

# Using IPUMS Datasets for Studying Older Immigrants

Prepared for a 2024 GSA webinar in collaboration with GSA's  
Interest Group on International Aging and Migration

Presented by Sarah Flood  
Life Course Center, IPUMS  
University of Minnesota









# Our Signature Activity: Harmonization

- A single, consistent data series from datasets collected in different times and places
- Codes group broadly comparable categories while retaining sample-specific detail
- Denote potential comparability issues



## Harmonization Example: NHIS Marital Status

### Pre-2004

1 = Married, spouse present

2 = Married, spouse absent

3 = Married, no spouse info

4 = Widowed

5 = Divorced

6 = Separated

7 = Never married

### 2004-forward

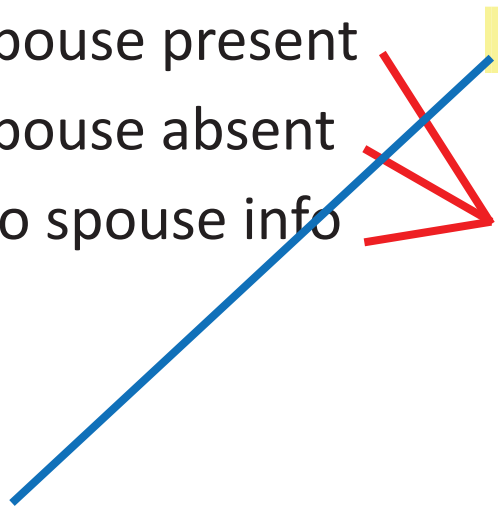
1 = Separated

2 = Divorced

3 = Married

4 = Single/never married

5 = Widowed





IPUMS USA

usa.ipums.org/usa/

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# IPUMS USA

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**IPUMS USA**  
ABOUT  
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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  
COMPLETE 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 

**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  
0 VARIABLES  
0 SAMPLES

**SELECT SAMPLES** | **SELECT HARMONIZED VARIABLES** |  HARMONIZED VARIABLES |  SOURCE VARIABLES | **DISPLAY OPTIONS** | [HELP](#)

HOUSEHOLD | PERSON | A-Z | SEARCH Q

Select samples and variables to build a data extract.

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



**DATA CART**  
YOUR DATA EXTRACT

0 VARIABLES  
37 SAMPLES

**VIEW CART**

**CHANGE SAMPLES**

**SELECT HARMONIZED VARIABLES**

HOUSEHOLD PERSON A-Z SEARCH Q

HARMONIZED VARIABLES *i*

SOURCE VARIABLES

**DISPLAY OPTIONS**

[HELP](#)

Samples have been selected; no

- TECHNICAL
- FAMILY INTERRELATIONSHIP
- DEMOGRAPHIC
- RACE, ETHNICITY, AND NATIVITY
- HEALTH INSURANCE
- EDUCATION
- WORK**
- INCOME
- SUPPLEMENTAL POVERTY MEASURE
- OCCUPATIONAL STANDING - SES
- MIGRATION
- ACTIVITY FIVE YEARS AGO
- DISABILITY
- VETERAN STATUS
- PLACE OF WORK AND TRAVEL TIME
- HISTORICAL OVERSAMPLE
- HISTORICAL TECHNICAL
- OTHER

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HOUSEHOLD ▾ PERSON ▾ A-Z ▾ SEARCH Q

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

**WORK VARIABLES -- PERSON** [TOP]

Add to cart	Variable	Variable Label	Type	Codes	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1990	1980	1970	1970	1960	V
					acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	acs	5pct	5pct	5pct	
<a href="#">+</a>	<a href="#">EMPSTAT</a>	Employment status	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">EMP</a>
<a href="#">+</a>	<a href="#">LABFORCE</a>	Labor force status	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">LABF</a>
<a href="#">+</a>	<a href="#">CLASSWKR</a>	Class of worker	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">CLA</a>
<a href="#">+</a>	<a href="#">OCC</a>	Occupation	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">OCC</a>
<a href="#">+</a>	<a href="#">OCC1950</a>	Occupation, 1950 basis	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">OCC</a>
<a href="#">+</a>	<a href="#">OCC1990</a>	Occupation, 1990 basis	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">OCC</a>
<a href="#">+</a>	<a href="#">OCC2010</a>	Occupation, 2010 basis	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">OCC</a>
<a href="#">+</a>	<a href="#">OCCSOC</a>	Occupation, SOC classification	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">OCC</a>
<a href="#">+</a>	<a href="#">OCCHISCO</a>	Occupation, HISCO classification	P	<a href="#">codes</a>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<a href="#">OCC</a>	
<a href="#">+</a>	<a href="#">OCC1930</a>	Occupation, Unrecoded 1930	P	<a href="#">codes</a>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<a href="#">OCC</a>	
<a href="#">+</a>	<a href="#">IND</a>	Industry	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">IND</a>
<a href="#">+</a>	<a href="#">IND1950</a>	Industry, 1950 basis	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">IND1</a>
<a href="#">+</a>	<a href="#">IND1990</a>	Industry, 1990 basis	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">IND1</a>
<a href="#">+</a>	<a href="#">INDNAICS</a>	Industry, NAICS classification	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">IND1</a>
<a href="#">+</a>	<a href="#">IND1930</a>	Industry, Unrecoded 1930	P	<a href="#">codes</a>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<a href="#">IND1</a>	
<a href="#">+</a>	<a href="#">WKSWORK1</a>	Weeks worked last year	P	<a href="#">codes</a>	X	-	-	-	-	-	-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">WKS</a>
<a href="#">+</a>	<a href="#">WKSWORK2</a>	Weeks worked last year, intervalled	P	<a href="#">codes</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	<a href="#">WKS</a>
<a href="#">+</a>	<a href="#">HRSWORK1</a>	Hours worked last week	P	<a href="#">codes</a>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	<a href="#">HRS</a>	



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HOUSEHOLD PERSON A-Z SEARCH Q

HARMONIZED VARIABLES  SOURCE VARIABLES

DISPLAY OPTIONS

HELP

Select samples and variables to build a data extract.

SUPPORTED BY: NATIONAL INSTITUTES OF HEALTH NATIONAL SCIENCE FOUNDATION ANCESTRY STAT/TRANSFER AND UNIVERSITY OF MINNESOTA



# SELECT SAMPLES

Variable documentation on the web site can be filtered to display only material corresponding to chosen datasets ([more information](#) on this feature).

