

The Past, Present, and Future of Microdata for Research on Social Inequality

Rob Warren, Director
Minnesota Population Center



UNIVERSITY OF MINNESOTA

Past

Present

Future

Past

Present

Future

Integrating Historical Microdata

Past Integrating Historical Microdata
Present IPUMS CPS
Future

Past	Integrating Historical Microdata
Present	IPUMS CPS
Future	Ongoing Record Linkage Initiatives

Past	Integrating Historical Microdata
Present	IPUMS CPS
Future	Ongoing Record Linkage Initiatives



P03 REL RELATIONSHIP TO HEAD

100 HEAD OF HOUSEHOLD
108 PARTNER / COHEAD
120 WIFE OF HEAD
128 WIFE OF PARTNER/COHEAD
129 SECOND OR THIRD WIFE OF HEAD
130 CHILD OF HEAD
131 STEP-CHILD OF HEAD
132 ADOPTED CHILD OF HEAD
133 SON/DAUGHTER-IN-LAW
136 FOSTER CHILD / FOUNDLING
140 HUSBAND / NOT HEAD
200 RELATIVE - UNSPECIFIED
210 PARENT OF HEAD
211 STEP-PARENT OF HEAD
213 PARENT-IN-LAW OF HEAD
220 BROTHER/SISTER OF HEAD
221 STEP/HALF BROTHER/SISTER
223 BROTHER/SISTER-IN-LAW
230 NIECE/NEPHEW
232 ADOPTED NIECE/NEPHEW
233 NIECE/NEPHEW-IN-LAW
237 GRAND NIECE/NEPHEW
240 COUSIN
243 COUSIN-IN-LAW
249 SECOND COUSIN
250 AUNT/UNCLE OF HEAD
253 AUNT/UNCLE-IN-LAW
260 GRANDPARENT OF HEAD
261 STEP-GRANDPARENT
263 GRAND-PARENT-IN-LAW
270 GRANDCHILD OF HEAD
271 STEP-GRANDCHILD

1900 Census

One variable,
72 Categories

RELAT1

2

2

Relationship

00

Householder

Family member other than householder:

01

Spouse

02

Child

03

Brother or sister

04

Parent

05

Other relative (See RELAT2)

Person not related to householder:

06

Roomer or boarder

07

Partner or roommate

08

Paid employee

09

Other nonrelative

In group quarters:

10

Inmate

11

Noninmate

1980 Census

Two variables,
20 Categories

RELAT2

1

4

Detailed Relationship

0

N/A (person not listed as 'other relative' of householder)

1

Son-in-law or daughter-in-law

2

Grandchild

3

Father-in-law or mother-in-law

4

Brother-in-law or sister-in-law

5

Nephew or niece

6

Grandparent

7

Uncle or aunt

8

Cousin

9

Other person related by blood or

RELATE

ADD TO CART

SELECT SAMPLES

Relationship to household head

Group: [Demographic — PERSON](#)

DESCRIPTION

CODES

COMPARABILITY

UNIVERSE

AVAILABILITY

QUESTIONNAIRE TEXT

FLAGS

Codes and Frequencies

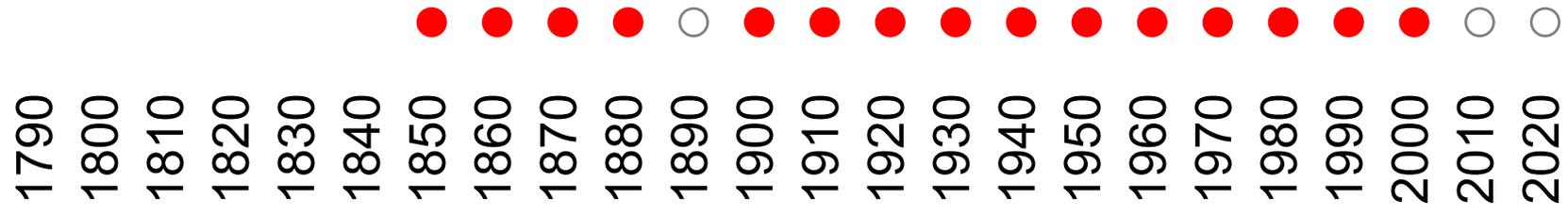
- Category availability view
- Case-count view
- General codes
- Detailed codes

An 'X' indicates the category is available for that sample

Code	Label	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1990	1980	1970	1970	1960	1950	1940	1930	1920	Code	Label	1910	1900	
		acs	5pct	5pct	5pct	met2	met1	5pct	1pct	1pct	5pct	1pct			1pct	5pct															
RELATIVES																														RELATIVES	
01	Head/Householder	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	X	01	Head/Householder	X	
02	Spouse	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	X	02	Spouse	X	
03	Child	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	X	03	Child	X	
04	Child-in-law	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	X	04	Child-in-law	X	
05	Parent	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	X	05	Parent	X	
06	Parent-in-Law	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	X	06	Parent-in-Law	X	
07	Sibling	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	X	07	Sibling	X	
08	Sibling-in-Law	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	X	08	Sibling-in-Law	X	
09	Grandchild	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	X	09	Grandchild	X	
10	Other relatives	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	X	10	Other relatives	X	
NON-RELATIVES																														NON-RELATIVES	
11	Partner, friend, visitor	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	X	11	Partner, friend, visitor	X	
12	Other non-relatives	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	X	12	Other non-relatives	X	
13	Institutional inmates	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	X	13	Institutional inmates	X	

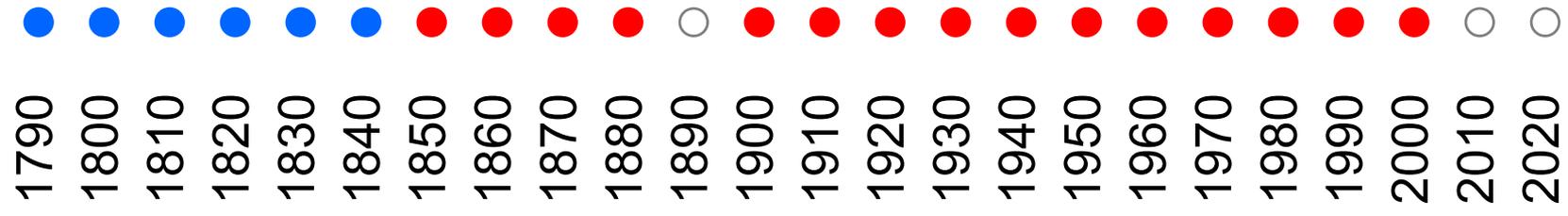
U.S. Census Microdata Collections

1790-2000



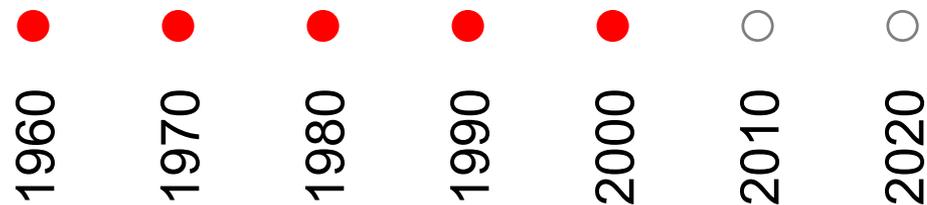
U.S. Census Microdata Collections

1790-2000



U.S. Microdata Collections

Decennial Censuses

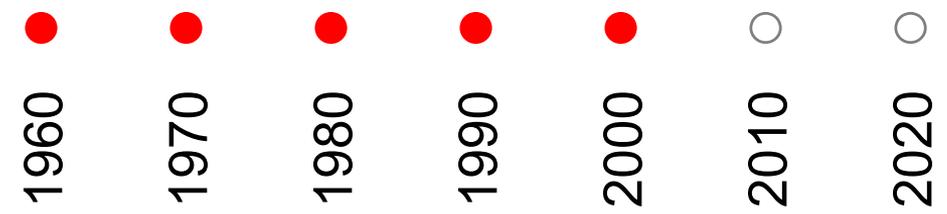


U.S. Microdata Collections

ACS (2000-)



Decennial Censuses



U.S. Microdata Collections

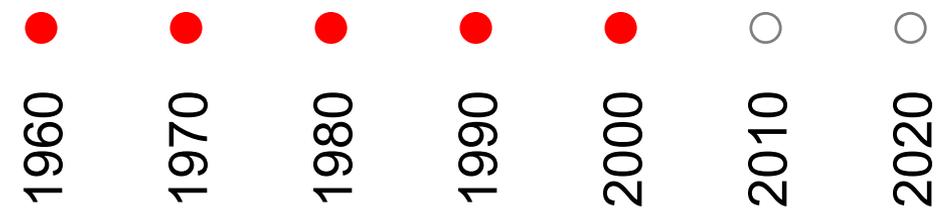
CPS (1962-)



ACS (2000-)



Decennial Censuses

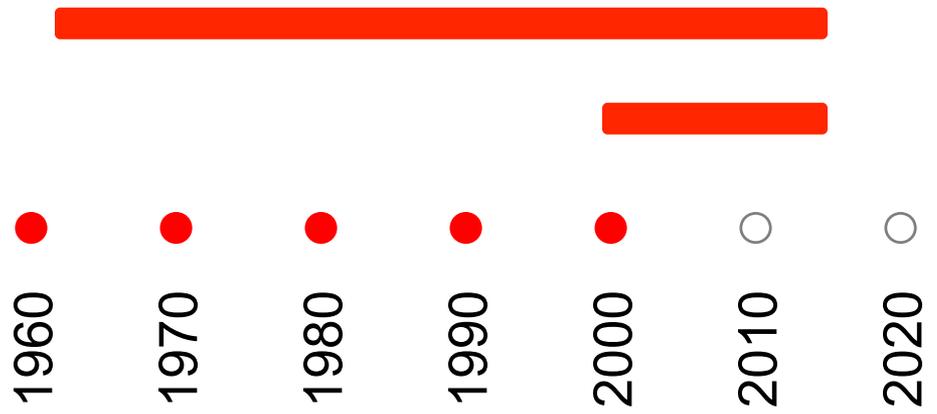


U.S. Microdata Collections

CPS (1962-)

