



11-2018

Harnessing Administrative Records for Official Statistics on People and Households

Misty L. Heggeness
US Census Bureau

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Harnessing Administrative Records for Official Statistics on People and Households

Abstract

The availability and excessiveness of alternative (non-survey) data sources, collected on a daily, hourly, and sometimes second-by-second basis, has challenged the federal statistical system to update existing protocol for developing official statistics. Federal statistical agencies collect data primarily through survey methodologies built on frames constructed from administrative records. They compute survey weights to adjust for non-response and unequal sampling probabilities, impute answers for nonresponse, and report official statistics via tabulations from these survey. The U.S. federal government has rigorously developed these methodologies since the advent of surveys -- an innovation produced by the urgent desire of Congress and the President to estimate annual unemployment rates of working age men during the Great Depression.

In the 1930s, Twitter did not exist; high-scale computing facilities were not abundant let alone cheap, and the ease of the ether was just a storyline from the imagination of fiction writers. Today we do have the technology, and an abundance of data, record markers, and alternative sources, which, if curated and examined properly, can help enhance official statistics. Researchers at the Census Bureau have been experimenting with administrative records in an effort to understand how these alternative data sources can improve our understanding of official statistics. Innovative projects like these have advanced our knowledge of the limitations of survey data in estimating official statistics. This paper will discuss advances made in linking administrative records to survey data to-date and will summarize the research on the impact of administrative records on official statistics.

Comments

DOI <https://doi.org/10.23889/ijpds.v3i5.1056>

Harnessing Administrative Records for Official Statistics on People and Households

Misty L. Heggeness, PhD, MPP, MSW

ADRF Conference

November 13-14, 2018

Disclaimer

This presentation was prepared for the 2018 ADRF Conference in Washington, DC.

It was developed to promote research and advancements in our understanding of the use of administrative records in household and person-level statistics. In that spirit and to encourage discussion and thoughtful feedback at early stages of our work, this presentation has undergone a more limited review than official Census Bureau reports. All views and any errors are solely those of the author and do not necessarily reflect any official position of the Bureau.

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Motivation

- Nonresponse on the rise; people less willing to share data
- Innovation of household surveys is necessary in the world of big data we live in today
- Can we produce better, improved statistics more efficiently with already existing resources?

First Question: Are Administrative Records and Census/Survey Data Really So Different?





Döbte.

Döbte.

Zamarkninger.

| No. | Barnets Navn. | Födelsedatum. | Döbdatum. | Forældrenes Navne. | Faddernes Navne. | Naar og af hvem Bar- net er hjemmedöbt. | Fremmede. |
|------|-------------------------|----------------------|--------------------|----------------------------------|-----------------------------|--|-----------|
| 1920 | | | | | | | |
| 8. | Doris Jeanette | 20 June | 12 Sept. | Carl og Josephine Kala | Mrs. Brovold | Mrs. Kensevick | |
| 9. | Doris Alta | 24 Aug. | 10 Oct. | Christ og bora Ellison | Conrad Ellison | Lars Ruten. | |
| 10. | Harvey John | 14 Aug. | 21 Nov. | Albert og Eda Anderson | F. Sether | E.W. Brabtree | |
| 11. | Kubin Rosella | 1 Mai | 25 Nov. | John og Beasi Kanne | John Kosvick | Lillian og Leo. Kunnison | |
| 1921 | | | | | | | |
| 1. | Eugene Gordon | 10 Sept. 1920 | 6 Mich. 1921 | Gulbrand og Emma Lenn | Mrs. Gilbert Bjone | Hannok Bjone, Erik Tengstad | fra |
| 2. | Hers Adolph | 2 Feb. | 15 Mai | Nelge og Augusta Ness | H. Bellings | Bertina Willason, Selmer Sand | |
| 3. | Mabel Helen | 24 Feb. | 25 Mich. | Andrud og Olive Olson | Steve Olson | Mabel Gyerson, Melvire Bjone | |
| 4. | Selmer Meriel Clarence | 30 Oct. 1920 | 17 Apr. 1921 | Selmer og Lillie Pauls | E. Amesen | Hilda Landrud, Clarence Anderson | |
| 5. | Doris Lovane Peterson | 18 Jan. | 29 Mai | Perry og Josie Peterson | J. J. Hanson | Laura Hanson, W. Hanson, S.O. Kulsith | fra |
| 6. | Clinton Rogers Hanson | 10 Feb. | 29 Mai | Harry og Selma Hanson | Mrs. Kalsien | Kellie Linn O. S. Hanson | |
| 7. | Erna Harvick Helene | 25 March | 29 Mai | John og Emma Jensen | A. Brovold | Ligme Jensen, Kels Jensen | fra |
| 8. | Sidny Bernhard | 27 th Mai | 17 July | Loise og Martha Akre | Gilbert Bjone | Miss Hannah Bjone, S. Brudsen | fra |
| 9. | Earl Iceso West | 26 Nov. 1919 | 28 Aug. 1921 | David og Ella West | A. Kelly | Edna Nordahl, Alvin Nordahl | fra |
| 10. | Alfred Filman | 1 Aug | 28 Aug | Thorvald og Anna Peters | Swan Peterson | Har og Mrs. H. Peterson | |
| 11. | Nora Evaline | 11 Sept. | 30 Oct. | Nels og Jennie Lenn | H. Rösing | Constance Kunnison, Willie Kunnison | |
| 1922 | | | | | | | |
| 1. | Lyle Alexander | 4 Nov. 1921 | 11 Dec. 1921 | Christin og Ella Bjone | A. Brovold | Hilda Jensen, Lann Anderson | |
| 2. | Howard Wallin | 24 Mai 1921 | 22 Jan. 1922 | Thorin og Alma Borgerson | H. Lund | Agnes Lund, John Lund | |
| 3. | John Marvin | 12 March | 22 Jan. | John og Emma Jensen | B. H. Moorsag | Wearnes O'annson, Willie O'annson | |
| 4. | Elsie Ardell | 1 Sept | 15 Oct. | Ole og Lennhild Nygren | Leif Bellings | Mrs Lena Bernson, Louis Bernson | fra |
| 5. | Harvey Simon | 1 Oct | 27 Oct. | Harvey og Emma Jensen | Alfred Wallerson | Hannah Willason, Ole Olson | |
| 6. | Hellen Marcella | 16 March | 29 Oct | Otto og Mrs. Gilbertson | Otto Gilbertson | Lyla Olson | fra |
| 7. | Oscar John | 23 Oct | 3 Dec. | Henry og Lina Arves | Jacob Arves | Eda Lundshammer, Thorvald Lundshammer | fra |
| 8. | Hellen Marcella | 16 March | 29 Oct. | Mrs og Mrs. Otto Gilbertson | Otto Gilbertson | Miss Lyla Olson | |
| 9. | Oscar John | 23 Oct | Dec. 3. | Henry og Lina Lundshammer | Jacob Arves | Eda og Thorvald Lundshammer | |

