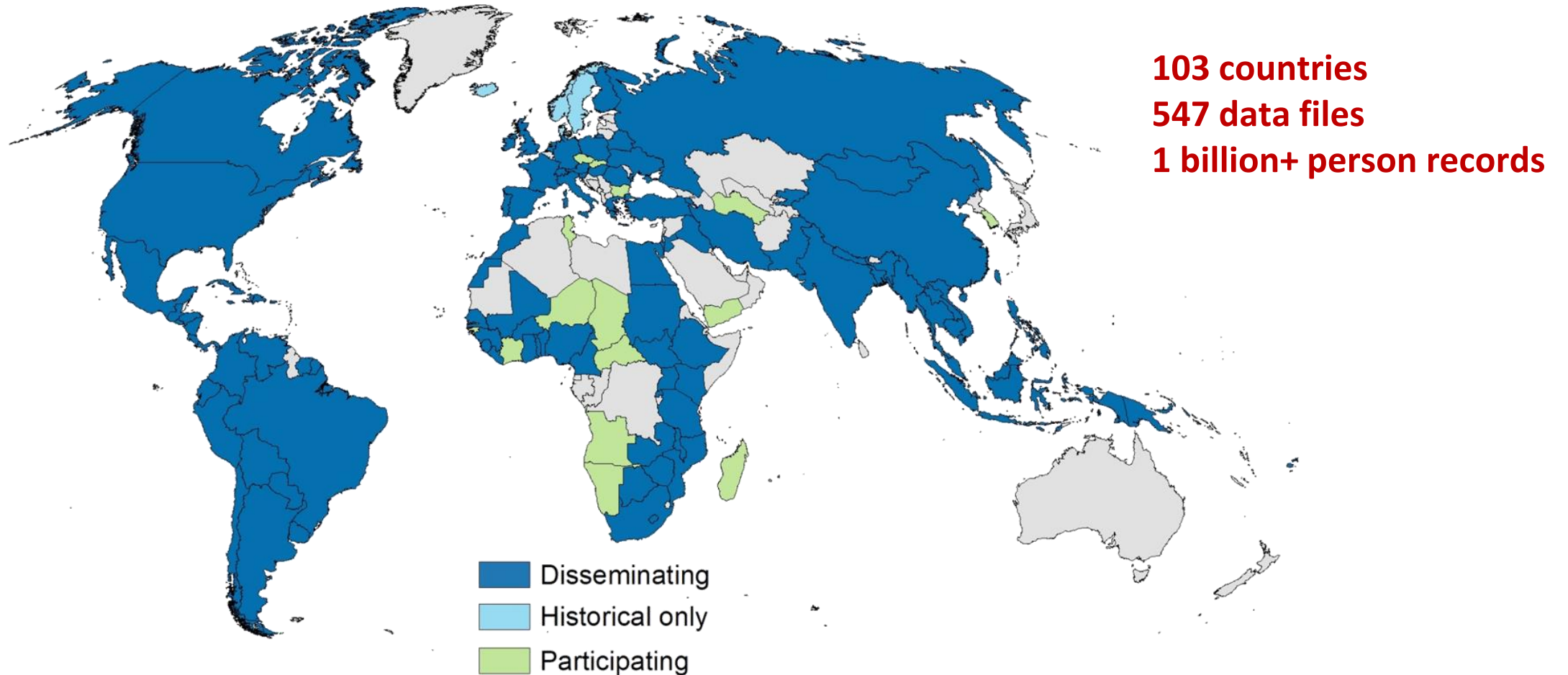
HARMONIZED INTERNATIONAL CENSUS DATA FOR SOCIAL SCIENCE AND HEALTH RESEARCH

IPUMS International is dedicated to collecting and distributing census microdata from around the world. The project goals are to collect and preserve data and documentation, harmonize data, and disseminate the harmonized data free of charge.