ACS (2000-)

Decennial Censuses



DATA CART
YOUR DATA EXTRACT

0 VARIABLES
23 SAMPLES

[VIEW CART](#)

RELATE

[ADD TO CART](#)

[CHANGE SAMPLES](#)

Relationship to household head
Group: [Demographic — PERSON](#)

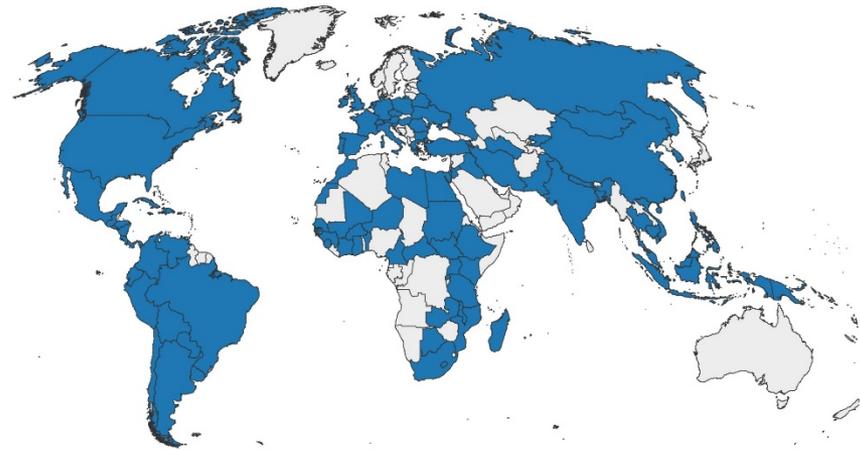
CODES	DESCRIPTION	COMPARABILITY	UNIVERSE	AVAILABILITY	QUESTIONNAIRE TEXT	SOURCE VARIABLES
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Codes and Frequencies

- Category availability view
- Case-count view
- General codes
- Detailed codes

An 'X' indicates the category is available for that sample

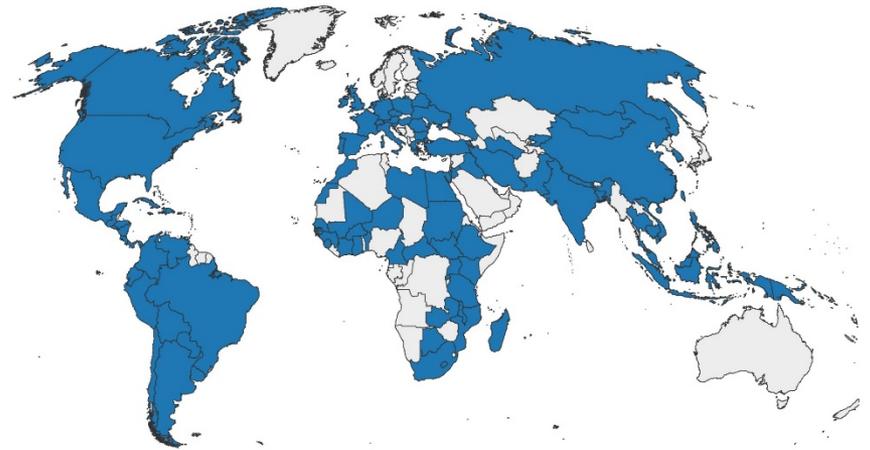
Code	Label	BW 2011	BF 2006	CM 2005	EG 2006	ET 2007	GH 2010	GN 1996	KE 2009	LR 2008	MW 2008	ML 2009	MA 2004	MZ 2007	NG 2010	RW 2002	SN 2002	SL 2004	ZA 2011	SS 2008	SD 2008	TZ 2012	UG 2002	ZM 2010
1	Head	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	Spouse/partner	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	Child	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	Other relative	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	Non-relative	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	Other relative or non-relative	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
9	Unknown	X	X	X	.	.	.	X	.	X	.	.	.	.	X	X	.	.	.	.	.	.	X	.



Censuses of 89 Countries (So Far)

336 Samples (So Far)

1701 to the present



Censuses of 89 Countries (So Far)

336 Samples (So Far)

1701 to the present



DATA

[BROWSE AND SELECT DATA](#)
[MY DATA EXTRACTS](#)
[GEOGRAPHY AND GIS](#)
[REGISTER TO USE IPUMS-DHS](#)

DOCUMENTATION

[SAMPLE DESCRIPTIONS](#)
[QUESTIONNAIRES AND REPORTS](#)
[USER GUIDES](#)

PROJECT

HEALTH DATA ON WOMEN AND CHILDREN IN THE DEVELOPING WORLD

IPUMS-DHS facilitates analysis of Demographic and Health Surveys, administered in low- and middle-income countries since the 1980s. IPUMS-DHS contains thousands of consistently coded variables on the health and well-being of women, children, and births, for 20 African countries and India. Users can determine variable availability at a glance and create data files with just the variables and samples they need.

21 COUNTRIES -- 96 SAMPLES -- 5000 VARIABLES



DATA

[BROWSE AND SELECT DATA](#)
[MY DATA EXTRACTS](#)
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21 COUNTRIES -- 96 SAMPLES -- 5000 VARIABLES

Demographic and Health Surveys

21 Countries, 96 Samples (So Far)

Benin	1996-2011	4	Malawi	1992-2010	4
Burkina Faso	1993-2010	4	Mali	1987-2012	5
Cameroon	1991-2011	4	Mozambique	1997-2011	3
Cote d'Ivoire	1994-2011	3	Niger	1992-2012	4
Egypt	1988-2014	7	Nigeria	1990-2013	5
Ethiopia	2000-2011	3	Rwanda	1992-2014	5
Ghana	1988-2014	6	Tanzania	1991-2015	6
Guinea	1999-2012	3	Uganda	1988-2011	5
India	1992-2005	3	Zambia	1992-2013	5
Kenya	1989-2014	6	Zimbabwe	1988-2015	6
Madagascar	1992-2008	4			



PROJECT

- [ABOUT IPUMS TERRA](#)
- [RESEARCH EXAMPLES](#)
- [PRESENTATIONS](#)
- [PARTNERS](#)
- [PEOPLE](#)

INTEGRATED POPULATION AND ENVIRONMENTAL DATA

IPUMS Terra integrates population and environmental data across disciplinary scientific domains, enabling research into dramatic transformations of human populations, the environment, and their interactions.



Global-scale data on

- human population characteristics
- land use
- land cover
- climate and other environmental characteristics

Data are interoperable across time and space

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.



U.S. Census and American Community Survey microdata from 1850 to the present.

[VISIT SITE](#)

Current Population Survey microdata including basic monthly surveys and supplements from 1962 to the present.

[VISIT SITE](#)

Census microdata covering 82 countries from 1960 to the present. [IPUMS NAPP](#) offers microdata from the 19th and early 20th centuries.

[VISIT SITE](#)

Demographic and Health Surveys integrated for analysis across time and space from 1980 to the present.

[VISIT SITE](#)

Tabular U.S. Census data and GIS boundary files from 1790 to the present.

[VISIT SITE](#)

Integrated data on population and the environment from 1960 to the present.

[VISIT SITE](#)

Historical and contemporary time use data from 1965 to the present.



Health survey data from the National Health Interview Survey from the 1960s to the present.



Survey data on the science and engineering workforce in the U.S. from 1993 to the present.

RESEARCH AWARDS

Submissions for IPUMS Research Award are now closed.

[BROWSE PREVIOUS AWARD WINNERS](#)

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CALENDAR

JUNE 25-27, 2017

Academy Health
Hyatt Regency, New Orleans, LA

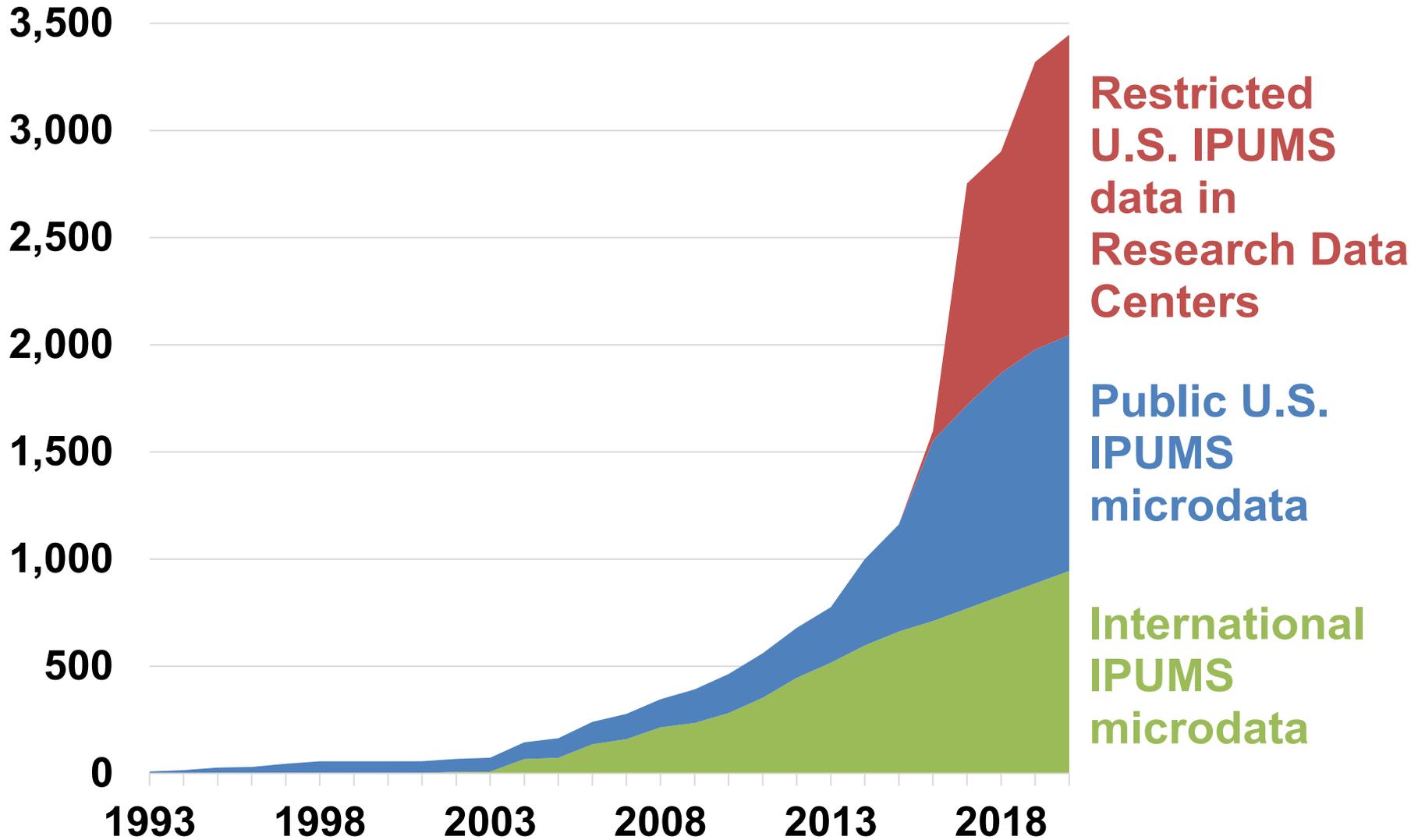
JULY 16-21, 2017

61st ISI World Statistics Congress (WSC)
Marrakech, Morocco

[VIEW MORE EVENTS](#)