CENSUS OF NORTH DAKOTA OF 1925

Sheet No. *two*

County *La Moure*

Township, Village or City *Ritchville*

Assessor's District *Ritchville*

| List & No. in Order Visited | Dwelling | Family | Name of each person whose place of abode on April 1st, 1925, was in this family. Enter surname first, then given name and middle initial, if any. Include every person living April 1st, 1925. Omit children born since April 1st, 1925. | | Age | NATIVE | | | | PERSONAL DESCRIPTION, NATIVITY AND CITIZENSHIP | | | | | | | | | | U. S. CITIZEN | | | |
|-----------------------------|----------|--------|--|-----|-----------------------|------------|--------------|--------------|----------------|--|--|---------------------|-----------------------|-------------------|---------------------|--------------------|----------------------|---------------------|-----------------------|---------------|----|-----|---|
| | | | | | | White Male | White Female | Colored Male | Colored Female | Foreign All Other Nationalities Male | Foreign All Other Nationalities Female | 5 yrs. & under Male | 5 yrs. & under Female | 5 to 20 yrs. Male | 5 to 20 yrs. Female | 20 to 60 yrs. Male | 20 to 60 yrs. Female | 60 yrs. & Over Male | 60 yrs. & Over Female | Yes | No | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | |
| 1 | 11 | 11 | Peterson, Thorvald C | 42 | Peterson, Annie | 26 | | | | 1 | | | | | | | | | | | | yes | |
| 2 | 11 | 11 | Peterson, Arthur R. | 12 | Peterson, Myrna H | 9 | 1 | 1 | | | | 1 | 1 | | | | | | | | | yes | |
| 3 | 11 | 11 | Peterson, Elvina S | 5 | Peterson, William A | 3 | 1 | 1 | | | 1 | 1 | | | | | | | | | | yes | |
| 4 | 11 | 11 | Peterson, Mavis P | 9 | month | | 1 | | | | 1 | | | | | | | | | | | yes | |
| 5 | 12 | 12 | Johnson, John W. | 39 | | | | | | 1 | | | | | | 1 | | | | | | yes | |
| 6 | 12 | 12 | | 1 | Johnson, Inga S. | 36 | | | | 1 | | | | | | | | | | | | yes | |
| 7 | 12 | 12 | Olafson, Leonard W. W. | 11 | Olafson, Mulhred B.E. | 9 | 1 | 1 | | | | | | 1 | 1 | | | | | | | yes | |
| 8 | 12 | 12 | Olafson, Doris E. | 6 | | | | | | | | | | | 1 | | | | | | | yes | |
| 9 | 12 | 12 | Olafson, Harold S. | 5 | Johnson, Joseph H. | 1 | 1 | 1 | | | 1 | | | | | | | | | | | yes | |
| 10 | 12 | 12 | Johnson, Helen V. | 1 | | | 1 | | | | | 1 | | | | | | | | | | yes | |
| 11 | 12 | 12 | Olafson, Siwert S | 38 | | | 1 | | | | | | | | | | 1 | | | | | yes | |
| 12 | 13 | 13 | Andersson, Kristine H | 52 | | | | | | 1 | | | | | | | | | | | | no | |
| 13 | 13 | 13 | Andersson, Hoane P.A. | 25 | Andersson, Rodil H. | 23 | | | | 1 | 1 | | | | | | | 1 | 1 | | | yes | |
| 14 | 13 | 13 | Andersson, Gustaf C. | 20 | | | | | | 1 | | | | | | | | | | | | yes | |
| 15 | 14 | 14 | Musser, Ole | 35 | | | | | | 1 | | | | 1 | 1 | | | | | | | yes | |
| 16 | 14 | 14 | Musser, Elsie G. | 2 | Musser, Lemuel W. | 24 | | 11 | | | | 1 | | | | | | | | | | yes | |
| 17 | 14 | 14 | Musser, Elsie G. | 2 | Musser, Lemuel W. | 24 | | 11 | | | | 1 | | | | | | | | | | yes | |
| 18 | 14 | 14 | Musser, Ole | 35 | | | | | | 1 | | | | | | | | | | | | yes | |
| 19 | 14 | 14 | Dunham, Joseph W. | 19 | | | | | | 1 | | | | | | | | | | | | yes | |
| 20 | 15 | 15 | Dunham, Jesse W. | 61 | Dunham, Elsie J. D. | 50 | 1 | 1 | | | | | | | | | | | | | | yes | |
| 21 | 15 | 15 | Dunham, John | 26 | Dunham, John R. | 20 | 11 | | | | | | | | 1 | | | | | | | yes | |
| 22 | 15 | 15 | Dunham, Alice H. | 19 | | | | | | 1 | | | | | | | | | | | | yes | |
| 23 | 15 | 15 | Dunham, Paul R. | 13 | | | | | | 1 | | | | | | | | | | | | yes | |
| 24 | 15 | 15 | Dunham, Vernon H. | 12 | | | | | | 1 | | | | | | | | | | | | yes | |
| 25 | 15 | 15 | Dunham, Gordon H. | 8 | | | | | | 1 | | | | | | | | | | | | yes | |
| 26 | 16 | 16 | Hilbertson, Luitpold | 40 | Hilbertson, Annie B. | 36 | 1 | 1 | | | | | | | | | | | | | | yes | |
| 27 | 16 | 16 | Hilbertson, Helen R. | 9 | | | | | | 1 | | | | | | | | | | | | yes | |
| 28 | 16 | 16 | Hilbertson, Palma J. | 7 | | | | | | 1 | | | | | | | | | | | | yes | |
| | 6 | 6 | TOTALS CARRIED FORD. | 216 | | | | | | 3 | 6 | 4 | 3 | 7 | 8 | 7 | 8 | 1 | | | | yes | 6 |