**SUBMIT SAMPLE SELECTIONS**

**USA SAMPLES** | USA FULL COUNT | PUERTO RICO

Default sample from each year

Year	ACS	ACS 5yr	ACS 3yr	ACS 5yr	ACS 5yr	ACS 5yr	ACS 5yr	ACS 5yr
2020	<input type="checkbox"/>	<input type="checkbox"/>						
2019	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2018	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2017	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2016	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2015	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2014	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2013	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
2012	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
2011	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2009	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
2008	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
2007	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

# What we do

1. We harmonize, repackage, and deliver large-scale census and survey data and documentation to the research community
- 2. We provide user support through tutorials, user forum, and a dedicated user support team**

# IPUMS

IPUMS provides census and survey data from around the world integrated across time and geography. We help you conduct comparative research, merge information across data types, and analyze individual-level data.

- USER FORUM
- BIG MICRODATA NETWORK
- TUTORIALS
- IPUMS DATA TRAINING EXERCISES
- TEACHING RESOURCES
- CONTACT US [ipums@umn.edu](mailto:ipums@umn.edu)

**IPUMS USA**

U.S. Census and American Community Survey microdata from 1850 to the present. [Learn More](#)

VISIT SITE

**IPUMS CPS**

Current Population Survey microdata including basic monthly surveys and supplements from 1962 to the present. [Learn More](#)

VISIT SITE

World's largest collection of census microdata covering over 100 countries, contemporary and historical. [Learn More](#)

VISIT SITE

Contextualizing Work and Health across the Life Course

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Health survey data for Africa and Asia, including harmonized data collections for [DHS](#) and [PMA](#). [Learn More](#)

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**IPUMS NHGIS**

Tabular U.S. Census data and GIS boundary files from 1790 to the present. [Learn More](#)

VISIT SITE

**IPUMS IHGIS**

Tabular and GIS data from population, housing, and agricultural censuses around the world. [Learn More](#)

Find additional spatial population & environmental data in [IPUMS Terra](#).

VISIT SITE

CENSUS BUREAU PLANS MAJOR CHANGES TO PUBLIC DATA

New data may be unusable for research and planning

LEARN MORE

CALENDAR

Webinar: Did The COVID-19

# What we do

1. We harmonize, repackage, and deliver large-scale census and survey data and documentation to the research community
2. We provide user support through tutorials, user forum, and a dedicated user support team
- 3. We don't collect data**



# There must be a catch...

- How much do IPUMS data cost?
  - Nothing! All data are available free of charge!
- How's that possible?
  - We're funded by NIH, NSF, Gates Foundation, and others to improve data accessibility
  - We receive support from NIA P30 to connect with researchers specifically interested in IPUMS to study aging

# Ways Researchers Use IPUMS

1. Primary analysis
2. Rich description of populations in specific places and/or at particular points in time
3. For identification of places to target more specific data collections and/or interventions





# General Data Notes

- Large-scale population data
  - Flexibility and sample size to identify specific subpopulations, places
- Mostly cross-sectional with annual snapshots
  - Excellent for trend analysis, change over time, locate people in historical context
- Rich information about all (or multiple) people in an household