102 COUNTRIES - 473 CENSUSES AND SURVEYS - OVER 1 BILLION PERSON RECORDS

**SOURCE DATA FOR IPUMS INTERNATIONAL ARE GENEROUSLY PROVIDED BY PARTICIPATING NATIONAL STATISTICAL OFFICES**

# Microdata in IPUMS International



Data provided by National Census offices, partners in the census integration and dissemination project

# IPUMS International data users and usage

## Data users: Institutional affiliation

### North America

University of Minnesota  
University of California, Berkeley  
Harvard University  
University of Michigan  
University of Chicago  
Columbia University

### Asia & Oceania

National University of Singapore  
Australian National University  
Xiamen University, China  
HKUST

### Europe

London School of Economics  
Universidad Carlos III de Madrid  
University of Oxford  
University College London

### Central and South America

Universidade Federal de Minas Gerais, Brazil  
El Colegio de México  
Universidad de Valle, Colombia  
Pontificia Universidad Católica de Chile

### Africa

University of Witwatersrand, South Africa  
Obafemi Awolowo University, Nigeria  
University of Cape Town, South Africa  
Makerere University, Uganda

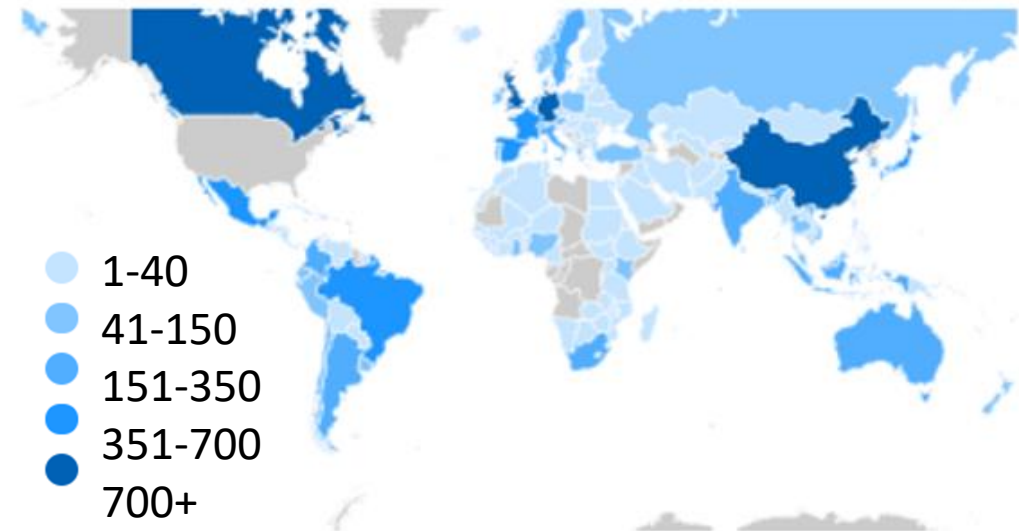
### International Organizations

The World Bank  
United Nations (UNPD, UNFPA, UNESCO)  
Inter-American Development Bank  
World Health Organization

## Since 2005

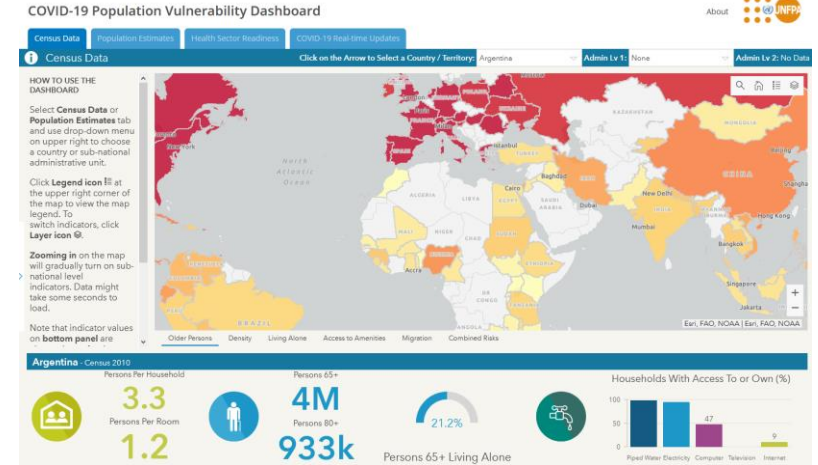
**> 20,000 approved data users**  
verified and credible  
academic or policy affiliation  
**> 80,000 data download requests**

