



Finding Information about Rural America

Marsha Ann Tate, Ph.D.

Librarian

Department of Plant Pathology
College of Agricultural Sciences
The Pennsylvania State University
University Park, PA 16802

mat1@psu.edu

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Topics to be Discussed

- **Information & Data**
- **Basic Criteria for Evaluating Information**
- **Research “Reality Check”**
- **U.S. Government Censuses and Surveys**
- **Tips for Organizing and Documenting Web-based Data**
- **Conclusion**



Information & Data

Information: “1. The communication or reception of knowledge or intelligence. 2a(1). knowledge obtained from investigation, study, or instruction” (*Merriam-Webster Online Dictionary*).

Data: “Factual information (as measurements or statistics) used as a basis for reasoning, discussion, or calculation” (*Merriam-Webster Online Dictionary*).

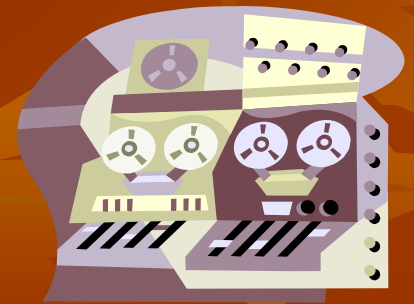
Two Major Types of Data:

- **Primary Data:** Data gathered as a result of original research or experimentation.
- **Secondary Data:** “Data originally collected for a different study, used again for a new research question”
(Joop J. Hox & Hennie R. Boeijs, *Data Collection, Primary vs. Secondary*, http://www.apnet.com/refer/measure/Outlines/data_collection_primary_secondary.htm).

Characteristics of Data

Data can be “published” in print, electronic, microfilm, or other formats

- The format can affect the quantity and quality of the data presented
- **Not all data** is available in electronic *or* in any other format



Sources of Data

- **Federal, state, and local government agencies**

- U.S. Census Bureau

- **Nongovernmental organizations (NGOs)**

- "Organizations, organized either formally or informally, that are independent of government"

USAID CP CY2000: Glossary of Terms, <http://www.usaid.gov/pubs/cp2000/cp00gloss.html>.

- **Examples:** Policy institutes, advocacy groups, trade associations

- **Colleges and universities**

- **Businesses**

Basic Criteria for Evaluating Information

■ Authority

- “The extent to which material is the creation of a person or organization that is recognized as having definitive knowledge of a given subject area.”
- **Questions to Ask:**
 - Who is responsible for the information provided?
 - Was the information provided originally published in another source?

■ Accuracy

- “The extent to which information is reliable and free from errors.”
- **Questions to Ask:**
 - How was the data gathered? (i.e., methodology)
 - Is the data based upon a sample? Is it an estimate?
 - Are sources for factual information provided?

View this table...
 ▶ from 2006
 from 2005
Change...
[geography \(state, county, place...\)](#)
[table](#)

- [Subject Definitions](#)
- [Quality Measures](#)

Centre County, Pennsylvania
S2001. Earnings in the Past 12 Months (In 2006 Inflation-Adjusted Dollars) ?
 Data Set: 2006 American Community Survey
 Survey: 2006 American Community Survey

NOTE: For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

Subject	Total	Margin of Error	Male	Margin of Error	Female	Margin of Error
Population 16 years and over with earnings	89,958	+/-1,723	49,024	+/-1,235	40,934	+/-1,398
Median earnings (dollars)	15,378	+/-1,474	18,473	+/-2,054	12,330	+/-1,591
Full-time, year-round workers with earnings	38,742	+/-2,164	23,408	+/-1,314	15,334	+/-1,746
\$1 to \$9,999 or less	1.5%	+/-0.5	1.5%	+/-0.7	1.5%	+/-1.0
\$10,000 to \$14,999	7.5%	+/-2.3	6.3%	+/-2.6	9.4%	+/-4.4
\$15,000 to \$24,999	20.5%	+/-3.7	15.1%	+/-3.5	28.8%	+/-6.0
\$25,000 to \$34,999	20.5%	+/-3.7	16.7%	+/-4.1	26.4%	+/-5.7
\$35,000 to \$49,999	21.9%	+/-2.4	23.5%	+/-3.5	19.3%	+/-3.9
\$50,000 to \$64,999	10.1%	+/-2.0	12.5%	+/-2.8	6.6%	+/-2.4
\$65,000 to \$74,999	4.0%	+/-1.4	5.7%	+/-2.1	1.4%	+/-1.1
\$75,000 to \$99,999	6.2%	+/-1.9	8.1%	+/-2.8	3.3%	+/-1.9
\$100,000 or more	7.7%	+/-2.2	10.6%	+/-3.3	3.3%	+/-1.7
Median earnings (dollars)	(X)	(X)	42,039	+/-3,187	27,832	+/-3,022
Mean earnings (dollars)	44,827	+/-2,985	51,247	+/-4,102	35,025	+/-3,058
MEDIAH EARNINGS BY EDUCATIONAL ATTAINMENT						
Population 25 years and over with earnings	29,083	+/-2,499	35,547	+/-2,762	23,093	+/-1,724

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The data in this table are based on the American Community Survey and/or the Puerto Rico Community Survey conducted in 2006. To maintain confidentiality, the Census Bureau applies statistical procedures that introduce some uncertainty into data for geographic areas with small population groups. The data in this table contain sampling error and nonsampling error. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. See also [definitions of subject characteristics](#).