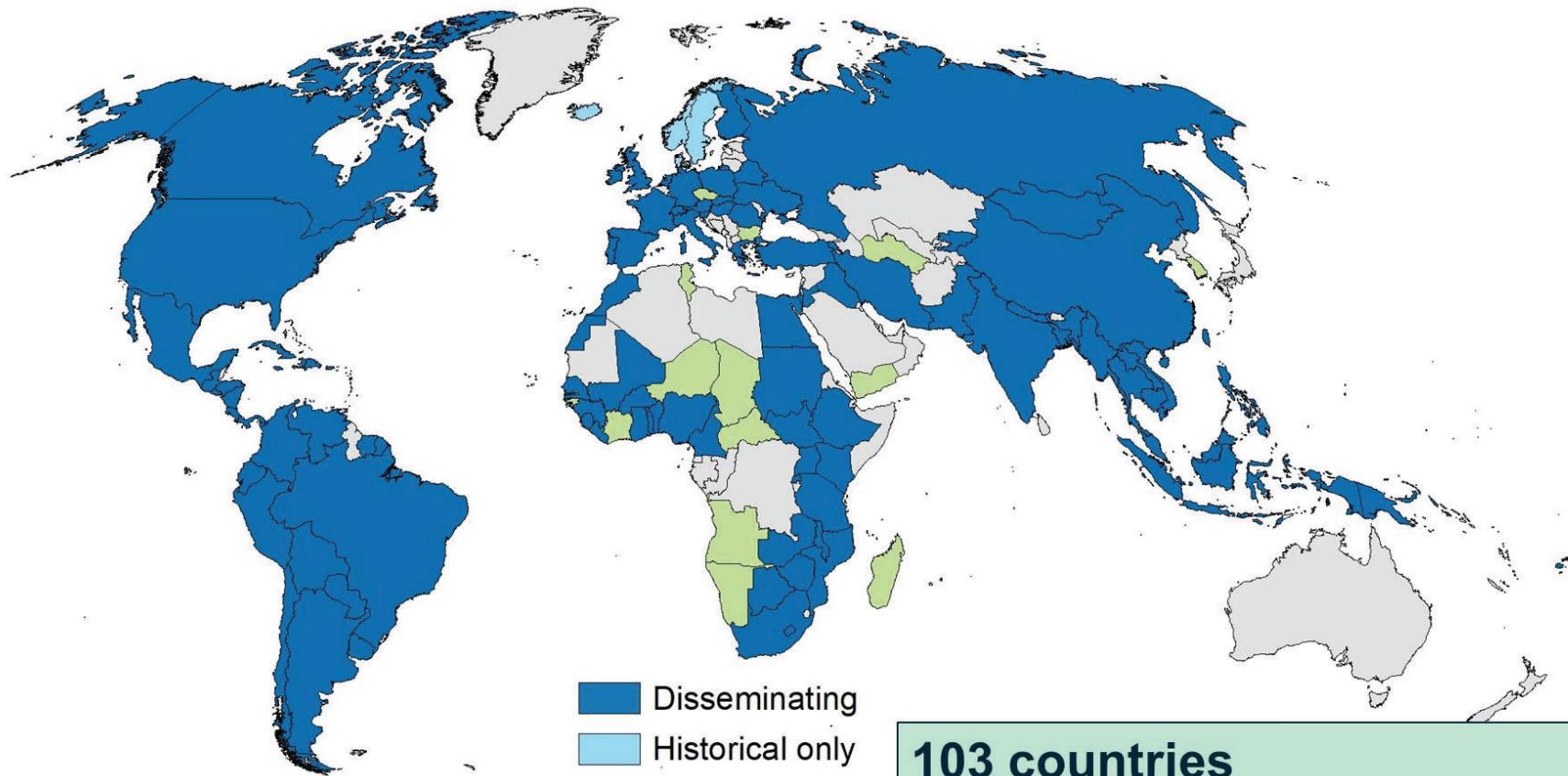
# Microdata

Relation to head	Marital status	Education	Occupation
000098000100100210000	0791220	2208021	120390099900990
000098000100200120000	0642220	2208022	120310099900990
000098000100300041000	0231100	2208022	120100083200269
000098000100400041000	0132100	2208012	120330099900990
000098800100100210000	0351210	2208022	311230072300527
000098800100200120000	0412210	2208022	120310099900990
000098800100300030000	0172100	2208022	212230099800990
000098800100400030000	0162100	2208022	212310099900990
000098800100500649100	0192210	2208022	212310099900990
000098800100600549100	0271210	2208022	312100012200011
000098800100700041000	0002100	2208000	000000099900990
000098800100800049100	0221100	2208022	311100061100011
000100500100100210000	0451210	2208012	212100061100011
000100500100200120000	0342210	2208012	221310099900990
000100500100300030000	0122100	2208012	212330099900990
000101300100100210000	0651220	2207022	120343099900990
000101300100200120000	0652220	2208022	120310099900990
000101300100300030000	0332350	2208022	221310099900990
000101300100400041000	0152100	2208012	221330099900990
000101300100500041000	0132100	2208012	212330099900990
000101300100600041000	0021100	2208000	000000099900990



# IPUMS International

- Censuses and surveys from more than 100 countries
- Many datasets include information on country of birth and/or citizenship which you can use to identify immigrants

