# Overview of the CE Surveys Program

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Consumer Expenditure Surveys Program

2018 Consumer Expenditure Surveys

Microdata Users' Workshop

July 18, 2018

# CE Mission

- The mission of the CE is to collect, produce, and disseminate information that presents a statistical picture of consumer spending for the Consumer Price Index, government agencies, and private data users.

- The mission encompasses analyzing CE data to produce socio-economic studies of consumer spending, and providing CE data users with assistance, education, and tools for working with the data.

# Highlights from CE History

- **1888:** First BLS expenditure survey
- **1972:** First use of weekly Diary & 3-month recall Interview
  Census Bureau begins survey collection for BLS
- **1979:** Continuous data collection starts
- **2003:** Computer Assisted Personal Interview (CAPI) begins
- **2004:** Imputation for missing income variables implemented
- **2013:** Model-based estimation of income taxes introduced
- **2013:** 1st publication of midyear tables (Jul 2011 - Jun 2012)
- **2015:** Elimination of the first (bounding) interview in Interview
- **2018:** State-level weights introduced

# Survey Design, Data Collection, & Research

**Nutrition Facts**

Serving Size 172 g

| Amount Per Serving | |
|---|---|
| **Calories** 200 | Calories from Fat 8 |
| | **% Daily Value*** |
| **Total Fat** 1g | 1% |
| Saturated Fat 0g | 1% |
| Trans Fat | |
| **Cholesterol** 0mg | 0% |
| **Sodium** 7mg | 0% |
| **Total Carbohydrate** 36g | 12% |
| Dietary Fiber 11g | 45% |
| Sugars 6g | |
| **Protein** 13g | |

| | | | |
|---|---|---|---|
| Vitamin A | 1% | • Vitamin C | 1% |
| Calcium | 4% | • Iron | 24% |

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

# Survey Design

- National probability sample of households designed to represent the total U.S. civilian non-institutional population
  - Includes: (1) persons living in houses, condominiums, apartments, and (2) group quarters such as college dormitories
  - Excludes: (1) military personnel living on base and (2) nursing home residents, as well as (3) people in prisons or other institutions
- Data are collected by the Census Bureau on behalf of BLS via two independent surveys
  - Quarterly Interview Survey
  - Diary Survey

# Quarterly Interview Survey

- Designed primarily to collect expenditures for large or less frequently purchased items that can be recalled in a quarterly interview, or things that you make regular monthly payments on
- Approximately 48,000 addresses are visited each year
- Consumer units (CUs) are identified at each address
- Rotating panel design, each CU is interviewed for 4 consecutive quarters
- Approximately 6,500 quarterly interviews, or 26,000 annual interviews

# Diary Survey

- Designed primarily to collect detailed data on small, frequently purchased items which would be difficult to recall in a quarterly interview
- 4 sections: Food at home; food away from home; clothing; other
- Annual diary cases are divided equally among the days of the year and then assigned to the collection period month
- Each CU is assigned two consecutive 7-day diaries with two personal visits
- Approximately 6,200 annual CU interviews (12,400 completed diaries)
- At BLS, each Diary week is treated separately for estimation purposes

# Research

- Propose and evaluate regular survey questionnaire changes
- Develop and evaluate new methods
  - Use of incentives for increased cooperation and engagement
  - Linking to administrative data for validation
  - Record and receipt use to improve data quality
- Provide comprehensive info to stakeholders on data quality
  - Annual data quality profile
  - R-indicators for representivity assessments
  - Response rates and assessment of potential nonresponse bias

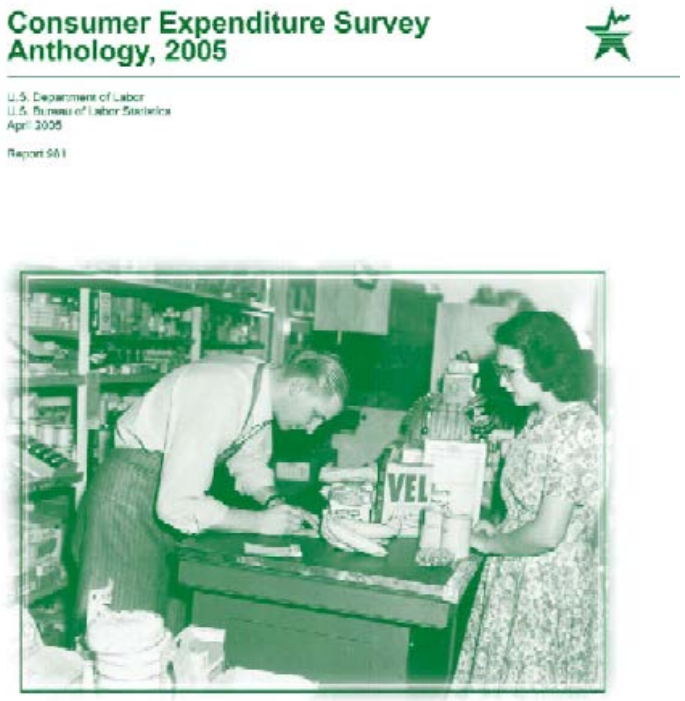
# Dissemination & Outreach

# CE Customers

- Government
  - Consumer Price Index (CPI)
  - Census Bureau (BOC)
  - Defense Department (DoD)
  - Internal Revenue Service (IRS)
  - Bureau of Economic Analysis (BEA)
  - Health and Human Services (HHS)
  - Department of Agriculture (USDA)
- Media
- Market & Academic Research