KONFIRMEREDE

| Nr. | Navn | Fødselssted | Norsk | Eng. | Fødselsdato | Konf. dato | Forældres navne | Anmerkninger |
|-----------------------|--------------------------|----------------------|-------|------|--------------|------------|-------------------------------|---------------|
| | | | | | | | | <u>meddel</u> |
| | | | | | 1935 | | | |
| <u>By Mølle</u> 1. | Walter Clayton Sand | Litchville, N.D. | | Eng. | Aug 11 1935 | | Alfred and Agnes Sand | most god. |
| 2. | Gilman Adolph Hess | Litchville, N.D. | | Eng. | Aug 11 1935 | | Mr. and Mrs. Felix Hess | god. |
| 3. | Helmer Joseph Johnson | Litchville, N.D. | | Eng. | Aug 11 1935 | | Ole and Esther Johnson | god. |
| 4. | Norma Gertrude Horkman | Green Bay, Wis. | | Eng. | Aug 11 1935 | | Clady and Alma Horkman | god. |
| 5. | Rene Helene Johnson | Kathryn, N. Dak. | | Eng. | Aug 11 1935 | | Ole and Esther Johnson | most god. |
| 6. | Edna Berdella Nyffen | Ransom Co. N. Dak. | | Eng. | Aug 11 1935 | | Ole and Gertrude Nyffen | most god. |
| 7. | Walter Regina Nyffen | Litchville, N. Dak. | | Eng. | Aug 11 1935 | | Mr. and Mrs. Nyffen | most god. |
| 8. | Olaf Leith Haflied | Litchville, N. Dak. | | Eng. | Aug 11 1935 | | John and Clara Haflied | most god. |
| | | | | | 1936 | | | |
| <u>By Bjel</u> 1. | Justine Mathilde | Fort Ransom | | Eng. | Oct 11-36 | | Justin & Mathilde Berrison | good |
| 2. | Lyle Severin | Fort Ransom | | Eng. | Oct 3rd 1922 | | Justin & Mathilde Berrison | good |
| 3. | Norman Haavager | Litchville N.D. | | Eng. | Oct 11-36 | | Nils & Emilia Haavager | " |
| 4. | John Paulson | " | | " | Oct 11-36 | | | |
| 5. | Herry Susnas | Hastings N.D. | | " | Oct 11-36 | | | |
| 6. | Harvey Silbertson | Litchville N.D. | | " | Oct 11-36 | | Luas & Annie Silbertson | |
| 7. | Kenneth Haavager | Eng. born in N. Dak. | | " | Oct 11-36 | | John & Elise Haavager | |
| 8. | Oscar Arves | Kathryn N.D. | | " | Oct 11-36 | | | |
| 9. | Russell Paulson | " | | " | Oct 11-36 | | Roy Paulson + wife Mabel | |
| 10. | Ruby Haavager | " | | " | Oct 11-36 | | | |
| 11. | George Billing | Litchville N.D. | | " | Oct 11-36 | | | |
| 12. | Serde Bergerson | " | | " | Oct 11-36 | | Thoren Bergerson + wife Alma | |
| 13. | Howard Bergerson | " | | " | Oct 11-36 | | Thoren Bergerson + wife Alma | |
| 14. | Marrin Korrning | " | | " | Oct 11-36 | | | |
| | | | | | 1937 | | | |
| 1. | Fabian Wilmar | " | | " | June 20-37 | | Charles & Amanda Horkman | most god. |
| | | | | | 1938 | | | |
| <u>By Mølle</u> 1. | Erna Virginia Smidhames | Litchville, N. Dak. | | Eng. | July 8. | | Mr. and Mrs. Justin Smidhames | most god. |
| 2. | Melissa Cordella Johnson | Kathryn, N.D. | | " | " " | | Mr. and Mrs. Johnson | most god. |
| 3. | Edith Marcelle Horkman | Litchville, N.D. | | " | " " | | Mr. and Mrs. Horkman | most god. |
| 4. | Romaine Sylvia Jensen | " " | | " | " " | | Mr. and Mrs. Jensen | most god. |
| 5. | Andromy Webber Anderson | " " | | " | " " | | Mr. and Mrs. Anderson | most god. |
| 6. | Walter Raymond Quasso | " " | | " | " " | | Mr. and Mrs. Quasso | most god. |