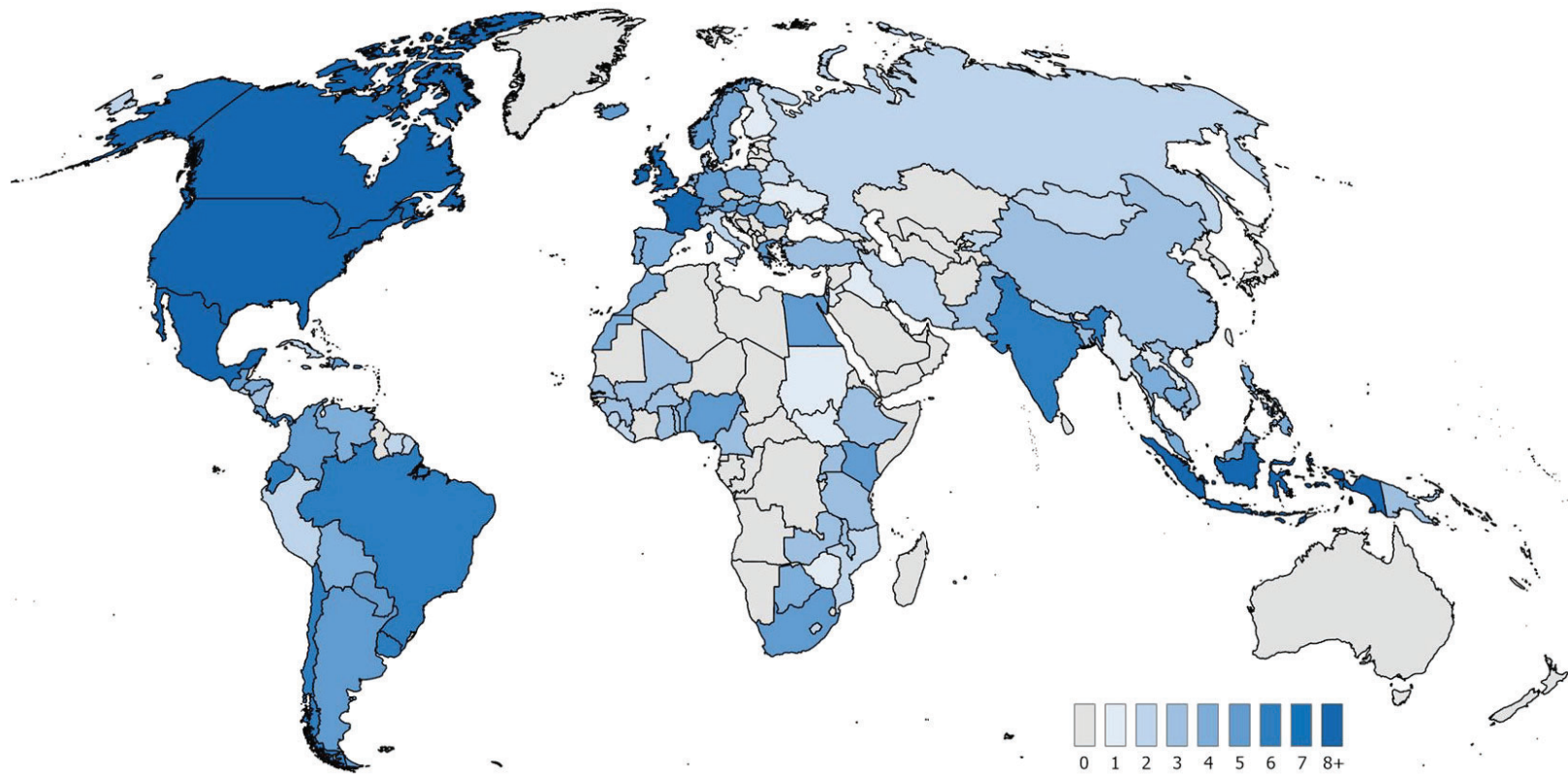


- Disseminating
- Historical only
- Participating

**103 countries**  
**547 censuses and surveys**  
**Over 1 billion person records**



# Temporal Extent



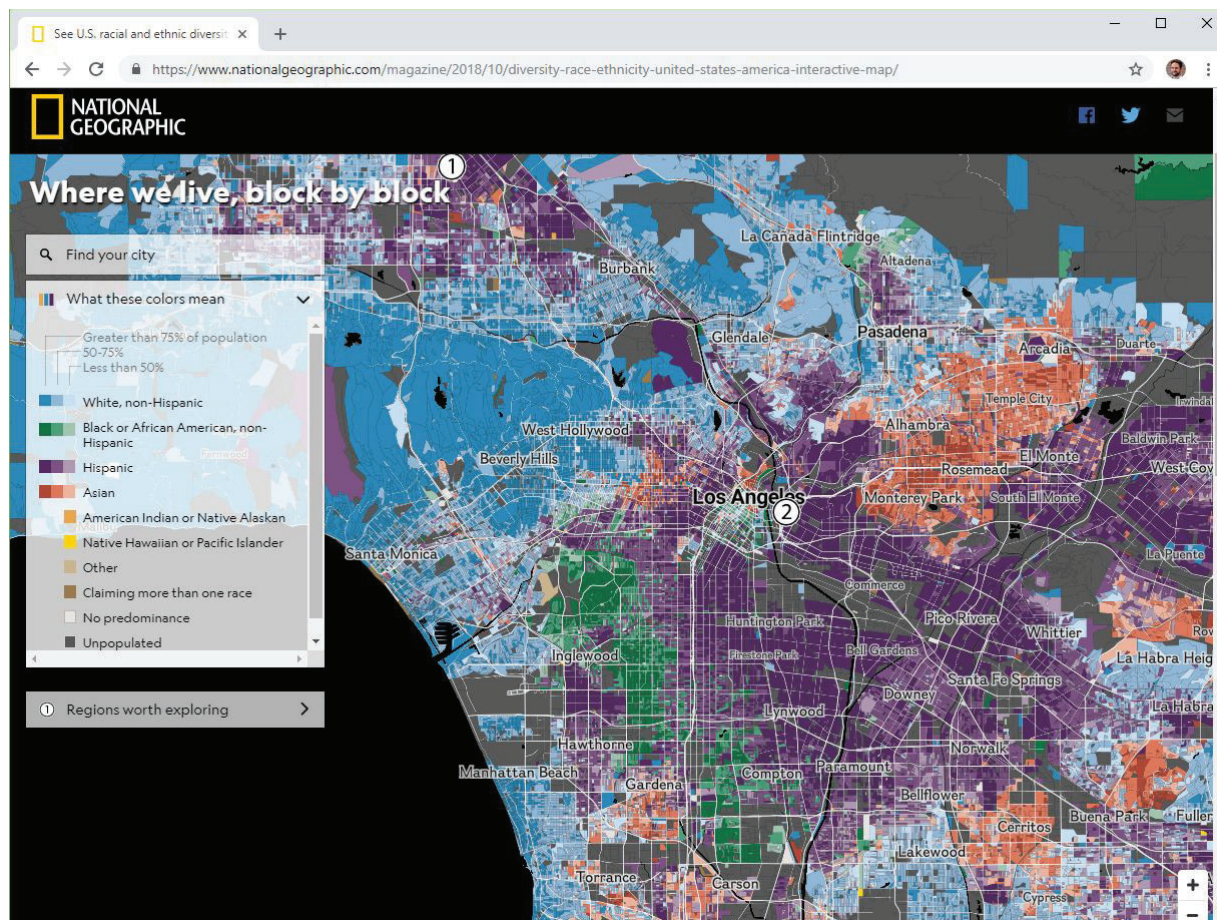
# Topical coverage

Basic demography	Fertility	Country of birth and immigration	Migration	Disability
Ethnicity	Education	Work	Income	Appliances
Mechanicals	Housing structure	Geography	Home ownership	Religion



# NHGIS

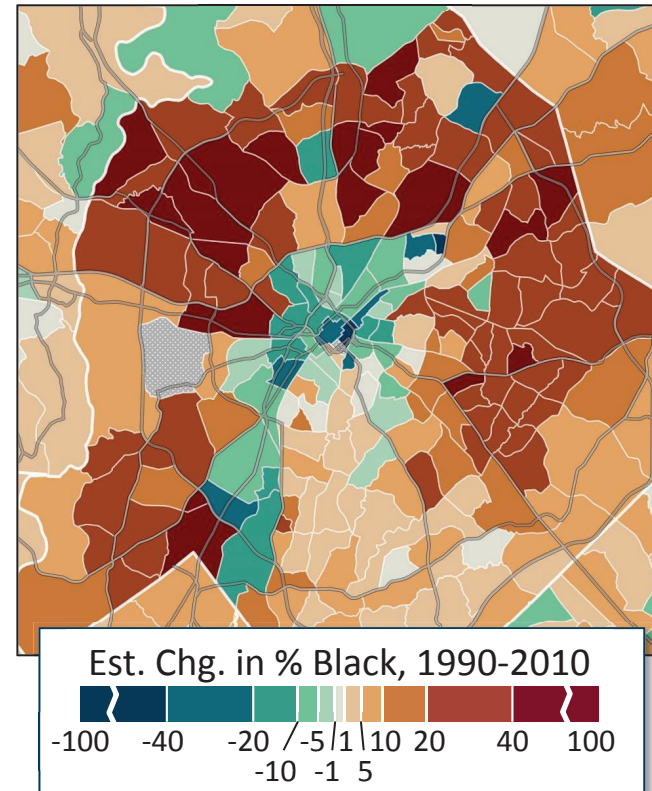
- All summary levels down to census blocks



# NHGIS

- All summary levels down to census blocks
- Time series & geographic crosswalks
- A data source, not a mapping or analysis tool

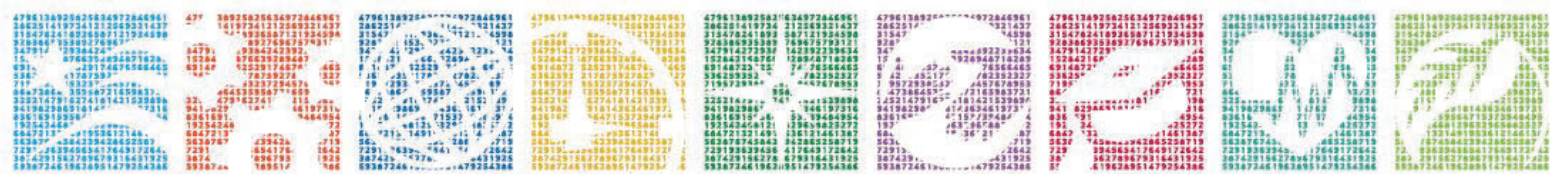
Charlotte, NC





# IPUMS Data: Features and Characteristics

**IPUMS**  
DATA PROJECTS



FEATURES

	USA	CPS	INTERNATIONAL	TIME USE	NHGIS	PMA	DHS	HIGHERED	MEPS	NHIS	IHGIS
Microdata	■	■	■	■		■	■	■	■	■	■
International			■			■	■				■
Earliest Year of Data	1790	1962	1960s	1965	1790	2013		1993	1996	1963	1960s
Geographic Detail	Sub-state	Sub-state	2 <sup>nd</sup> or 3 <sup>rd</sup> Sub-national	Sub-state	Census Block	Region	Region	None	Census Region	Census Region	Varies
Households & Families	■	■	■	■	■		■		■	■	■