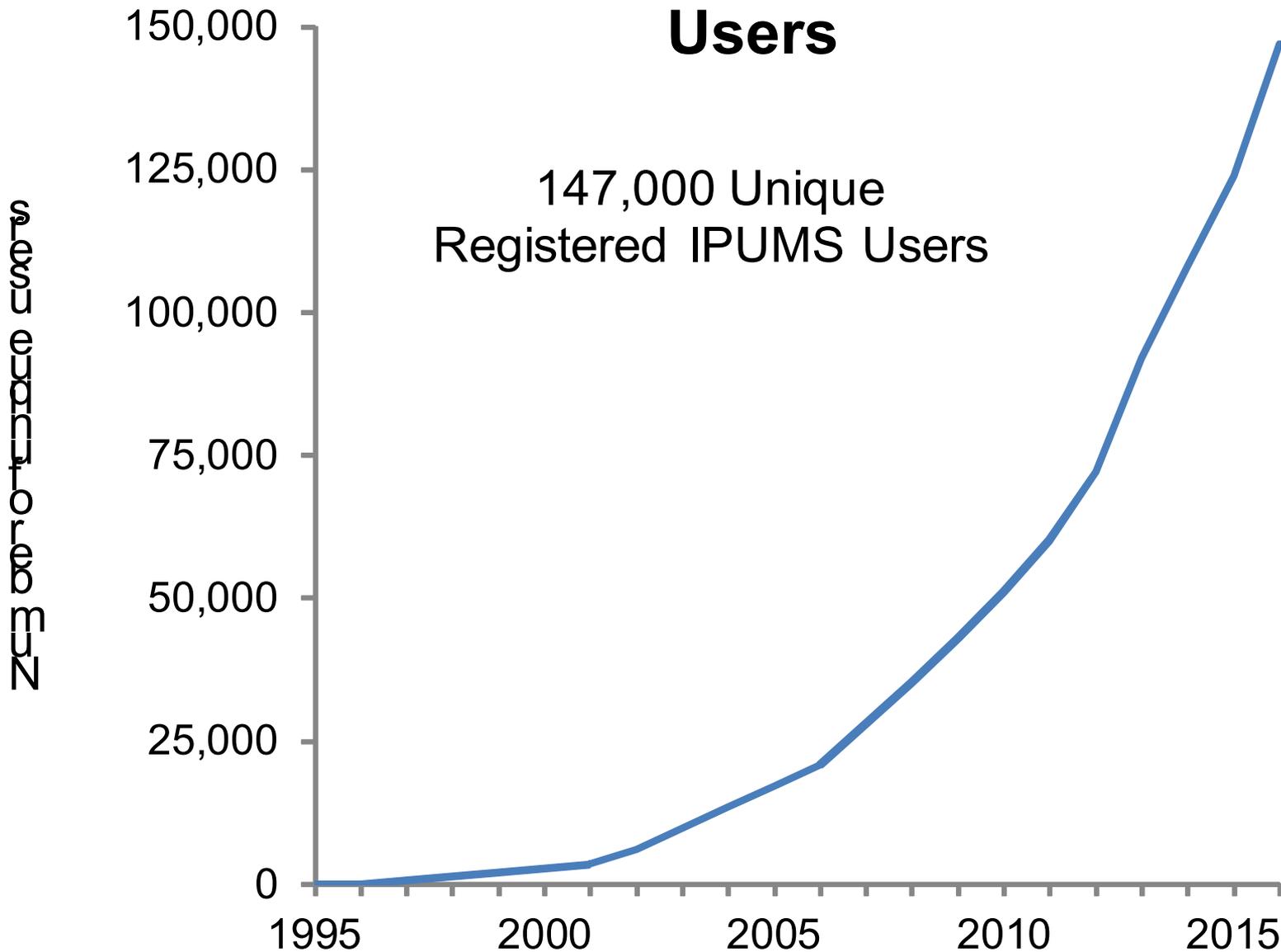
Available IPUMS Microdata 1993-2020

(Millions of Person Records)