## Country of Residence of IPUMS Data Users (non-US)





# Indicators and Dashboards



# Scholarly and Policy Work

## High-impact scholarly publications



Climate-Induced migration and unemployment in middle-income Africa

Valerie Mueller <sup>a, b</sup> **nature**

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nature > articles > article

Article | [Open Access](#) | Published: 15 April 2020

### Measuring and forecasting progress towards the education-related SDG targets

Joseph Friedman, Hunter York, Nicholas Graetz, Lauren Woyczynski, Joanna Whisnant, Simon I. Hay & Emmanuela Gakidou



### The Effect of Fertility on Mothers' Labor Supply over the Last Two Centuries

Daniel Aaronson, Rajeev Dehejia , Andrew Jordan, Cristian Pop-Eleches, Cyrus Samii, Karl Schulze

*The Economic Journal*, Volume 131, Issue 633, January 2021, Pages 1–32, <https://doi.org/10.1093/ej/ueaa100>

Published: 25 August 2020 [Article history](#)

## UN & NGO reports & SDG Monitoring

**SUSTAINABLE DEVELOPMENT GOALS**

Gender equity in the health workforce: Analysis of 104 countries

UNFPA Strategy for the 2020 Round of Population & Housing Censuses (2015-2024)

BECAUSE EVERYONE COUNTS

Global strategy on human resources for health: Workforce 2030

TURNING PROMISES INTO ACTION: GENDER EQUALITY IN THE 2020s FOR SUSTAINABLE DEVELOPMENT

ILO global estimates on migrant workers: Results and methodology

A pilot study on disaggregating SDG indicators by migratory status

# Census for SDG measurement

## Census Microdata

110 of 169 Targets ♦ 11 of the 17 Goals

Multidimensional crosstabulation and investigation



### Household

- Household composition
- Dwelling ownership
- Household amenities
- Access to utilities
- Group quarters
- Subnational geography

### Person

- Fertility
- Mortality
- Migration
- Education
- Labor-force participation
- Occupational structure
- Ethnicity
- Disability



IPUMS supports the Sustainable Development Goals



# IPUMS Overview & Data Usage

## Optimizing Data for Research

## Partnering in Data Dissemination



# Standardize data

```
110100000 1 100 1 1 11 02 171984 1 42 31 2 1 6 2 59914000000000000010990999144144002 20 01 10236501601
110100000 1 100 1 1 11 12 401961 6 42 31 2 1 3 2 599 110000000000000000 11999144144002 11 01 10236501601
110100000 1 100 1 2 11 22 781923 4 2 2 0 2 8 2 599 90000000001000000990999141141002 11 01 10207308201
1141002990 01 10207308201
1 1002 11 00 10211208201
5 85002990 111 10209801101
```

**Ukraine 2001 – SPSS transferred to flat ascii**

```
110100000 1 100 113 11131 401961 2 2 2 0 2 3 2 599150000000000000001990999142142002990 61 10171801801
110100000 1 100 113 11131 401961 2 2 2 0 2 3 2 599150000000000000001990999142142002990 61 10171801801
110100000 1 100 113 11131 401961 2 2 2 0 2 3 2 599150000000000000001990999142142002990 61 10171801801
110100000 1 100 113 11131 401961 2 2 2 0 2 3 2 599150000000000000001990999142142002990 61 10171801801
```

```
1 1
2 21 11SAN JOSE
3 3101 01 1SAN JOSE
4 410101 01 1EL CARMEN
5 51010100010001 1
6 6101010001001111 0 650222110 511 01133331 4 3 71243 91
7 710101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
810101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
910101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
1010101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
1110101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
1210101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
1310101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
1410101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
1510101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
1610101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
1710101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
1810101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
1910101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
2010101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
2110101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
2210101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
2310101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
2410101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
2510101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
2610101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
2710101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
2810101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
2910101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
3010101000121 4910010021 1012 2031 98362 01611 163163633203323332 9 610 5
```