For information on response rates, coverage rates, sample size and allocation rates see [quality measures](#).

For the full documentation on the ACS sample design, estimation methodology, and accuracy of the ACS data, see <http://www.census.gov/acs/www/Downloads/ACS/accuracy2006.pdf> (154 KB).

The letters PDF indicate a document is in the [Portable Document Format \(PDF\)](#). To view the file you will need the [Adobe® Acrobat® Reader](#), available for **free** from the Adobe web site.

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Basic Criteria for Evaluating Information

■ Objectivity

- “The extent to which material expresses facts or information without distortion by personal feelings or other biases.”
- **Questions to Ask:**
 - Is the point of view of the author evident?
 - Is it clear what relationship exists between the author and the person, company, or organization responsible for the site?
 - Is there a description of the goals of the person or organization for providing the information?

Basic Criteria for Evaluating Information

■ Currency

- "The extent to which material can be identified as up to date."
- **Questions to Ask:**
 - Is the date the material was first created in any format provided?
 - If the data has been revised, is the date of last revision included?
 - If statistical data, is the date the statistics were collected given?

■ Coverage/Intended Audience

- "The range of topics included in a work and the depth to which those topics are addressed."
- **Questions to Ask:**
 - Is it clear what materials are included at the site?
 - Is the intended audience for the material clear?

Research “Reality Check”

- Government agencies, organizations, and businesses collect a huge amount of data about people, places, and things.
- A large amount of the data collected **is available** to the public; *however*, a significant amount of data **is not available** because:
 - Of privacy concerns
 - Of security concerns
 - It is *proprietary* information (i.e., it is owned by a business or other private party)
- Finally, some data is simply not collected by anyone



Censuses and Surveys



- Used to collect general statistical information from individuals and establishments throughout the United States.
- Once compiled, the statistics are used by policymakers, educators, and community leaders to make decisions on education, employment, health care, development, transportation, housing, and other issues.



Censuses and Surveys



■ Decennial Census

<http://www.census.gov/main/www/cen2000.html>

- Article 1, Section 2 of the U.S. Constitution mandates a census of the U.S. population every ten years.
- Population and housing data

■ Economic Census

<http://www.census.gov/econ/census02/>

- Presents a profile of business activities in U.S. industries and communities at the national, state, metropolitan area, county, place, and ZIP code levels.
- Conducted every five years, in years ending in '2' and '7.'



Censuses and Surveys



- **American Community Survey (ACS)**

- <http://www.census.gov/acs/www/index.html>

- Population and housing information from approximately 3 million households from across every county in the U.S.

- **Current Population Survey (CPS)**

- <http://www.census.gov/cps/>

- Monthly survey of about 50,000 households
 - Primary source of information on the labor force characteristics of the U.S. population.

- **Annual Economic Surveys**

Census Terminology

- Public Use Microdata Samples (PUMS)
- Zip Code Tabulation Area (ZCTA)
- FIPS code
- Estimate
- Census County Divisions (CCD)
- Census Designated Place (CDP)
- Incorporated place
- Census Block



Census Geography



What is Rural?



The definition of rural varies based upon a number of factors, including:

- (a) The government agency or organization making the definition;
- (b) The era in which the definition is made;
- (c) The type of project that the definition is to be applied to;
- (d) The type of data available.

The Decennial Census: Privacy Considerations

- **The U.S. Census Bureau:**
 - Cannot share individual answers with others
 - “Withholds data if they represent a population (within a geographic area) so small that the numbers might identify someone”
(*Census 2000 Basics*, p. 5).
- **72 year restriction on access to individual census information**
 - **1930** is currently the latest individual census information available to the public

- 2005 Data Profiles:**
- [Demographic](#)
 - [Social](#)
 - [Economic](#)
 - [Housing](#)
 - ▶ Narrative**
- View this table...**
- ▶ from 2005
- View this table...**
- [for other geographies \(state, county, place...\)](#)

- [Subject Definitions](#)
- [Quality Measures](#)



Centre County, Pennsylvania

Population and Housing Narrative Profile: 2005

Data Set: 2005 American Community Survey
Survey: 2005 American Community Survey

- [Demographic](#) - Sex and Age, Race, Relationship, Household by Type
- [Social](#) - Education, Marital Status, Fertility, Grandparents...
- [Economic](#) - Income, Employment, Occupation, Commuting to Work...
- [Housing](#) - Occupancy and Structure, Housing Value and Costs, Utilities...
- Narrative** - Text profile with graphs for easy analysis...