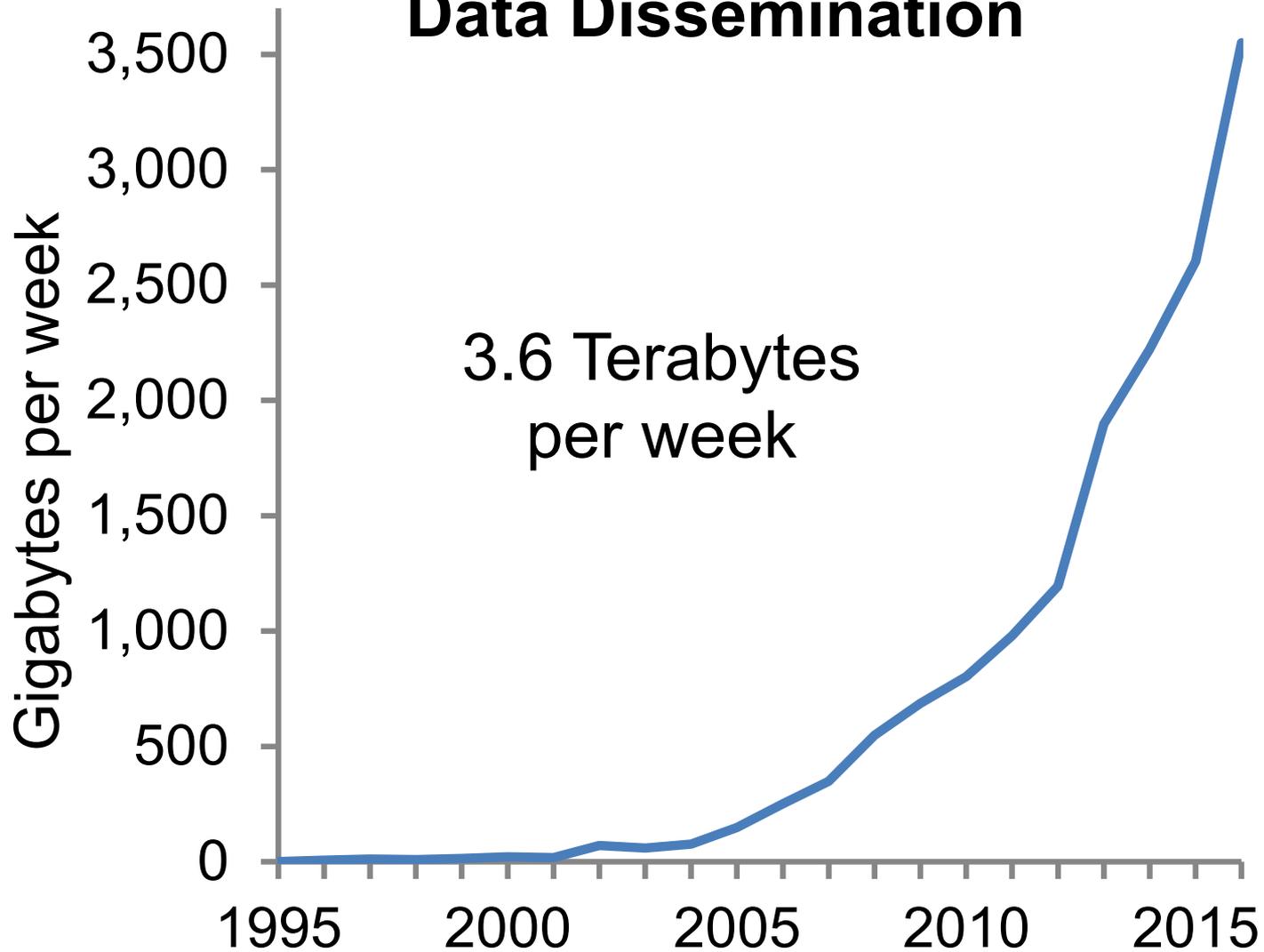
Users

147,000 Unique
Registered IPUMS Users

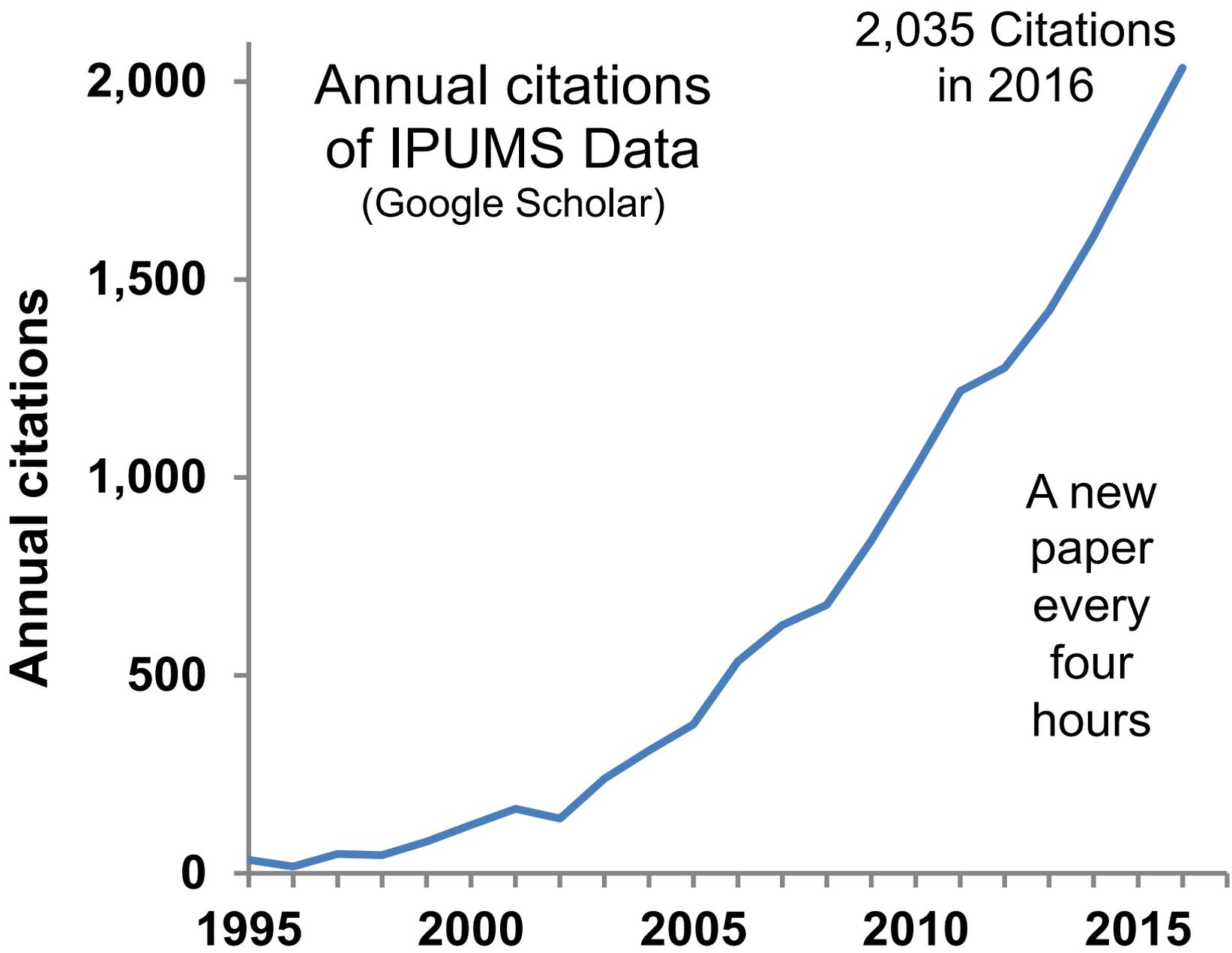


Registered IPUMS data users, 1995-2016

Data Dissemination



IPUMS Data Dissemination



Past Integrating Historical Microdata
Present IPUMS CPS
Future Ongoing Record Linkage Initiatives

Current Population Survey (CPS)

Sample of civilian, household based population

Each month, ~140k people in ~70k households

Basic Monthly Survey: Labor force, demography

Supplemental Surveys: e.g., education, food security, civic engagement, computer/internet use, veterans

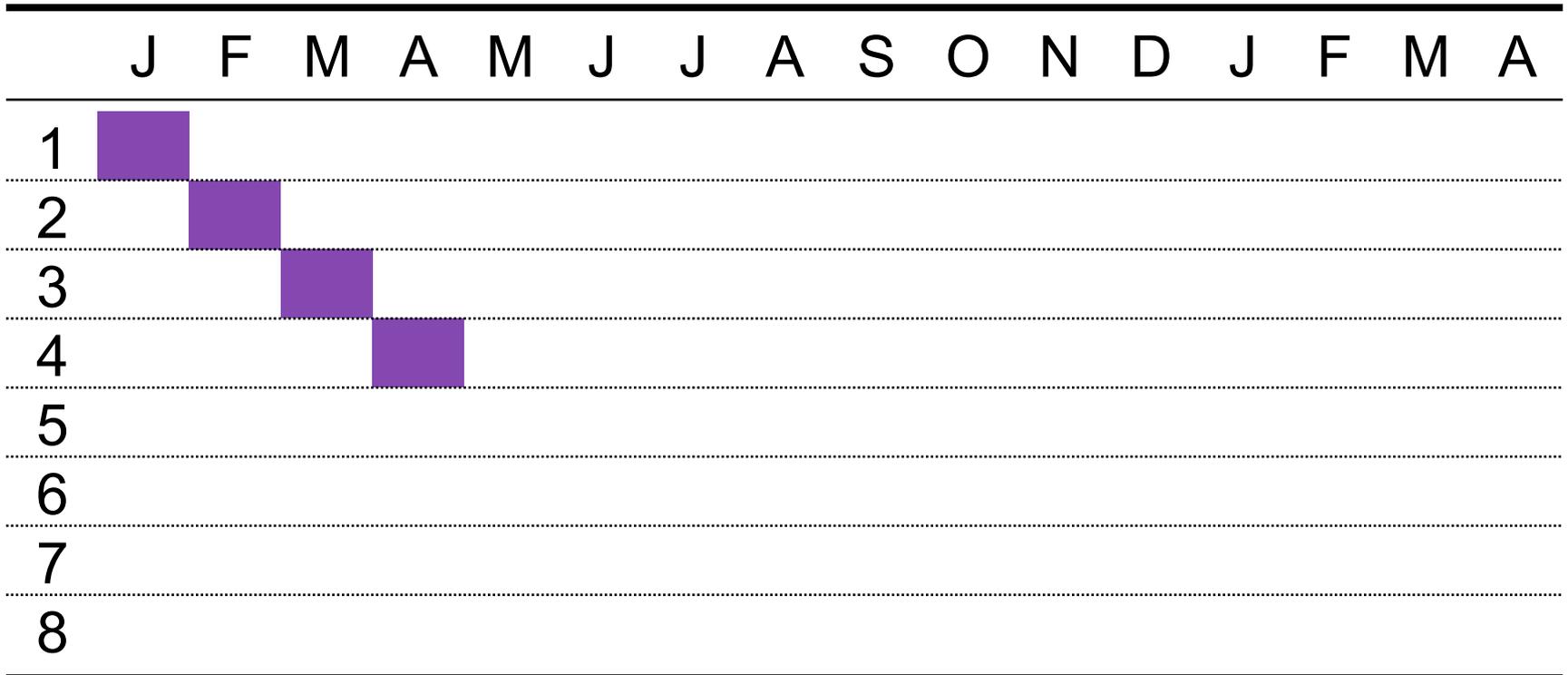
Annual Social and Economic Supplement (ASEC):

Income, poverty, other social and economic measures

Current Population Survey (CPS)

	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A
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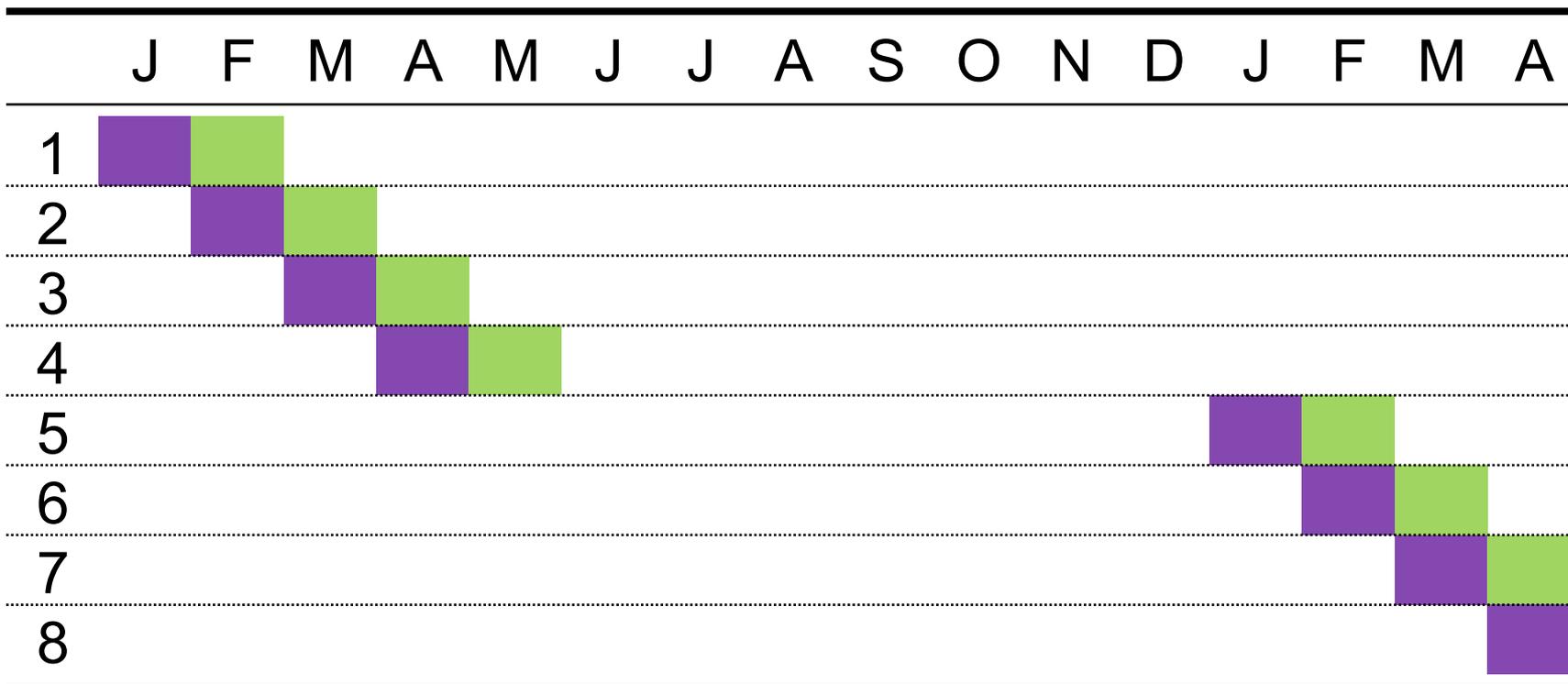
Current Population Survey (CPS)



