# Consumer Expenditure Surveys Public-Use Microdata (PUMD) Overview

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CE Microdata Users' Workshop
July 22-24, 2020



## What Are Microdata?

- "In the study of survey and census data, microdata are information at the level of individual respondents." – Wikipedia
- Consumer Expenditure Surveys (CE) Public-Use Microdata (PUMD) consists of Consumer Unit (CU) level characteristics, income, taxes, assets and liabilities, and expenditure data, as well as member level characteristics and income data.





## Consumer Expenditure Surveys



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#### Public-Use Microdata (PUMD)

The Consumer Expenditure Survey (CE) collects data on expenditures, income, and demographics in the United States. The public-use microdata (PUMD) files provide this information for individual respondents, without any information that could identify respondents. PUMD files include adjustments for information that is missing because respondents were unwilling or unable to provide it. The files also have been adjusted to reduce the likelihood of identifying respondents, either directly or through inference.

This format allows researchers to analyze expenditures, income, and demographic trends beyond what the published tables show. However, users of the PUMD files should have strong skills with statistical software. To learn more, you may want to explore the PUMD methodology with the <u>CE PUMD Getting Started Guide</u> and check the availability of data with the <u>Dictionary for Interview and Diary Surveys (XLSX)</u>.

The 2017 PUMD were released on September 11, 2018.

**Note:** To users of the CE 2017 Public-use Microdata: some corrected files have been reissued on June 27, 2019. See <u>Frrata notice</u> for details.

Experimental State Weights for 2017, supporting state level analysis for selected states, are also available with their documentation.

To be notified when new datasets become available, please sign up for the <u>CEX e-mail updates</u>. If you have comments, suggestions, and questions about this page and its contents, please <u>contact us</u>.

#### **Quick Links**

- » Introduction to PUMD
- » Data files
- » Documentation
- » Supplemental resources

## https://www.bls.gov/cex/pumd.htm

Public-Use Microdata Annual Users'
<u>Workshop</u> provides users the opportunity to learn how to use the PUMD and to present how they used PUMD in their research.



# **PUMD Data Package**

## ■ Data files:

File types available include:

SAS (\*.sas7bdat), STATA (\*.dta), SPSS (\*.sav), comma-delimited (\*.csv)

## Documentation:

- Documents covering specific years (changes with each new PUMD release)
- Documents covering all years (Static or evolving documentation)

## Supplementary resources:

Provide information regarding PUMD disclosure methods and requirements





Diary (zip) (10.5 MB) | Documentation



2015 | <u>Interview (zip)</u> (87.7 MB) |

CE FAQ

## **Data Files**

■ PUMD files contain respondent data collected in either the *Interview* or *Diary* survey.

- These data can be used to create and correlate information in a variety of ways:
  - **▶** Descriptive Statistics
    - How many CU's in the sample purchased a new car in 2014?
  - ► Inferential Statistics
    - What is the average annual expenditure on eggs by all CU's in the northeast region?





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#### PUMD Documentation

This page contains documentation for the public-use microdata (PUMD) for years starting in 1996. Documentation for years prior to 1996 are available USB flash drive for purchase (PDF). The documentation falls into two major types: Documentation that covers all years and documents that cover one particular year. If you are new to CE PUMD data, you may want to explore the CE PUMD Getting Started Guide.

### Documents covering all years

- Consumer Expenditure Surveys Public-use Microdata Getting Started Guide provides documentation for the CE PUMD, its conventions, files, sample code, and methodology.
- Consumer Expenditure Surveys Program Considerations When Using the Public-use Microdata discusses considerations when preparing and interpreting estimates with PUMD.
- Dictionary for Interview and Diary Surveys (XLSX) provides variables and codes from 1996 forward.
- Source selection file (XLSX) identifies which survey data variable comes from when combining the two CE surveys for 1996 forward.
- **Description of income imputation** provides information on the methods BLS uses to estimate income since 2004.

Documents covering specific years

https://www.bls.gov/cex/pumd\_doc.htm

• Hierarchical groupings lists the relation between the summary variables and their contribution variables as they are used in the published tables. Integrated stub (IntCtub) lists the variables as DLC integrates them from the Integrious and Diany Cunyous



# **Documentation Covering All Years**

- **■** CE PUMD Getting Started Guide
  - ► Provides documentation for the CE PUMD, its conventions, files, sample code, and methodology.
- CE Program Considerations When Using the Public-use Microdata
  - ► Discusses considerations when preparing and interpreting estimates with PUMD



# **Documentation Covering All Years**

- Dictionary for Interview and Diary Survey (XLSX)
  - Provides variables and codes from 1996 forward.
- Source selection file (XLSX)
  - ► Identifies which survey data item (category) comes from when combining the two CE surveys for 1996 forward.
- Description of Income Imputation
  - ▶ Provides information on the methods BLS uses to estimate income since 2004.