No. 81486

STATE OF WASHINGTON,
County of Pierce ss.

MARRIAGE CERTIFICATE

THIS IS TO CERTIFY, that the undersigned, a Justice of the Peace
by authority of a License bearing date the 16th day of July A. D. 1943
and issued by the County Auditor of the County of Pierce did, on the 7th day of
July 1943, at the hour of 5 PM in the County and State aforesaid, join IN LAWFUL WEDLOCK

Orville Stephen Olson of St Lewis State of Wash
Litchville W. D. 29

Place of birth Litchville W. D. Age last birthday 29
and Elsie Ardell Nypen of Litchville State of W. D.

Place of birth Kanson County W. D. Age last birthday 20

with their mutual assent, in the presence of Ruth Lesnick

and Marion Seymour Witnesses.

IN TESTIMONY WHEREOF, Witness the signatures of the parties to said ceremony, the witnesses and myself, this 7th
day of July A. D. 1943

| WITNESS | PARTIES | OFFICIATING CLERGYMAN OR OFFICER |
|-----------------------|--------------------------------------|----------------------------------|
| <u>Marion Seymour</u> | <u>Orville Stephen Olson</u> MALE | <u>Lawrence Taylor</u> |
| <u>Ruth Lesnick</u> | <u>Elsie Ardell Nypen</u> FEMALE | <u>Tacoma</u> WASHINGTON |

Filed _____, 19____ County Clerk

By _____ Deputy

The person performing the ceremony must fill out this Certificate within 30 days thereafter, and file the same with the County Clerk of the County wherein the ceremony is performed; under penalty of a fine of not less than \$25.00 or more than \$300.00. The County Clerk's Fee for filing was paid at the time the license was issued. 34889

Second Question: Does the Household Survey of Yester Year Meet Today's Needs?

History of Surveys

- 1930s: “Enumerative Check Census”
 - First attempt to use national sampling to measure unemployment
 - Develops into the *monthly Sample Survey of Unemployment* in March 1940
 - Primary Sampling Units (PSU) developed in 1943 and evolved into 230 PSUs (from 58) by 1954...what is now...
- **Current Population Survey (CPS)**
 - *Monthly survey; rotational (4-8-4)*
 - *Historically we have versions of the surveys from 1962 to present*



Today the Census Bureau administers more than 130 surveys every year!

BUREAU OF LABOR STATISTICS
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CDC Centers for Disease Control and Prevention
 CDC 24/7: Saving Lives, Protecting People™

NCES National Center for Education Statistics [MENU](#)

American Time Use Survey Re

- BROWSE ATUS RESPONDENTS
- ATUS RESPONDENTS HOME
- FREQUENTLY ASKED QUESTIONS
- PURPOSE AND HISTORY
- CURRENT ATUS DATA FINDINGS
- ADDITIONAL RESOURCES AND CONTACTS

Welcome to the Ame Respondents



National Center for Health Statistics

Ambulatory Health Care Data

Meaningful Use and The Merit-based Incentive Payment System

About NAMCS/NHAMCS +

Welcome NAMCS Participar



Ambulatory Hea

[CDC](#) > [NCHS](#) > [Ambulatory Health Care Data](#)

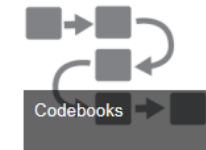
NHES National Household Education Surveys Program (NHES)
[Publications & Products](#) | [Data Products](#) | [Staff](#)

National Survey of Fishing, Hunting, & Wildlife-Associated Recreation

- About this Survey
- Data
- Library
- Technical Documentation

The National Survey of Fishing, Hunting, & Wildlife-Associated Recreation is sponsored by the U.S. Fish and Wildlife Service and provides information on individuals involved in fishing, hunting, and other wildlife-associated recreation.

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BJS Bureau of Justice Statistics

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- Corrections
- Courts
- Crime Type
- Criminal Justice Data Improvement Program
- Employment and

[Home](#) | [Data Collection Detail](#)

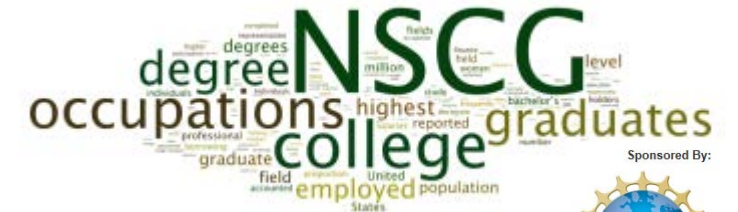
Data Collection: National Crime Victimization Survey (NCVS)

Status: Active
 Frequency: Ongoing from 1973
 Latest data available: 2016



U.S. Department of Commerce
 Economics and Statistics Administration
 U.S. CENSUS BUREAU
[census.gov](#)

Latest



Sponsored By:



History of Statistical Reporting

Table 1.