**USA:** most detailed geography, largest samples – best for identifying very specific immigrant groups

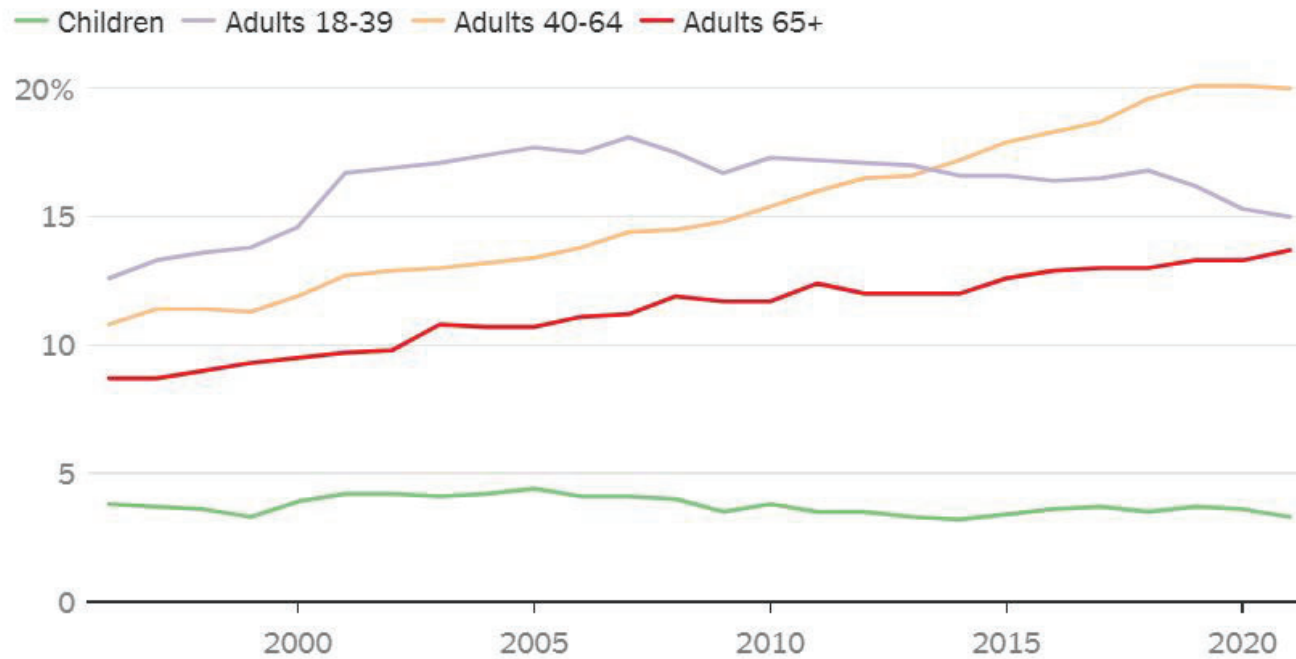
**CPS:** monthly snapshots, short panel, state-level estimates, wide variety of topics

**Time Use:** daily reports of time use in many domains of life

**NHIS/MEPS:** leading source of data on our nation’s health and medical expenditures

## Share of U.S. Age Groups That Are Foreign Born

The number of older immigrants in the United States has steadily increased over the last generation, with foreign-born residents accounting for a fifth of Americans between ages 40 and 64.