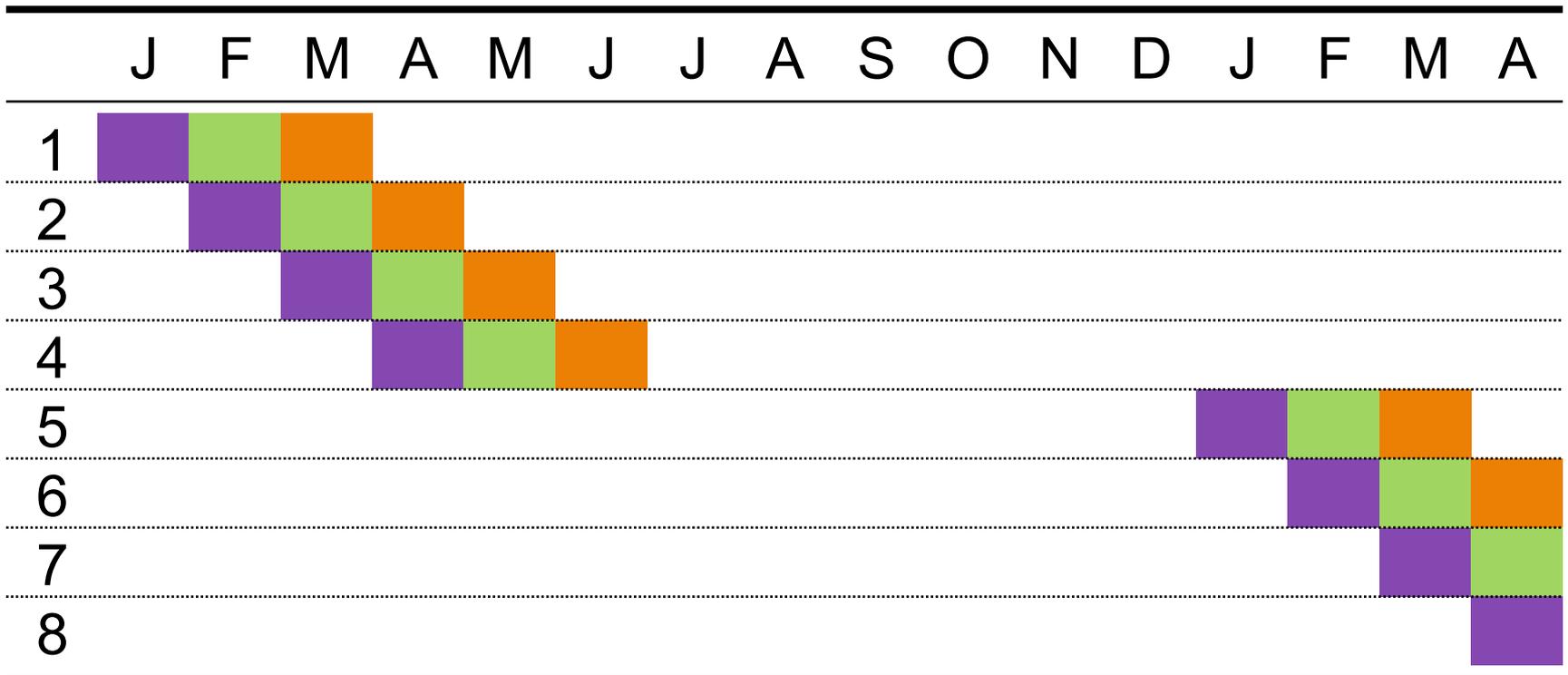
Current Population Survey (CPS)



Current Population Survey (CPS)



Current Population Survey (CPS)



Current Population Survey (CPS)

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Current Population Survey (CPS)

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Current Population Survey (CPS)

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Current Population Survey (CPS)

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7																
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"The Data Specialists"

- [Home](#)
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- CPS Utilities**
- General Information
- Why CPS Utilities?
- What is the CPS?
- What do I Receive?
- Features
- Survey Topics
- What are the Prices?
- Support and Download
- Frequently Asked Questions
- Output Examples and Screenshots
- SIPP Utilities**
- NLTCS Utilities**
- Medicare Data Utilities**
- News**
- CPS on Web**

Current Population Survey Data, Documentation, and Extraction Software Overview

The CPS Utilities provide compressed data, documentation, and extraction software for the Current Population Surveys. Currently, our Historical Series of Annual Supplements include all extant January, February, March, May, June, October, November, Computer Usage, Tobacco Usage, Outgoing Rotations, Food Security, Child Support/Alimony, Immunization, and Veterans surveys, containing data from as early as 1962.

- | | |
|--|--|
|  Why CPS Utilities? |  CPS Utilities Features |
|  What is the CPS? |  CPS Survey Topics |
|  What do Subscribers Receive? |  Price list |

 [Why CPS Utilities?](#)

Email support@unicon.com if you have questions about CPS Utilities.
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IPUMS-CPS

Integrated, harmonized, well-documented,
freely-disseminated CPS files

Basic Monthlies: January 1976 – March 2017

ASEC Supplements: 1976 – 2016

IPUMS-CPS

ASEC BASIC MONTHLY SUPPLEMENT TOPICS

Additional data are collected on a semi-regular basis as supplements to the Current Population Survey, which is fielded monthly.

CIVIC ENGAGEMENT

COMPUTER AND INTERNET USE

DISPLACED WORKER

EDUCATION

FERTILITY AND MARRIAGE

FOOD SECURITY

JOB TENURE

PUBLIC ARTS

TOBACCO USE

VETERANS

VOLUNTEER

VOTER

WORK SCHEDULES

Select All Samples

[Supplement documentation](#)

2013 [Nov](#)

2011 [Nov](#)

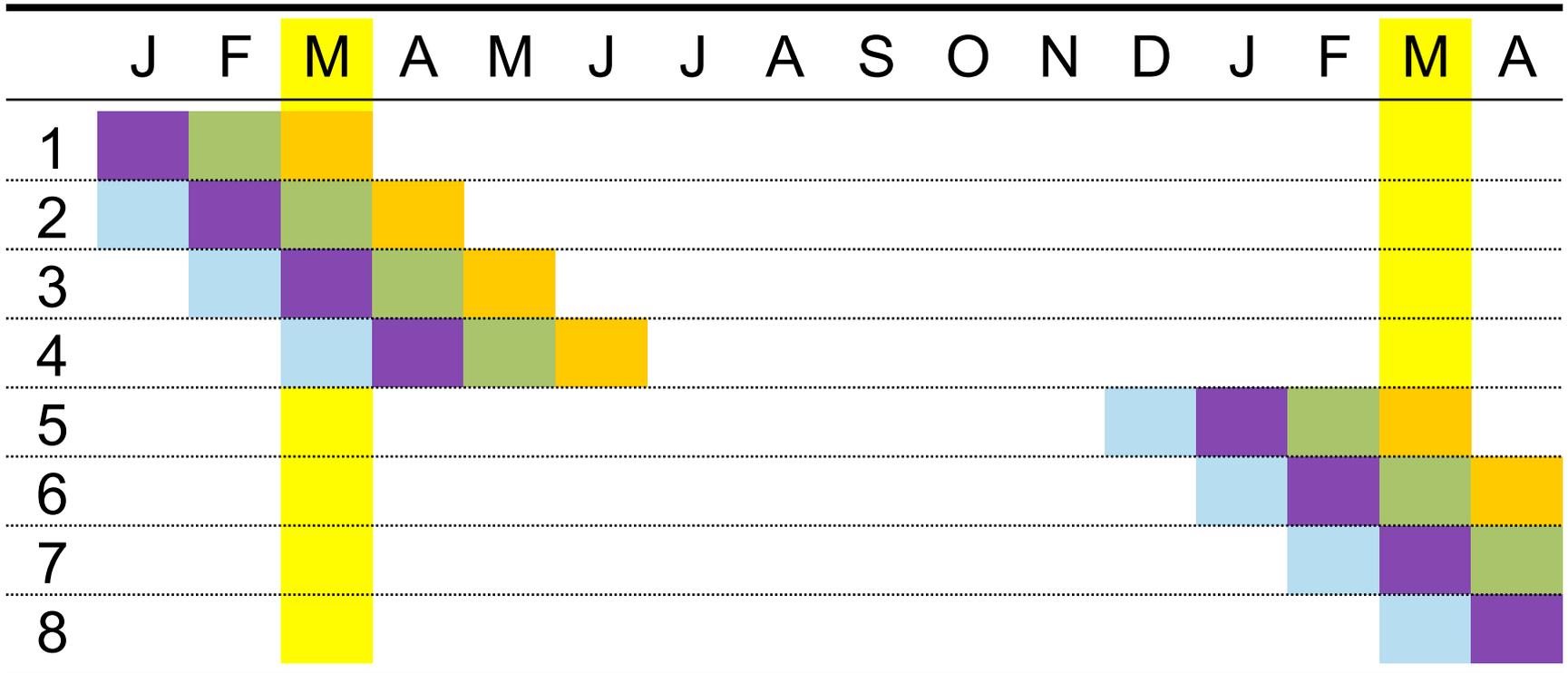
2010 [Nov](#)

2008 [Nov](#)

Current Population Survey (CPS)



Current Population Survey (CPS)



IPUMS-CPS

Integrated, harmonized, well-documented,
freely-disseminated CPS files

Basic Monthlies and Most Supplements:
Fully linked from 1976 forward

ASEC Supplements: Linked 1989 forward

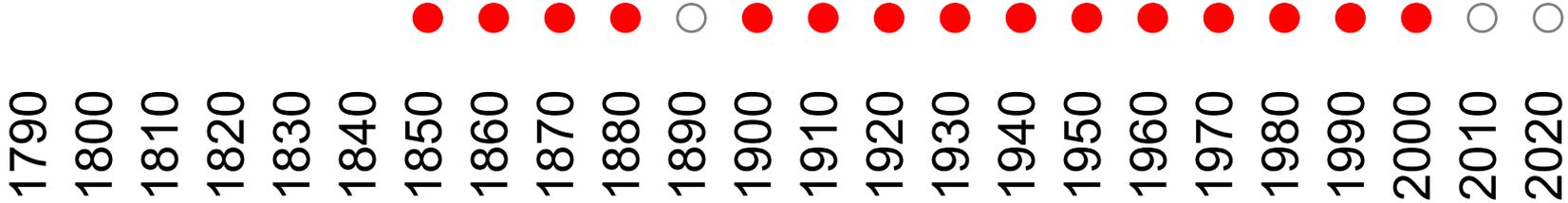
IPUMS-CPS

Short-term panel study of 16,000 household-based Americans ...