NOTE: Data are limited to the household population and exclude the population living in institutions, college dormitories, and other group quarters. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

POPULATION OF Centre County: Data for this section cannot be displayed because the number of sample cases is too small. Displaying the data would risk disclosing information for individuals.

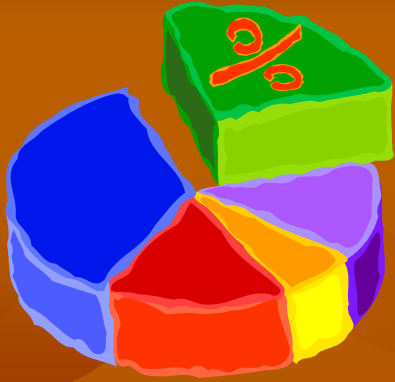
HOUSEHOLDS AND FAMILIES: In 2005 there were 52,000 households in Centre County. The average household size was 2.4 people.

Families made up 54 percent of the households in Centre County. This figure includes both married-couple families (47 percent) and other families (7 percent). Nonfamily households made up 46 percent of all households in Centre County. Most of the nonfamily households were people living alone, but some were comprised of people living in households in which no one was related to the householder.

The Types of Households in Centre County, Pennsylvania in 2005



Statistics



“There are three kinds of lies: lies, damned lies and statistics”

Benjamin Disraeli (or possibly Mark Twain, Henry Labouchère, Abram S. Hewitt, Holloway H. Frost, or ???)

“The average man himself is but a piece of fiction, a tissue of statistics”

Vladimir Nabokov

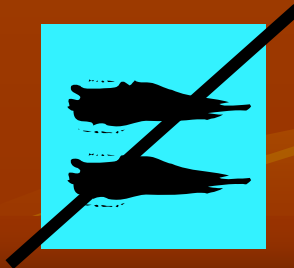
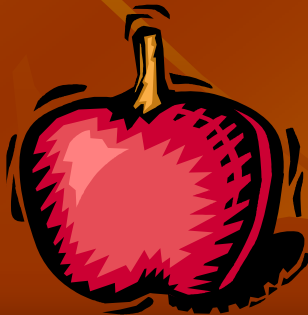
DANGER!

Statistics

DANGER!

Use extreme care when making comparisons between statistical data from different sources/years

Don't mix the statistical equivalent of apples and oranges!!



Research Strategy

- What types of information do you want to find out about your county?
- What information do you already know about your county?
- Begin with *State & County QuickFacts* and other U.S. government portals and databases to find information about your selected county
 - *Web-based Resources for Rural Research*
http://www.ppath.cas.psu.edu/LIBRARY/Rural_Information_Pathfinder.htm
 - *U.S. Census Bureau Censuses and Surveys*
http://www.ppath.cas.psu.edu/LIBRARY/US_Censuses_Surveys.htm

Research Strategy

- Use citations, footnotes and other links to find additional data sources.
- Since the coverage and currency of data varies across sources (even U.S. government sources) →
Search for data in a variety of sources
- **Exercise:** Search for the same county using *American FactFinder's* fact sheet tool and using *State & County QuickFacts*



Tips for Organizing and Documenting Web-based Information

- Information Retrieval Options
 - Print
 - Download
 - Rich Text Format (RTF)
 - Microsoft Excel (.xls)
 - Comma delimited (.csv)
 - Pipe delimited (.txt)
 - EndNote
- Selecting an option depends upon:
 - How you plan to use the data
 - Availability of software necessary to access/manipulate the data
 - Your skill with using the formats/software
 - Personal preferences

Tips for Organizing and Documenting Web-based Information

- Maintain a detailed record of all websites/pages that you visit
 - Keep track of what steps you use to find specific data tables
- Watch for *and read* footnotes that may accompany data
- Do not mix up data units (e.g., mistake thousands for millions)
- Be consistent in how you cite sources

Conclusion

A tremendous amount of information is available about rural America. To find the most and highest quality information available requires:

- Persistence
- Precision
- Vigilance
- Thoroughness
- Consistency



Additional Resources

Web-based Resources for Rural Research

http://www.ppath.cas.psu.edu/LIBRARY/Rural_Information_Pathfinder.htm

U.S. Census Bureau Censuses and Surveys

http://www.ppath.cas.psu.edu/LIBRARY/US_Censuses_Surveys.htm

U.S. Census Bureau. *American FactFinder*. Washington, DC:

U.S. Census Bureau.

http://factfinder.census.gov/home/saff/main.html?_lang=en

Pennsylvania State Data Center (PaSDC). *The Pennsylvania State Data Center* [home page]. Middletown, PA: Pennsylvania State Data Center.

<http://pasdc.hbg.psu.edu/index.html>