Income and Earnings Summary Measures by Selected Characteristics: 2015 and 2016

(Income in 2016 dollars. Households and people as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar17.pdf)

| Characteristic | 2015 | | | 2016 | | | Percentage change* in real median income (2016 less 2015) | |
|--|--------------------|-------------------------|----------------------------------|--------------------|-------------------------|----------------------------------|---|----------------------------------|
| | Number (thousands) | Median income (dollars) | | Number (thousands) | Median income (dollars) | | Estimate | Margin of error ¹ (±) |
| | | Estimate | Margin of error ¹ (±) | | Estimate | Margin of error ¹ (±) | | |
| HOUSEHOLDS | | | | | | | | |
| All households | 125,819 | 57,230 | 534 | 126,224 | 59,039 | 717 | *3.2 | 1.56 |
| Type of Household | | | | | | | | |
| Family households | 82,184 | 73,077 | 615 | 82,827 | 75,062 | 692 | *2.7 | 1.14 |
| Married-couple | 60,251 | 85,696 | 995 | 60,804 | 87,057 | 695 | *1.6 | 1.36 |
| Female householder, no husband present | 15,622 | 38,275 | 1,008 | 15,572 | 41,027 | 871 | *7.2 | 3.51 |
| Male householder, no wife present | 6,310 | 56,567 | 1,615 | 6,452 | 58,051 | 2,172 | 2.6 | 4.34 |
| Nonfamily households | 43,635 | 34,232 | 786 | 43,396 | 35,761 | 467 | *4.5 | 2.70 |
| Female householder | 23,093 | 29,389 | 832 | 22,858 | 30,572 | 603 | *4.0 | 3.56 |
| Male householder | 20,542 | 41,278 | 755 | 20,539 | 41,749 | 701 | 1.1 | 2.34 |

History of Statistical Reporting

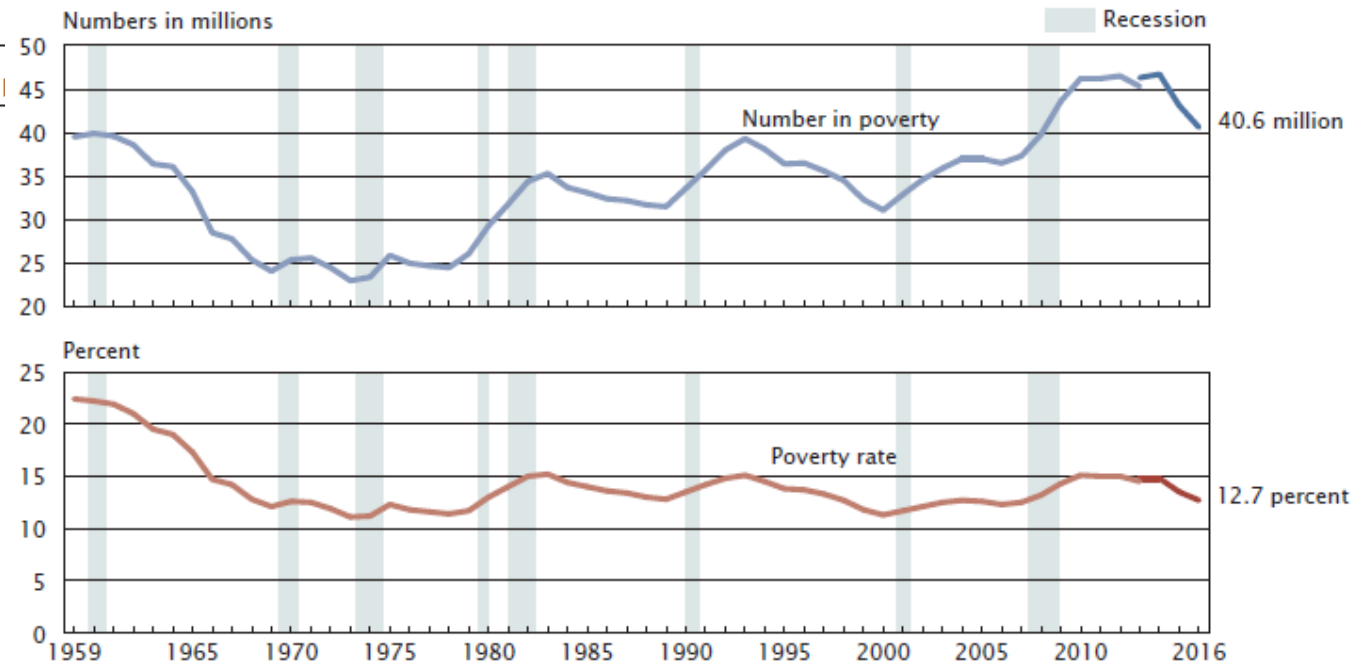
Table 1.