...with a fresh panel of 16,000 people starting the CPS every calendar month...

... across about four decades

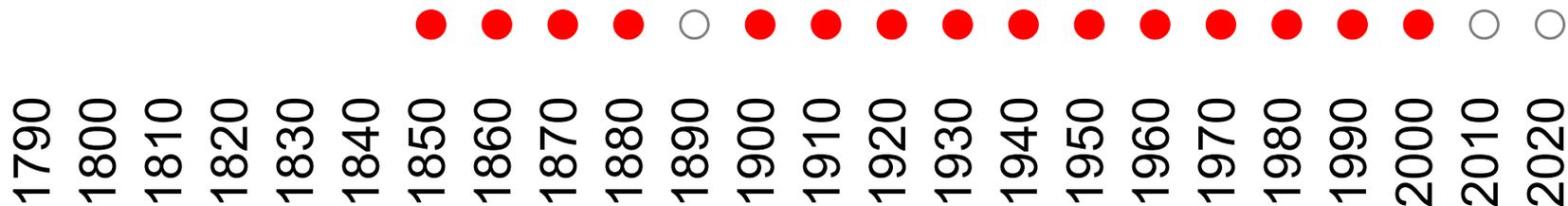
Past	Integrating Historical Microdata
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IPUMS-MLP

(Multigenerational Longitudinal Panel)

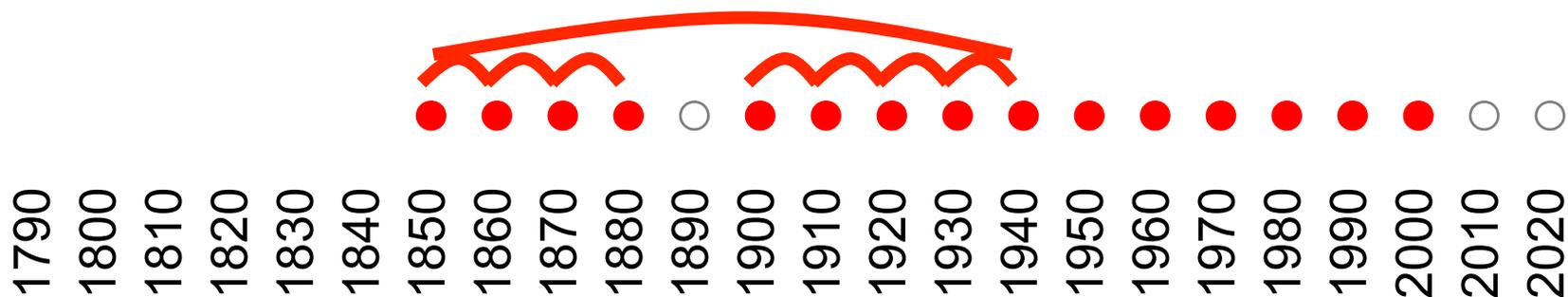
Minnesota Population Center (MPC)



IPUMS-MLP

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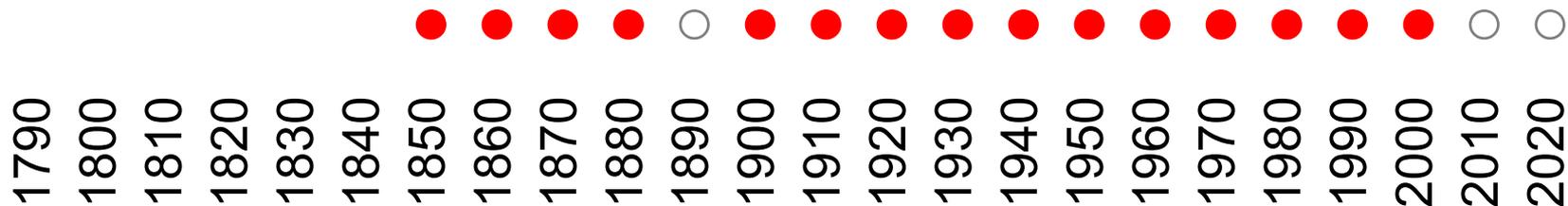
Minnesota Population Center (MPC)



CLIP

(Census Longitudinal Infrastructure Project)

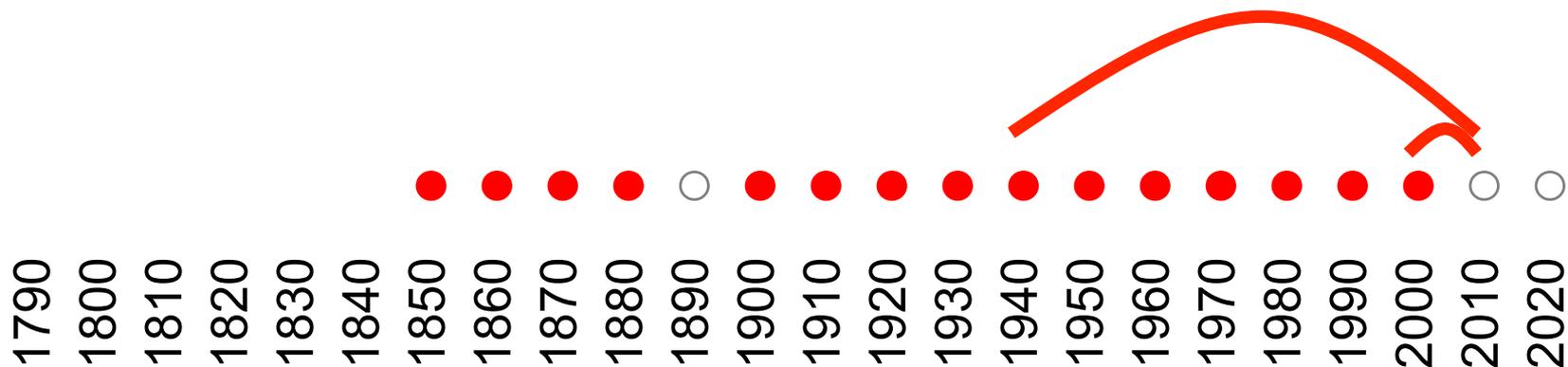
Center for Administrative Records Research and Applications (CARRA)



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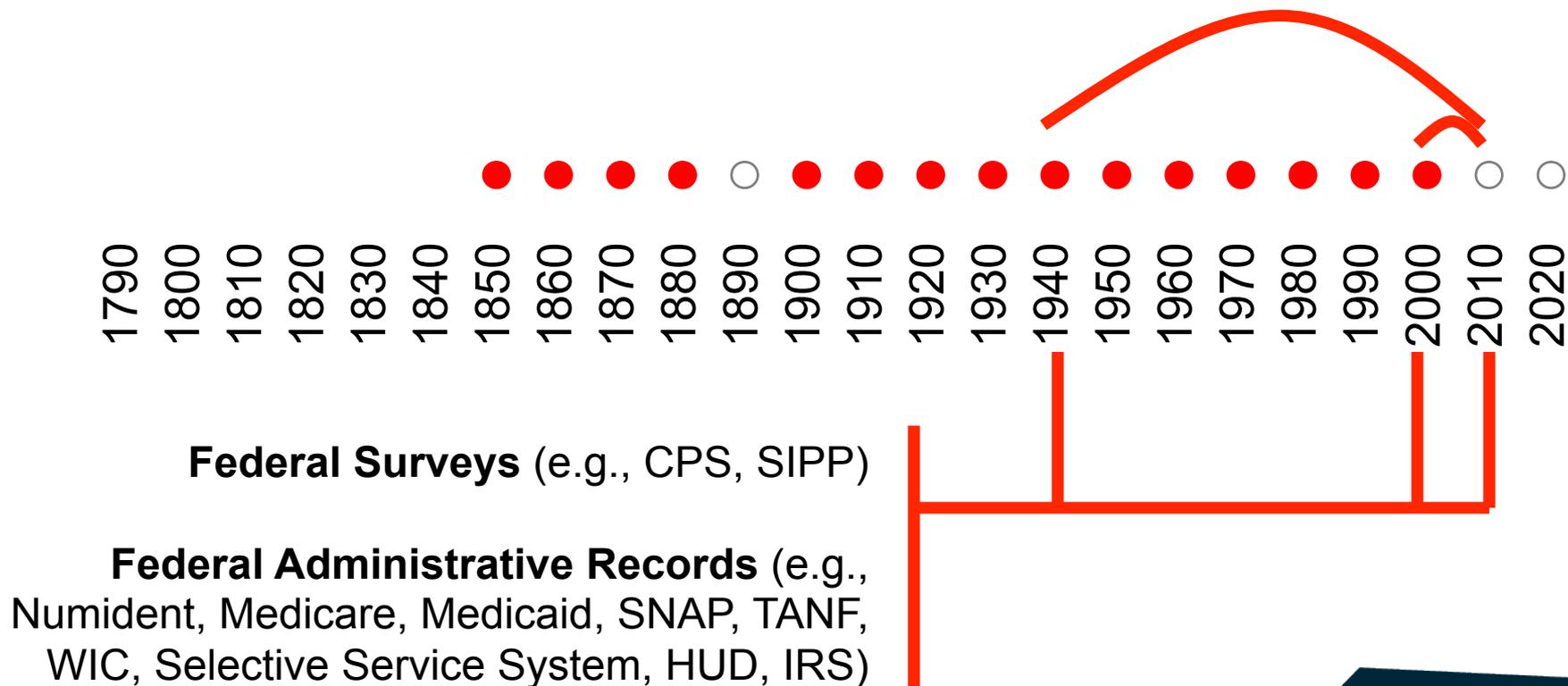
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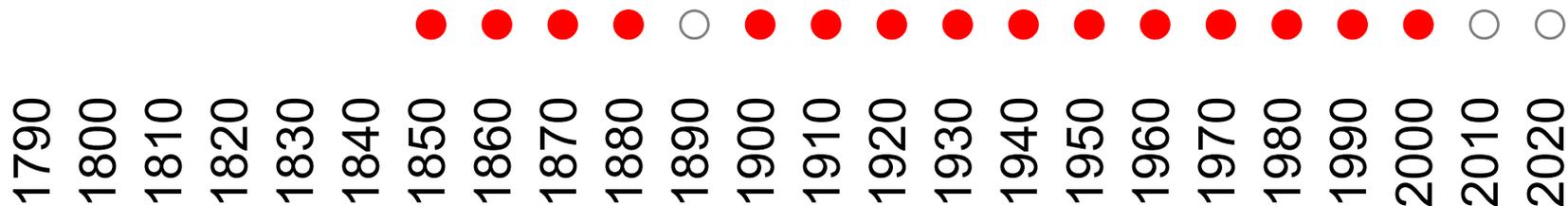
Center for Administrative Records Research and Applications (CARRA)