Source: IPUMS.org, Current Population Survey • By The New York Times

<https://www.nytimes.com/2022/02/05/us/immigration-census-population.html>

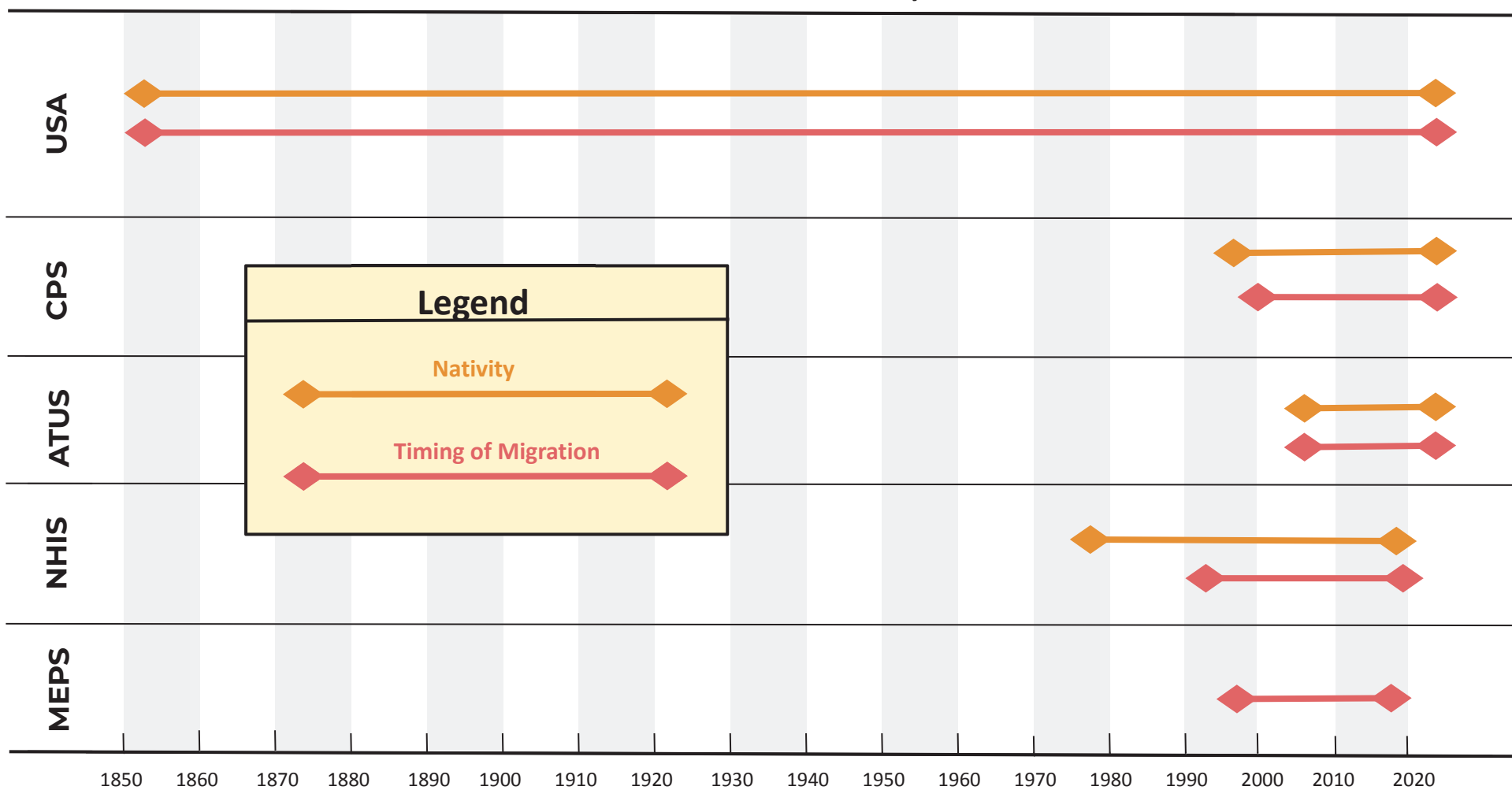








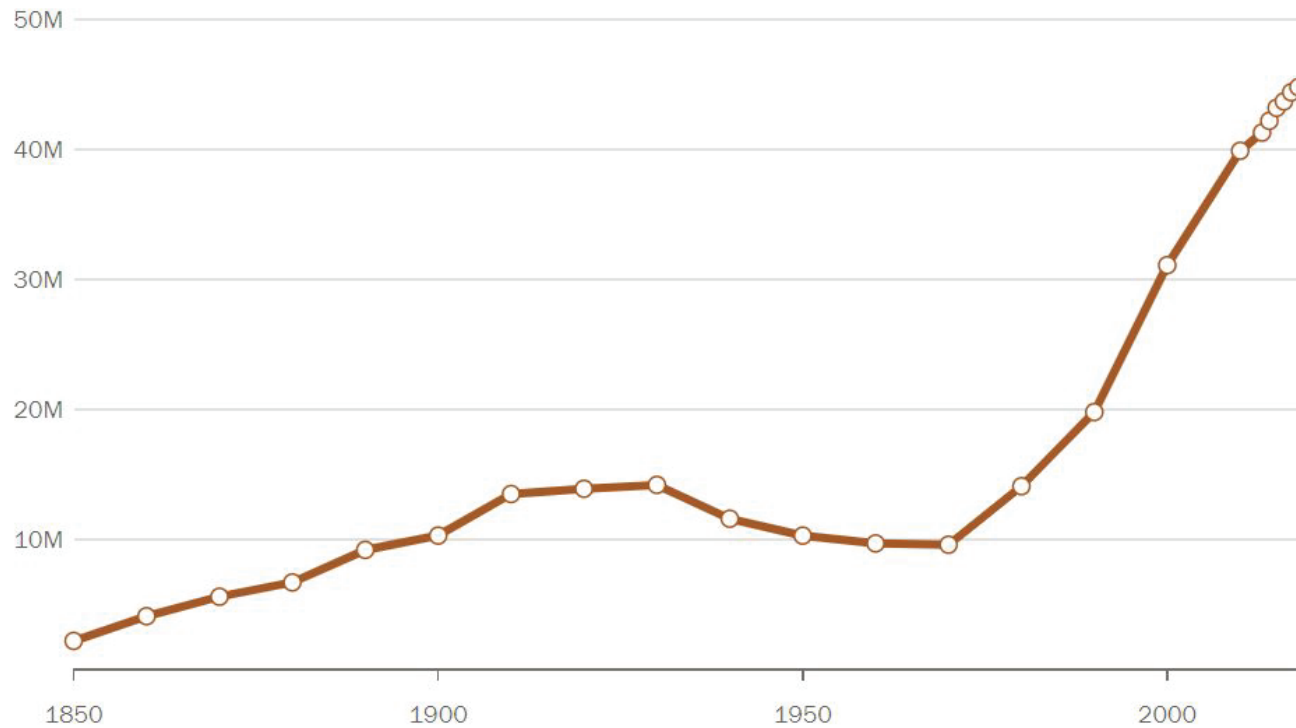
# Variable Availability





## Foreign-born population in the United States, 1850-2018

*Foreign-born population, in millions*

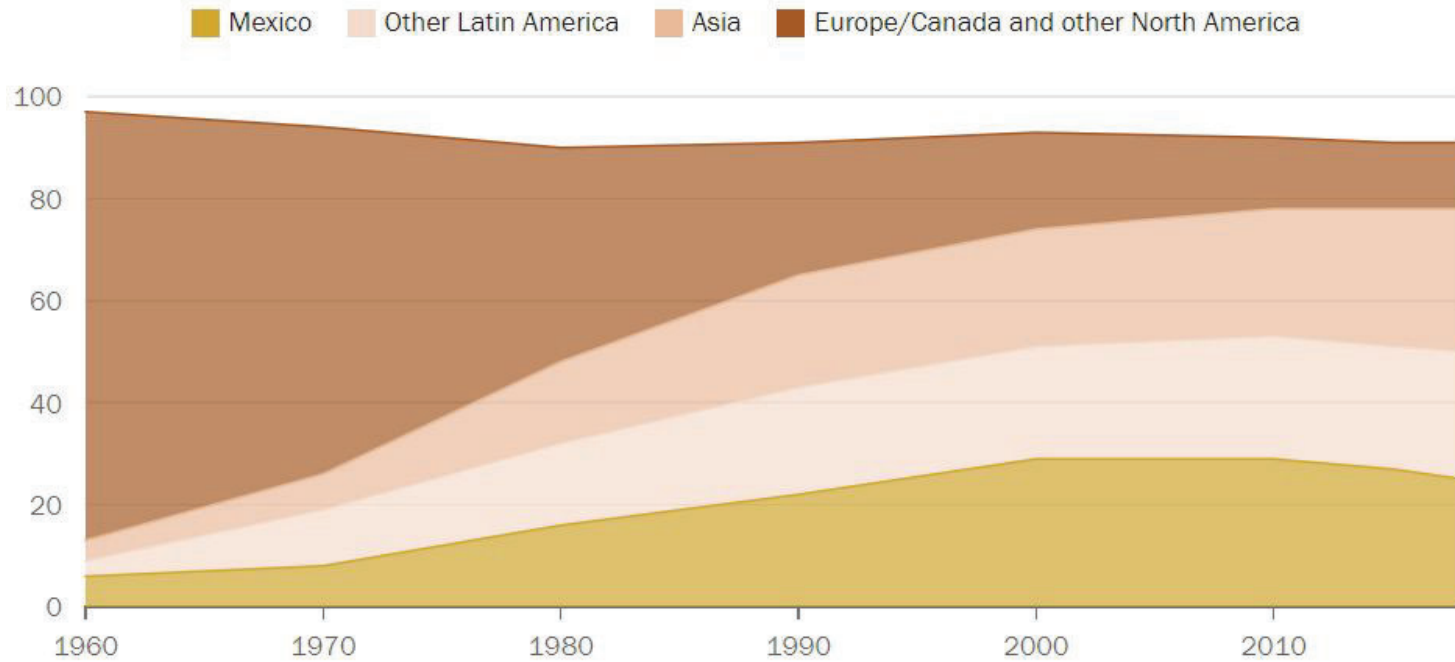


Source: U.S. Census Bureau population estimates and Pew Research Center tabulations of 2010, 2013-2018 American Community Surveys (IPUMS).