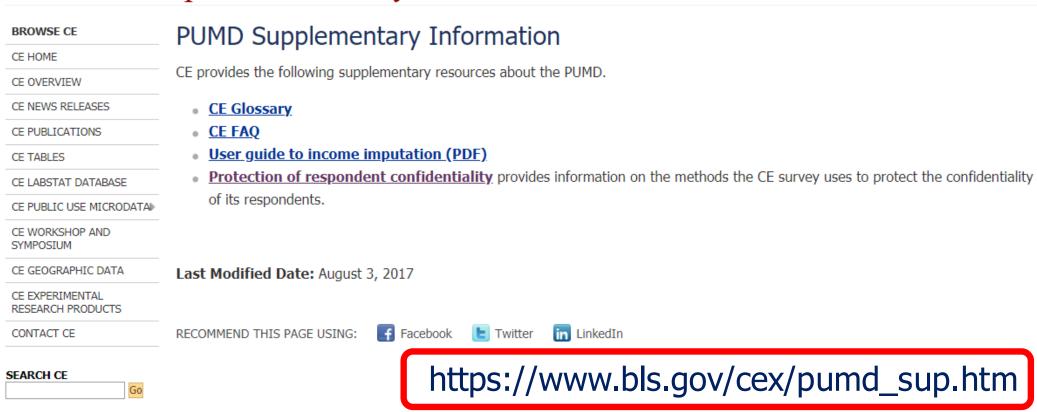
# **Documentation Covering Specific Years**

- Hierarchical groupings
  - Establishes a relation between the published tables' series and their contributing expenditure classification codes (UCC).
- Sample code
  - Replicates totals in the CE published tables.
- Errata
  - Provides information on errors and their correction to the files of a particular year.





## Consumer Expenditure Surveys



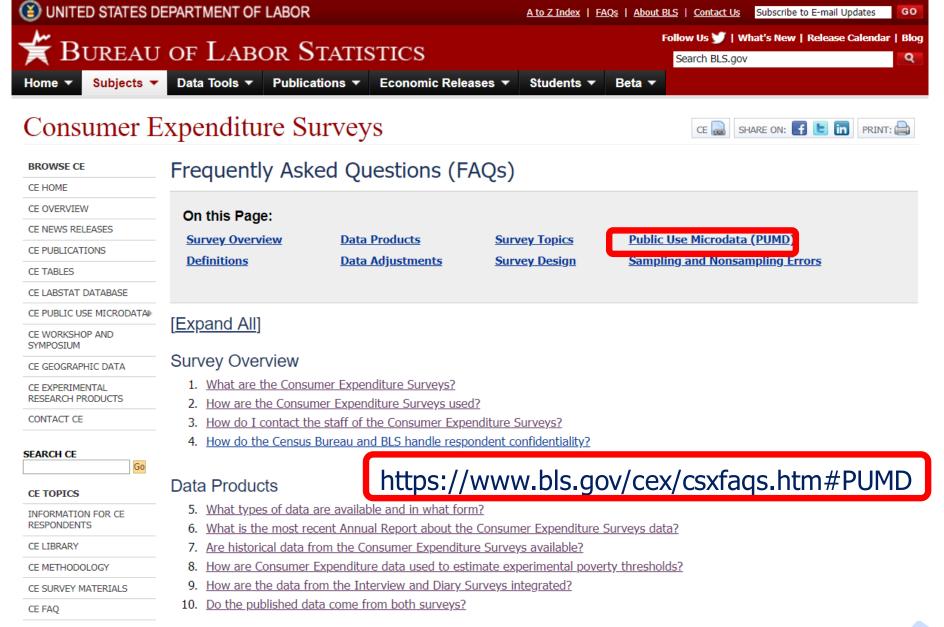


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# **Supplementary Resources**

- CE Glossary
- CE FAQ
- User's guide to income imputation (PDF)
- Protection of respondent confidentiality







## 2019 PUMD Release

■ September 2020



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