**Slovenia  
2011  
Households**

**Slovenia 2011  
Persons**

```
15 125116611111112 15647804991331 188899991998889999111160-642705861 8C21
29 213422311112111 156478049913339919119905991911990121255-592705271 2Q11
331127116612112122 15647804 11331 188899991998889999145220-24170504399Y91
29370433991321 688899992 68882007112255-594705261 2042
29370433991321 688899992 68882007146125-29170586599Y92
33388454 32142 388899992 38882000111245-49270524299Y91
33388454 32141 388899992 38882000121145-49270582299Y91
8882010145220-24170504399Y91
8882010145225-291705061 2P11
8889999111155-59270583499Y91
8881980121260-64270524499Y91
8889999111135-392705841 7C31
43392882 22141 288899991998889999121235-392705241 2P41
43392882 22141 28889999199888999914520-4 170598999Y91
43392882 22141 28889999199888999914525-9 170598999Y91
47724608991321 588899991998889999111175-79270582499Y91
47724608 51322 588899992 58881960121270-74270522499Y91
513827851221311288899991998889999111155-592705831 3N21
513827851221321288899993128881980121255-592705221 9A21
513827851221311288899991998889999145130-341705841 7N21
72598956 81311 888899991998889999117260-64370524499Y91
74764386 21312 288899993 28881980117155-59370584499Y91
80368686 81311 888899991998889999117160-64470583499Y91
83408869 81241 888899991998889999111135-392705841 1G33
83408869 81242 588899994 58882004121235-392705261 2K33
```

```
H01100013200401313520000
P011001132206619350200113541621100101
P01100213310341967050021324173230100011002
P011003133104219590200110400099900000
H021000122004013138301000
P02100112220661935020021484165341001100009
```

ascii fixed-width data files  
H and P records

Data users have format options:  
SPSS, Stata, SAS, R, .csv  
with  
Standard and DDI codebooks

# Standardize metadata: documentation

Si la respuesta es que sí ha tenido alguna hija o hijo nacido vivo, pregunta por el total de hijos nacidos vivos y el total de hijos vivos actualmente.

Recuerda que se trata de todos los hijos e hijas nacidos vivos, sin importar si viven con la madre o no. Asegúrate que el total de hijas e hijos que ha tenido la mujer empadronada, sea igual o mayor que el de los hijos e hijas vivos actualmente. De ser mayor el número de hijos e hijas vivos actualmente, acláralo con el informante y corrige.

## 5. Number of Rooms

How many rooms are used for sleeping without counting hallways?  
 \_\_\_\_\_ Write the number

Without counting the hallways or bathrooms how many total rooms are in this dwelling? Count the kitchen  
 \_\_\_\_\_ Write the number

## 6. Access to water

Read all of the options until you get an affirmative answer.  
 Circle only one answer

- 1 Running water inside the dwelling
- 2 Running water outside the dwelling but on the land
- 3 Running water from a public faucet or hydrant
- 4 Running water that is carried from another dwelling
- 5 Tanked in by truck
- 6 Water from a well, river, lake, stream or other

Answers 3, 4, 5, 6 continue with number 8

## 7. Water supply

How many days of the week is water available?  
 Circle only one answer

- 1 Daily
- 2 Every third day
- 3 Twice a week
- 4 Once a week
- 5 Occasionally

**IPUMS INTERNATIONAL** DATA CART  
 YOUR DATA EXTRACT  
 0 VARIABLES  
 11 SAMPLES  
 VIEW CART

HOME | SELECT DATA | MY DATA | FAQ | HELP

### ROOMS

Number of rooms  
 Group: [Dwelling Characteristics — HOUSEHOLD](#)