**PEW RESEARCH CENTER**

## Origins of the U.S. immigrant population, 1960-2018

*% of foreign-born population residing in the U.S. who were born in ...*



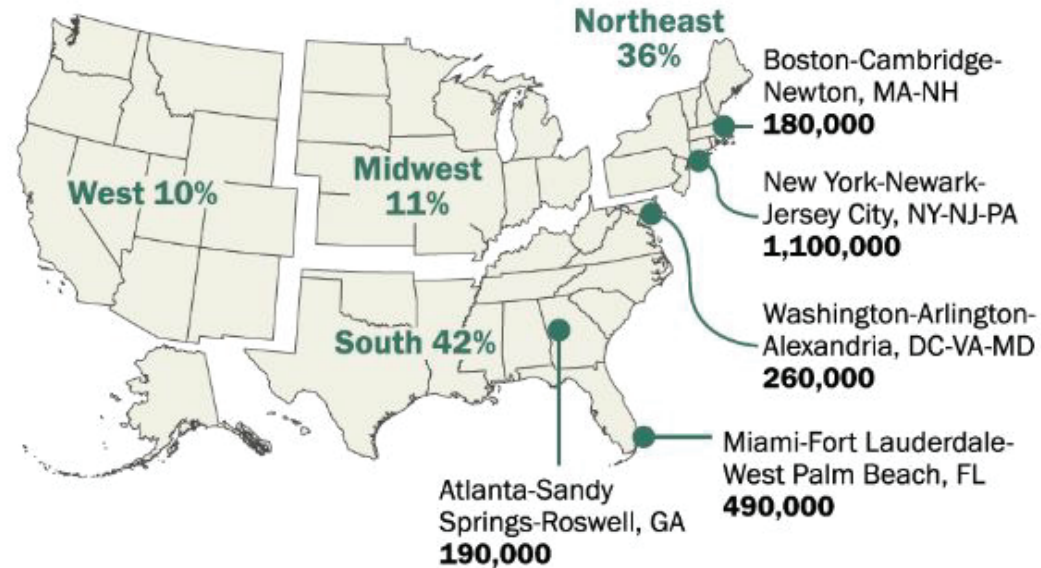
Note: Other Latin America includes Central America, South America and the Caribbean. Asia includes Central, East, Southeast, and South Asia.

Source: Pew Research Center tabulations of 1960-2000 decennial censuses and 2010, 2015-2018 American Community Surveys (IPUMS).

**PEW RESEARCH CENTER**

## Most Black immigrants live in Northeast and South

*% of U.S. Black immigrant population, 2019*



Note: Top five metro areas for the U.S. Black immigrant population displayed. Numbers are rounded to the nearest 100,000 if over 1 million and to the nearest 10,000 if below 1 million. "U.S. Black immigrant population" refers to all people who self-identify as Black, inclusive of single-race Black, multiracial Black and Black Hispanic people and were born outside of the U.S. to non-U.S. citizens.

Source: Pew Research Center tabulations of the 2019 American Community Survey (1% IPUMS).

"One-in-Ten Black People Living in the U.S. Are Immigrants"

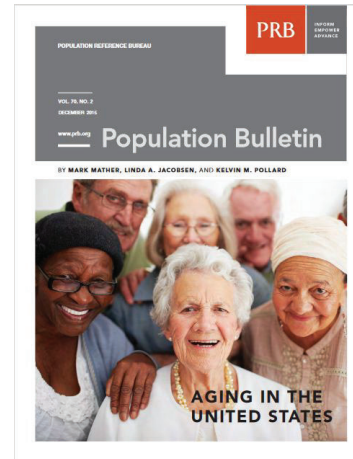
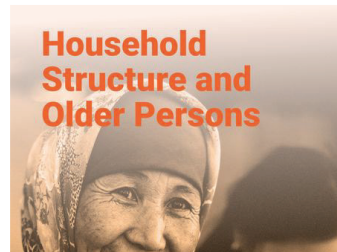
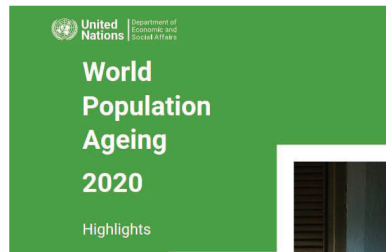
**PEW RESEARCH CENTER**







# Large-scale Census and Household surveys for aging research



**Research Report for Mayor's Commission on Aging**  
 Philadelphia Corporation for Aging, November 28, 2016

Allen Glickman, Director of Research and Evaluation, [aglickman@pcaphl.org](mailto:aglickman@pcaphl.org), 215-765-9000  
 Lauren Ring, Planning Associate, [lring@pcaphl.org](mailto:lring@pcaphl.org), 215-765-9000 x5074

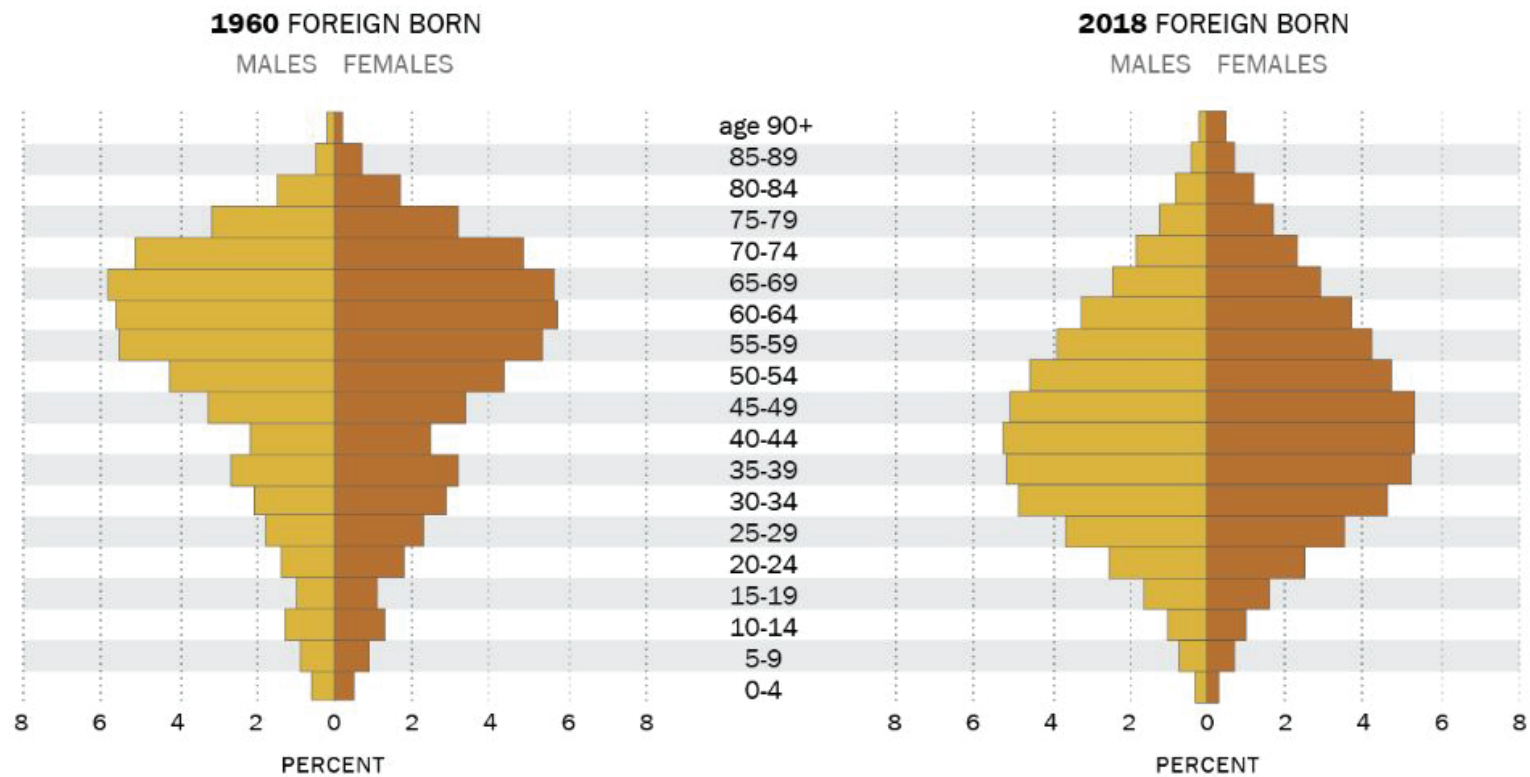
**Introduction**  
 Data taken from 2015 American Community Survey Public Use Microdata Sample IPUMS-USA, University of Minnesota, [www.ipums.org](http://www.ipums.org)