Income and Earnings Summary Measures by Selected Characteristics: 2015 and 2016

(Income in 2016 dollars. Households and people as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar17.pdf)

| Characteristic | 2015 | | | Number (thousands) |
|--|--------------------|-------------------------|----------------------------------|--------------------|
| | Number (thousands) | Median income (dollars) | | |
| | | Estimate | Margin of error ¹ (±) | |
| HOUSEHOLDS | | | | |
| All households | 125,819 | 57,230 | 534 | 126,224 |
| Type of Household | | | | |
| Family households | 82,184 | 73,077 | 615 | 82,827 |
| Married-couple | 60,251 | 85,696 | 995 | 60,804 |
| Female householder, no husband present | 15,622 | 38,275 | 1,008 | 15,572 |
| Male householder, no wife present | 6,310 | 56,567 | 1,615 | 6,452 |
| Nonfamily households | 43,635 | 34,232 | 786 | 43,396 |
| Female householder | 23,093 | 29,389 | 832 | 22,858 |
| Male householder | 20,542 | 41,278 | 755 | 20,539 |

Figure 4.
Number in Poverty and Poverty Rate: 1959 to 2016



Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions. The data points are placed at the midpoints of the respective years. For information on recessions, see Appendix A. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar17.pdf.

Source: U.S. Census Bureau, Current Population Survey, 1960 to 2017 Annual Social and Economic Supplements.

History of Statistical Reporting from Surveys

Table 1.
Income and Earnings Surveys
 (Income in 2016 dollars. Household error, nonsampling error, and definition error)

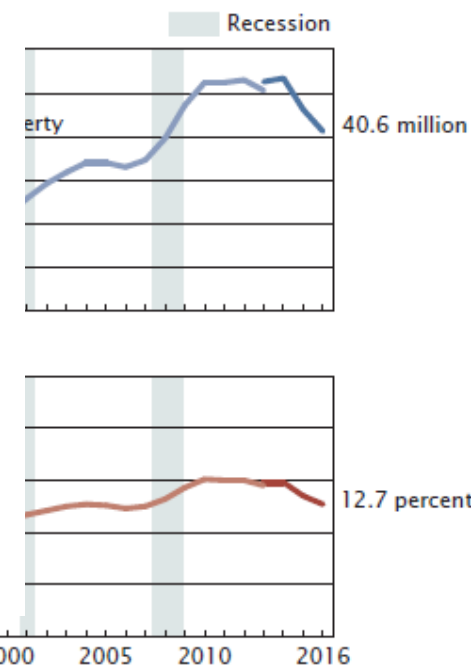
Basic Monthly CPS⁴

| File | Size (in Bytes) | Compression Type (Size in Bytes) | | | Record Count |
|----------------------------|-----------------|----------------------------------|------------|------------------|--------------|
| | | DOS/Windows | GNU gzip | Standard Unix | |
| Jan 2017 to Present | | | | | |
| Data Dictionary | 104,678 | | | | |
| Nov 2017 | 147,948,801 | 12,856,829 | 12,856,704 | NA ¹¹ | 147,801 |
| Oct 2017 | 147,765,618 | 12,868,963 | 12,868,838 | NA ¹¹ | 147,618 |
| Sep 2017 | 147,415,268 | 12,895,444 | 12,895,319 | NA ¹¹ | 147,268 |
| Aug 2017 | 147,172,025 | 12,871,940 | 12,871,815 | NA ¹¹ | 147,025 |
| Jul 2017 | 147,776,629 | 12,877,463 | 12,877,338 | NA ¹¹ | 147,629 |
| Jun 2017 | 148,202,054 | 12,869,109 | 12,868,984 | NA ¹¹ | 148,054 |
| May 2017 | 148,771,623 | 12,869,690 | 12,869,565 | NA ¹¹ | 148,623 |
| Apr 2017 | 149,754,605 | 13,019,893 | 13,019,768 | NA ¹¹ | 149,605 |
| Mar 2017 | 149,480,331 | 13,020,660 | 13,020,535 | NA ¹¹ | 149,331 |
| Feb 2017 | 150,504,354 | 13,126,718 | 13,126,593 | NA ¹¹ | 150,354 |
| Jan 2017 | 150,613,463 | 13,129,352 | 13,129,227 | NA ¹¹ | 150,463 |

Characteristic

HOUSEHOLDS
 All households

Type of Household
 Family households.....
 Married-couple.....
 Female householder, no husband present.....
 Male householder, no wife present.....
 Nonfamily households.....
 Female householder.....
 Male householder.....



0 1959 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2016

Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions. The data points are placed at the midpoints of the respective years. For information on recessions, see Appendix A. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar17.pdf>.
 Source: U.S. Census Bureau, Current Population Survey, 1960 to 2017 Annual Social and Economic Supplements.