AOS

(American Opportunity Study)

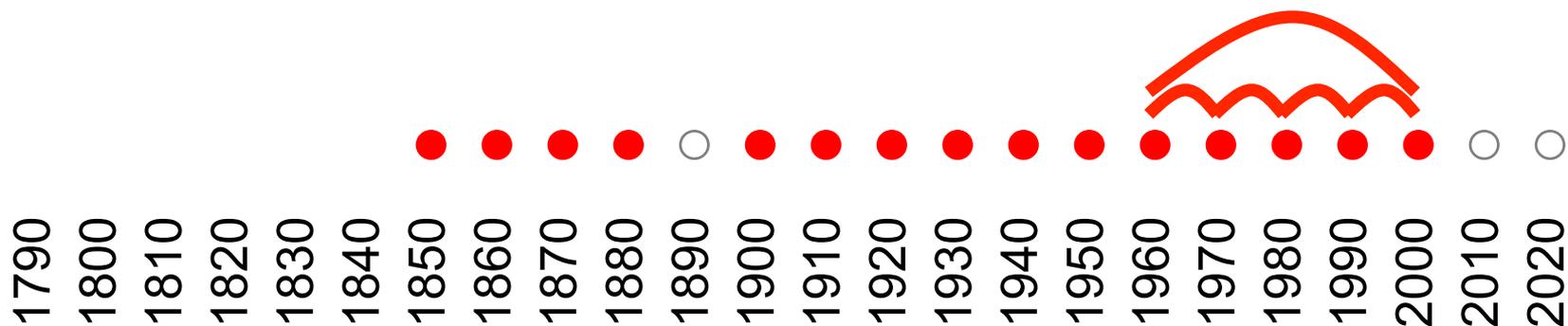
David Grusky & Team



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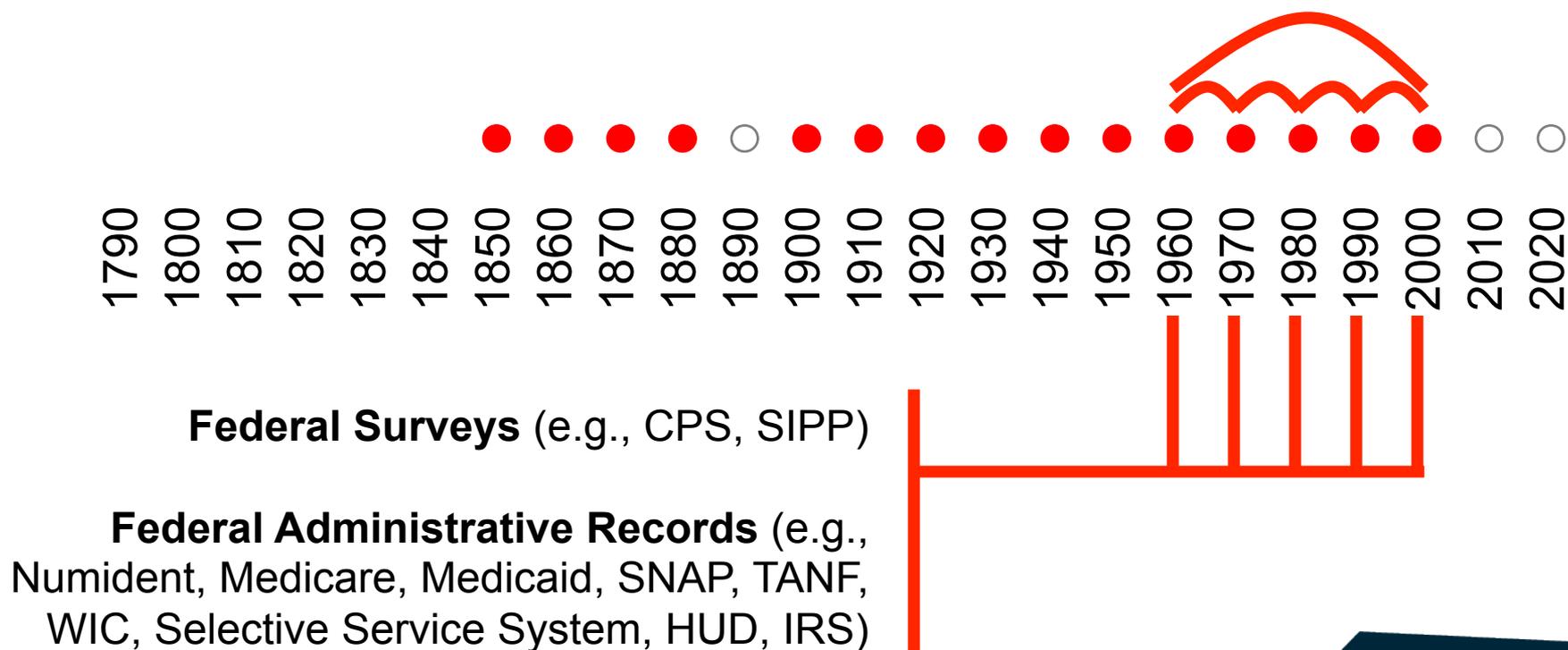
David Grusky & Team



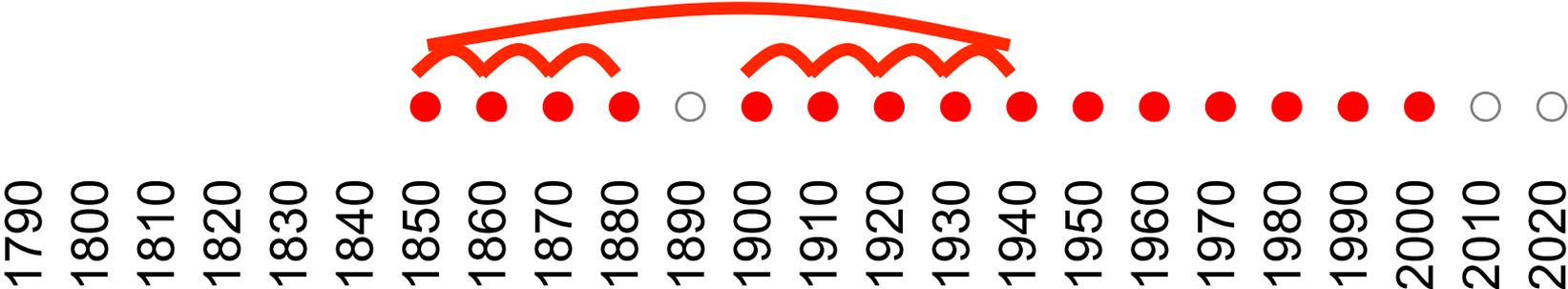
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(American Opportunity Study)