**Individual Level Characteristics**  
 There are approximately 1.6 million persons living in the city of which about 24% (379,000) are aged 65 and over. These are approximately 379,000 persons...



## Foreign born age pyramids

*% of foreign-born population in each age group*



Source: Pew Research Center tabulations of 1960 census and 2018 American Community Survey (IPUMS).

PEW RESEARCH CENTER





## Caregiving

Assistive Devices  
 Co-resident Family  
 Disability  
 Social Isolation  
 Technology  
 Well-Being  
 Formal in-home care

## Relationships

Adult Children  
 Cohabitation  
 Divorce  
 Grandchildren  
 Household Composition  
 Marriage  
 Multigenerational Households  
 Sexuality





## **Health**

- Cancer
- Cognitive Difficulties
- Depression/Anxiety
- Diabetes
- Hearing
- Injuries
- Mortality
- Nutrition
- Physical Activity
- Stress
- Vaccination
- Vision

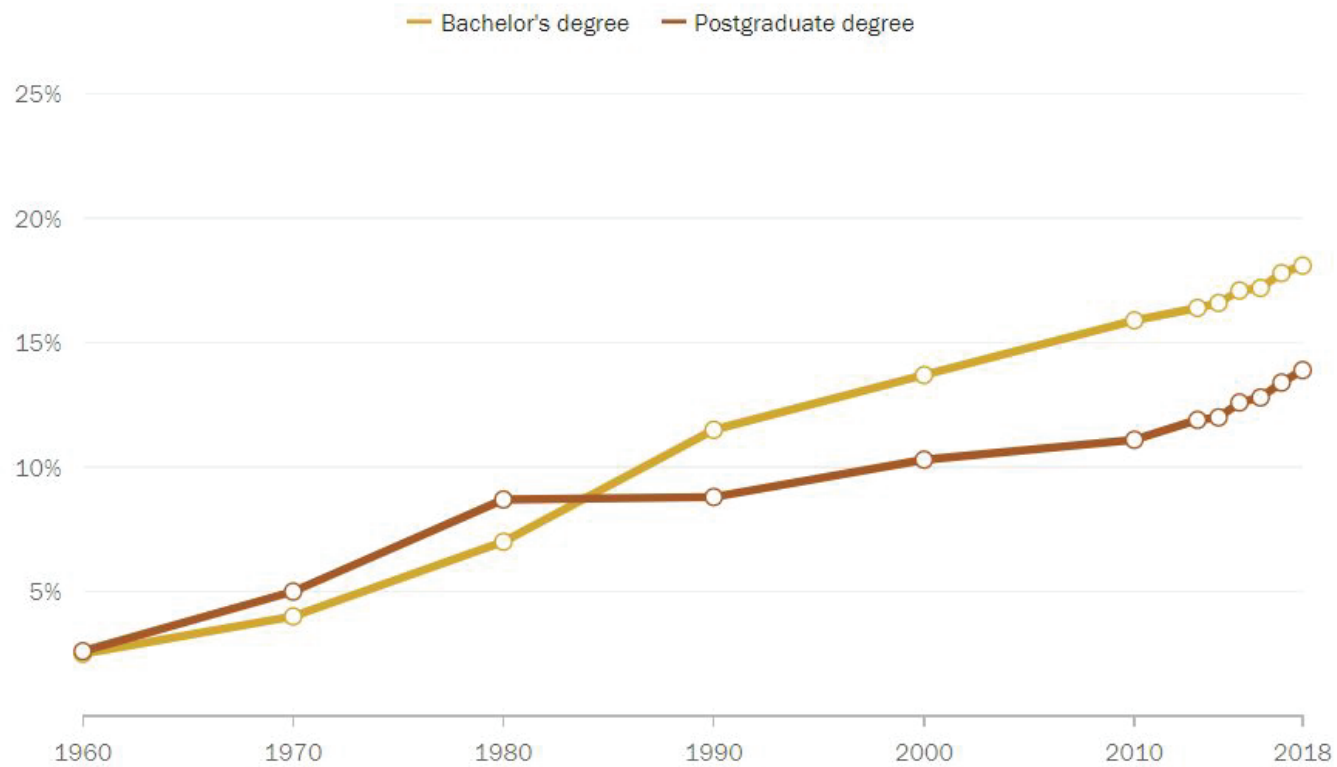
## **Policy**

- Barriers to Care
- Disparities
- Employment
- Health Insurance
- Income
- Medicare
- Military Service
- Service Access & Eligibility
- Transportation



## Educational attainment among U.S. immigrants, 1960-2018

*% of immigrants ages 25 and older whose highest level of education is a \_\_\_\_*



Source: Pew Research Center tabulations of 1960-2000 decennial censuses and 2010, 2013-2018 American Community Surveys (IPUMS).

**PEW RESEARCH CENTER**

# Concluding Thoughts

- All US microdata collections are appropriate for identifying aging immigrant populations
- Select between data collections based on outcomes, topical and temporal coverage, and level of detail available in key measures for your research application

# More Ways to Connect

- Email: [ipums@umn.edu](mailto:ipums@umn.edu)
- Virtual office hours
  - *Tuesday, February 20, 1:00-2:30pm CT*
  - [Registration is required](#), but you can drop in anytime with your questions