Everything Revolves around the Survey-Year

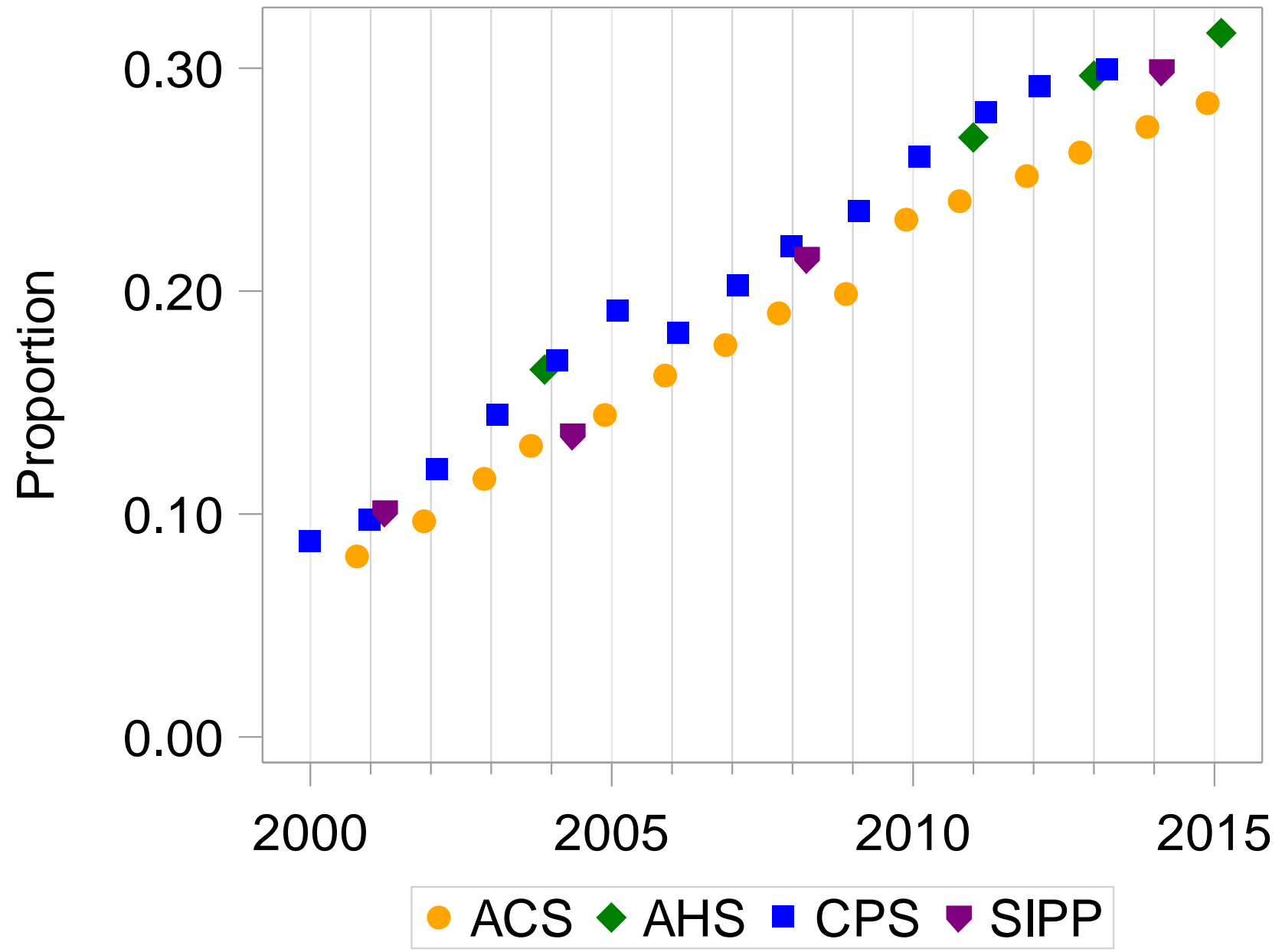
- Historically, this makes sense.
 - Sampling (and therefore national estimates) based on survey-year
 - Interested in changes and trends over time:
 - For example, income, poverty, the number of college graduates by year
 - Back end seems fine, however...
- What are we missing?
 - We are in an age of big data – “data, data, everywhere!”
 - Integrating data from multiple sources on the front end can:
 - Enhance and improve national statistics
 - Strengthen statistics on small populations