CODES	DESCRIPTION	COMPARABILITY	UNIVERSE	AVAILABILITY	QUESTIONNAIRE TEXT	SOURCE
	Comparability — Index					
	<a href="#">GENERAL</a>	<a href="#">Cambodia</a>	<a href="#">Palestine</a>			
	<a href="#">Armenia</a>	<a href="#">France</a>	<a href="#">Rwanda</a>			
	<a href="#">Brazil</a>	<a href="#">Morocco</a>	<a href="#">South Africa</a>			
	Comparability — General					
	The censuses generally agree on the broad definition of a "room": essentially an interior area or compartment of a dwelling defined by walls and a roof, excluding corridors or hallways. They differ considerably, however, in delineating which rooms are to be included in the tally and which are to be excluded. Points of difference include: kitchens; bathrooms; garages; kitchens or bathrooms shared by multiple households; rooms used for various commercial or non-residential purposes; etc. See the enumeration text for details.					

# Variable harmonization: Marital Status

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# Request customized data downloads

LOG IN | REGISTER | IPUMS.ORG



## EXTRACT REQUEST ([HELP](#))

SAMPLES:	10	<a href="#">(show)</a>	<a href="#">Change</a>
VARIABLES:	25	<a href="#">(show)</a>	<a href="#">Change</a>
DATA FORMAT:	.sav (SPSS)		<a href="#">Change</a>
STRUCTURE:	Rectangular (person)		<a href="#">Change</a>
ESTIMATED SIZE:	1071.1 MB		<a href="#">How to reduce extract size</a>

## OPTIONS

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.

Describe your extract



# IPUMS Overview & Data Usage

## Optimizing Data for Research

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# IPUMS Organizational Credibility

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- **Highest standards in data management**
  - Storage, security and handling (NIST and ISO standards, CISSP certified)
  - Archiving (Core Trust Seal)
  - Open data best practices
- **Organizational partnerships**
  - IPUMS Global Health: DHS, PMA, UNICEF-MICS for health survey data
  - IPUMS Time Use: Oxford, U Maryland for time use data
- **Independent reviewer endorsements**
  - Dennis Trewin and Alphonse MacDonald



# Other global data from IPUMS



[IPUMS.ORG](https://www.ipums.org) | [DHS](#) | [PMA](#)



## HARMONIZED INTERNATIONAL SURVEY DATA ON MATERNAL, CHILD, AND REPRODUCTIVE HEALTH

IPUMS Global Health provides integrated international health survey data at no cost for research and educational purposes from two data series: the Demographic Health Surveys (DHS) and Performance Monitoring for Action (PMA).

### IPUMS-DHS

#### DEMOGRAPHIC AND HEALTH SURVEYS

Integrated Demographic and Health Surveys from The DHS Program, currently covering Africa and South Asian surveys from the 1980s to the present.

### IPUMS-PMA

#### PERFORMANCE MONITORING FOR ACTION

Integrated PMA surveys on fertility, contraception, hygiene, and health, administered frequently to monitor trends in select high-fertility countries.



Tabular and GIS data from population, housing, and agricultural censuses around the world.

[Learn More](#)



Historical and contemporary time use data from 1930 to the present.

[Learn More](#)

# Direct Benefits & Support to NSOs

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## Direct support

- License fee for redistribution of your data (in IPUMS format), or
- Consultant services (technical/sampling/editing)

## Support for data preparation

- Data anonymization & confidentialization
- Conference sponsorship & partner workshops
- Data recovery & archiving

# Indirect Benefits & Support to NSO

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## Long-term data preservation

## Facilitate high-impact research

- Standardization & harmonization work
- Provide extensive metadata
- User-friendly web dissemination

## Alleviate NSO support burden

- Provide data user support & training
- Publicity for data usage



# IPUMS Participation Steps

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- **Memorandum of Understanding**
  - Signed by NSO and IPUMS (University of Minnesota)
  - Authorizes data integration and dissemination through IPUMS
- **Prepare and entrust data file & documentation**
  - Anonymized data (names and lowest level geography removed)
  - Full count or sample is fine in any format, accompanied by a codebook  
Sampling and other anonymization can be done by IPUMS or the NSO
- **IPUMS does the rest**
- **IPUMS provides a copy of harmonized data & periodic usage reports**



**INTERNATIONAL.IPUMS.ORG**

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 @ipumsi

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