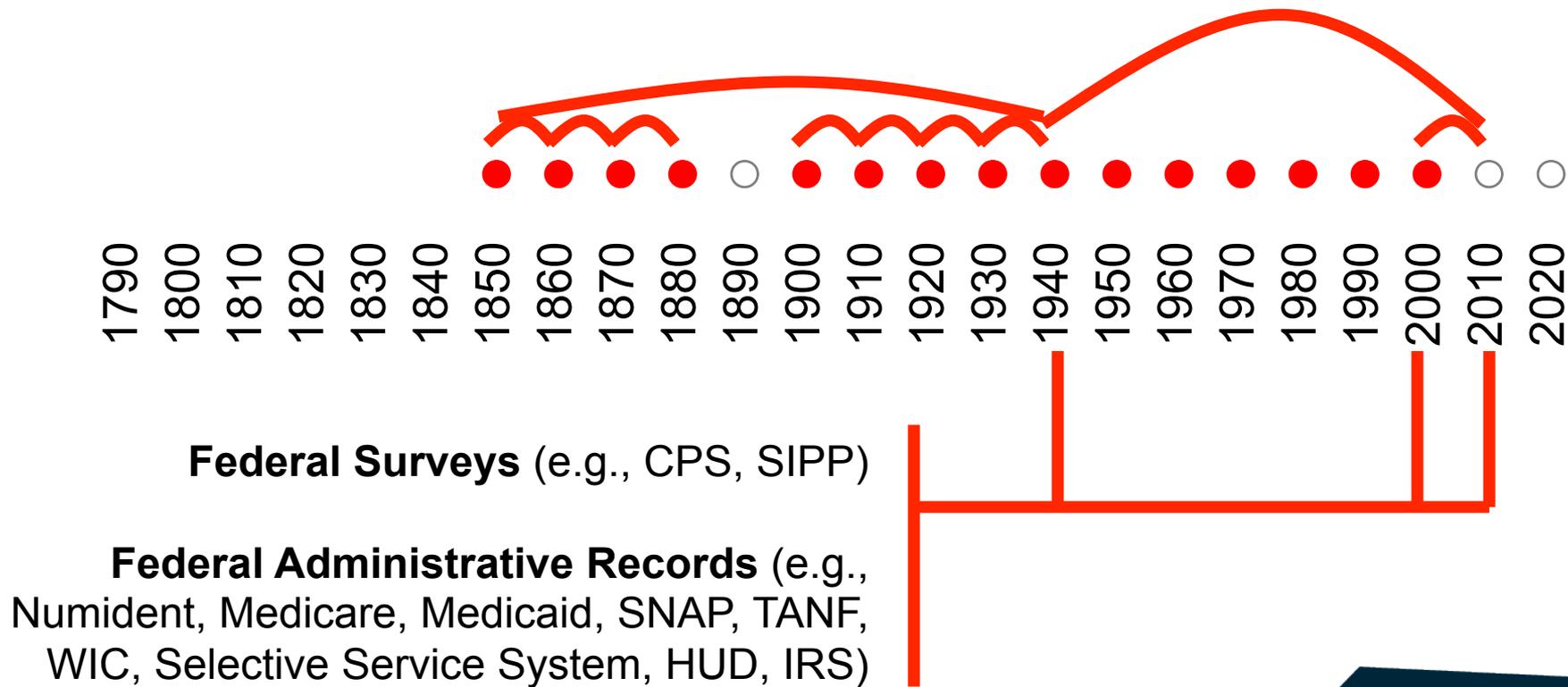
David Grusky & Team



IPUMS-MLP



IPUMS-MLP + CLIP



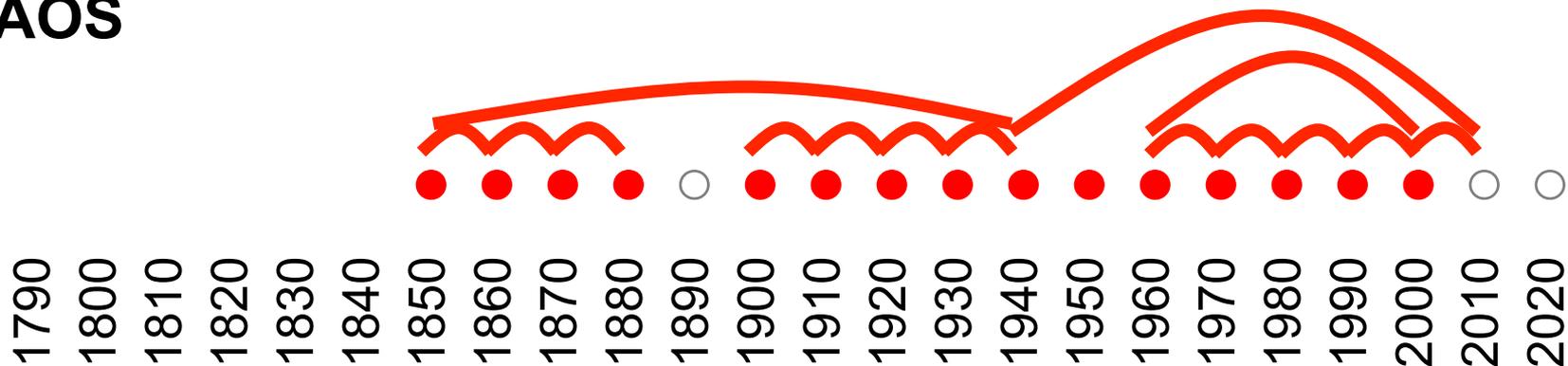
IPUMS-MLP

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CLIP

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AOS



Federal Surveys (e.g., CPS, SIPP)

Federal Administrative Records (e.g.,
Numident, Medicare, Medicaid, SNAP, TANF,
WIC, Selective Service System, HUD, IRS)

IPUMS-MLP

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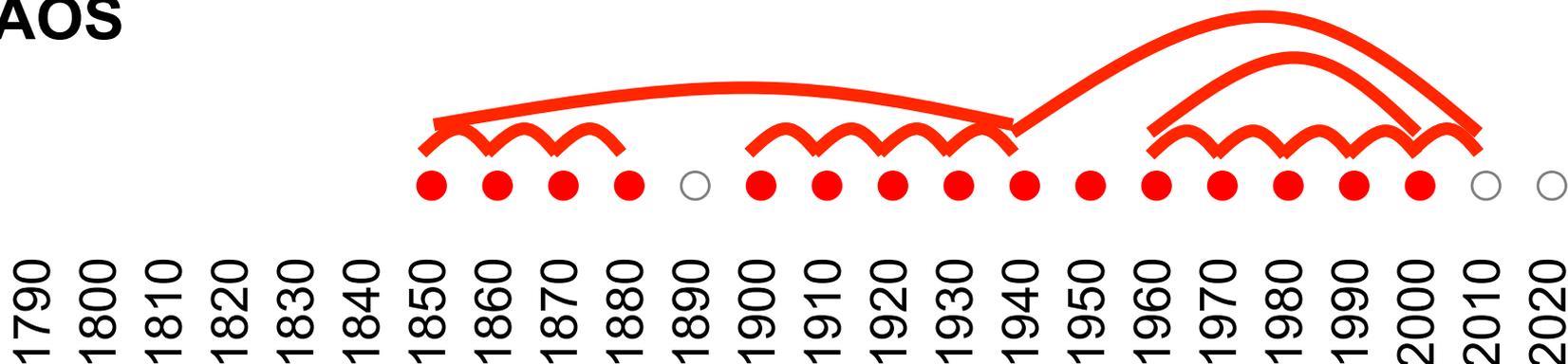
CLIP

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AOS

Longitudinal data on virtually all Americans 1850 forward, linked to modern federal surveys and modern administrative data



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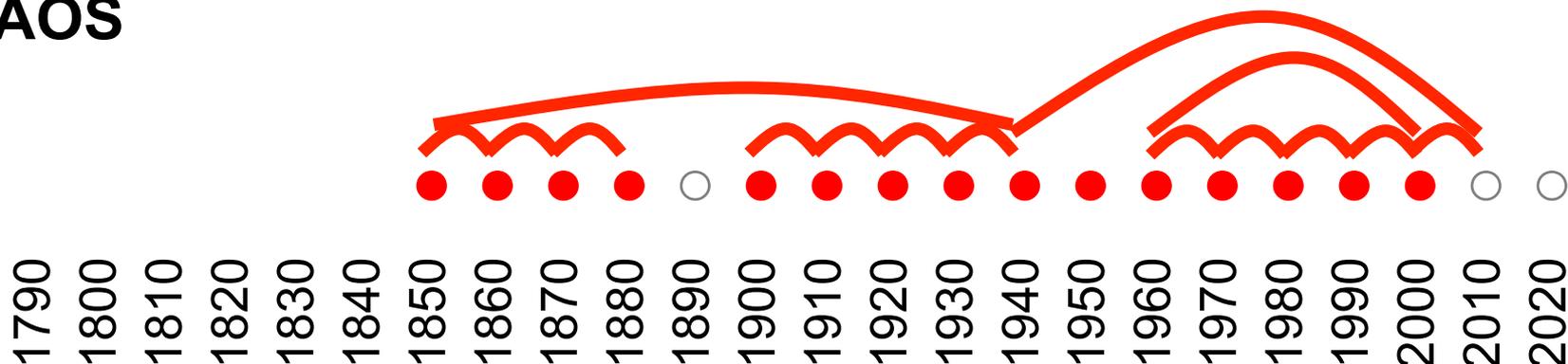
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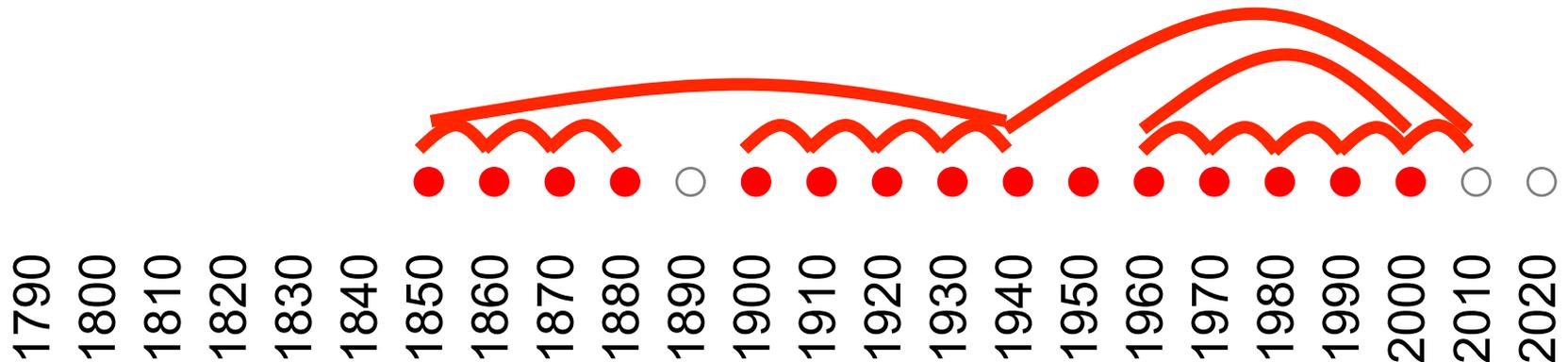


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Insert Your Survey Data Here

(Pause)



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Insert Your Survey
Data Here

1. Analyzing CPS Data?

(Especially linked CPS data?)

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Consider using IPUMS-CPS

<https://cps.ipums.org/cps/>



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2. Data Silos are Crumbling

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(Especially linked CPS data?)

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2. Data Silos are Crumbling

It is time to re-imagine what is possible for research on social inequality

IPUMS

<https://www.ipums.org/>

IPUMS – CPS

<https://cps.ipums.org/cps/>

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(NIH/NICHD R24HD041023)