Challenges

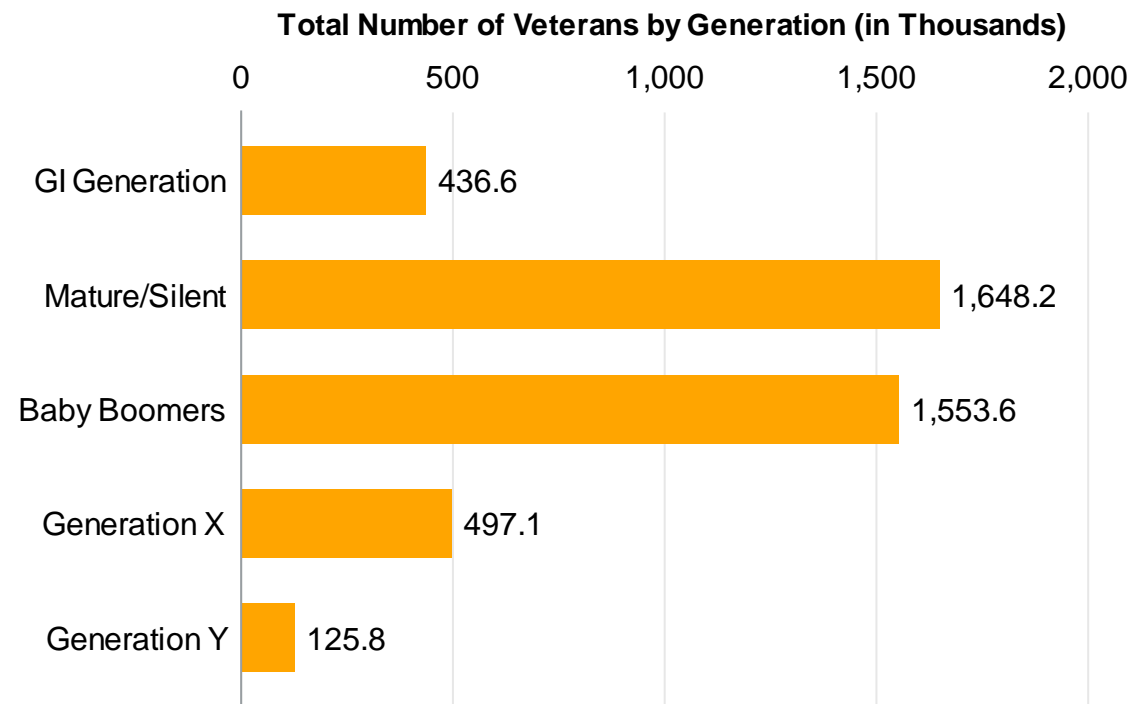
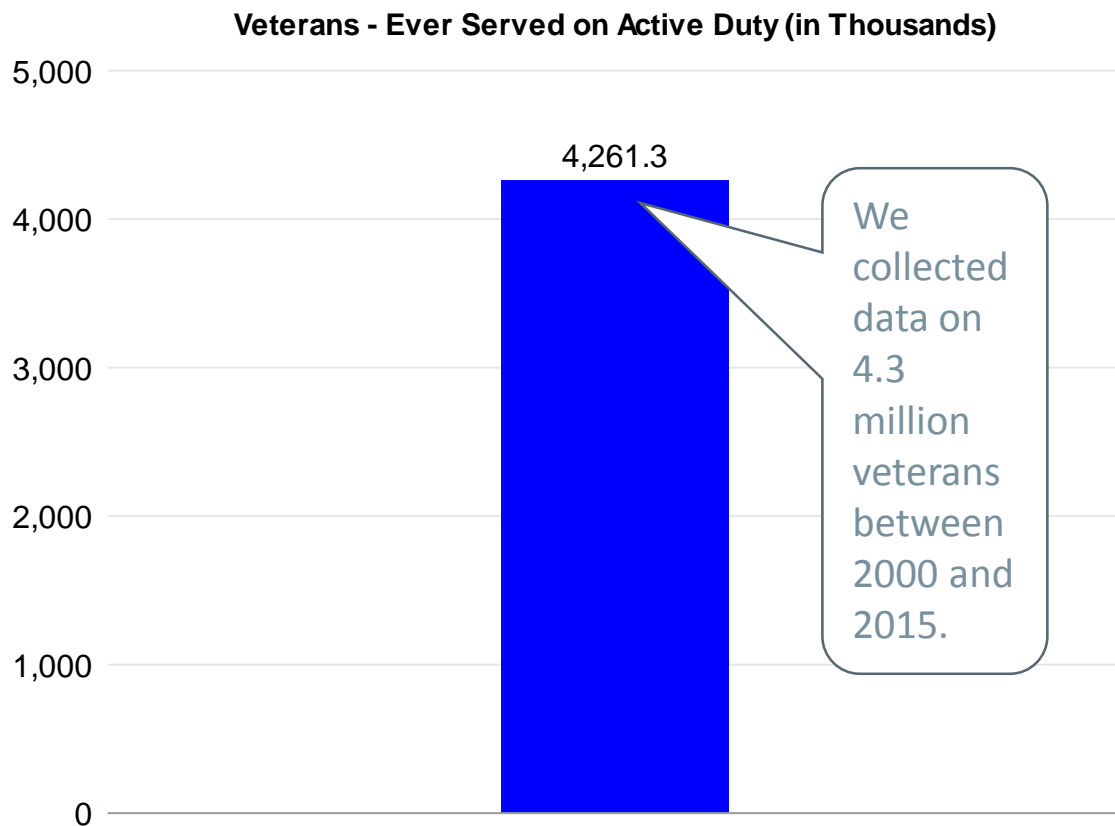
- Updating infrastructure and protocol
 - Editing and storing data
 - Can we get away from manual data curation?
 - Statistical methods to handle generating statistical properties from multisource data
 - Skillsets & human capital
- Policy and data privacy issues
 - Other topic areas are more advanced in figuring out these issues
 - Business Register
 - Master Address File

Opportunities?

How many uniquely new respondents we have interviewed post the 2000 decennial?



How many total veterans we have data on? What generation those veterans come from?



Source: American Community Survey 2001-2015; American Housing Survey 2015; Current Population Survey 2000-2013; Survey of Income and Program Participation 2001, 2004, 2008, 2014

When Wives Earn More Than Husbands, Neither Partner Likes to Admit It

Deceiving the census: New research suggests that social attitudes are lagging behind both workplace progress and how people actually live their lives.



By Claire Cain Miller



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A study shows that when a wife out-earns her husband, she downplays her income while he exaggerates his

By Drew Kann, CNN

Updated 1:45 PM ET, Fri July 20, 2018



What's Next?

- Are administrative data and survey data so different?
 - In terms of data collection, perhaps not.
 - In terms of policy and quality, variability exists.
- Does the Household Survey of Yester Year Meet Today's Needs?
 - Maybe, but it shouldn't limit us
 - Can we do better?
 - Only engage the survey when we cannot find the information via any other source?
- Need a system for improved data integration at the front end that connects, cleans, and harmonizes multisource data
 - The system should also feed into new surveys (pre-populate)
 - The system should be updated regularly
 - The integrated data should be available under updated data privacy and protection rules to statistical agencies for production and to researchers

Thank you

Questions or comments to:
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