# Publications

- Monthly Labor Review
- Beyond the Numbers
- Spotlight on Statistics
- Data Comparisons
- Department of Labor (DOL) blog posts


Consumer Expenditure Survey
Anthology, 2005

U.S. Department of Labor
U.S. Bureau of Labor Statistics
April 2005

Report 981

# Data Dissemination

- New Releases & Reports
- Public Use Microdata (PUMD) files
- Tables
  - Annual calendar year tables
  - Midyear tables
  - Multiyear tables
  - Cross-tabulated tables
  - Metropolitan statistical area tables
  - Region tables and area tables
  - High-income tables

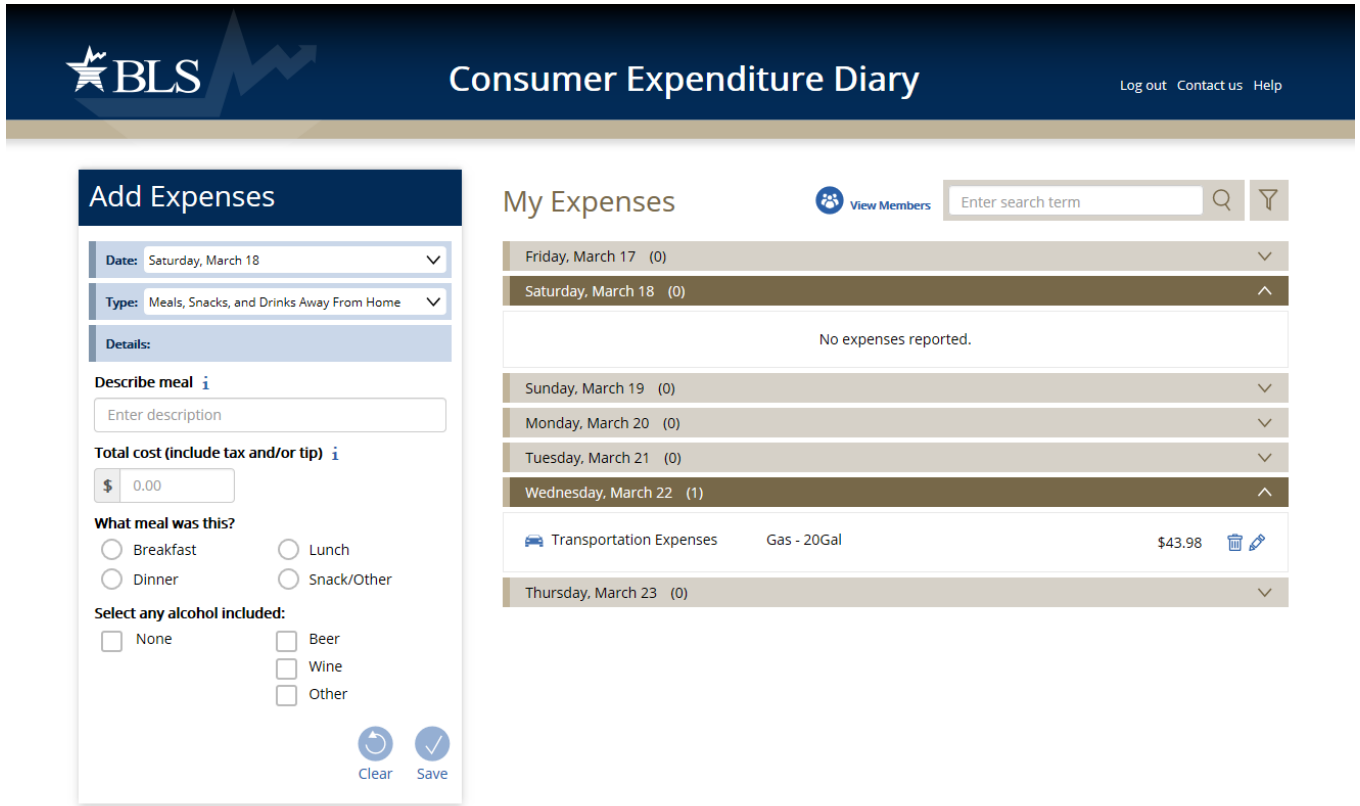
# Outreach

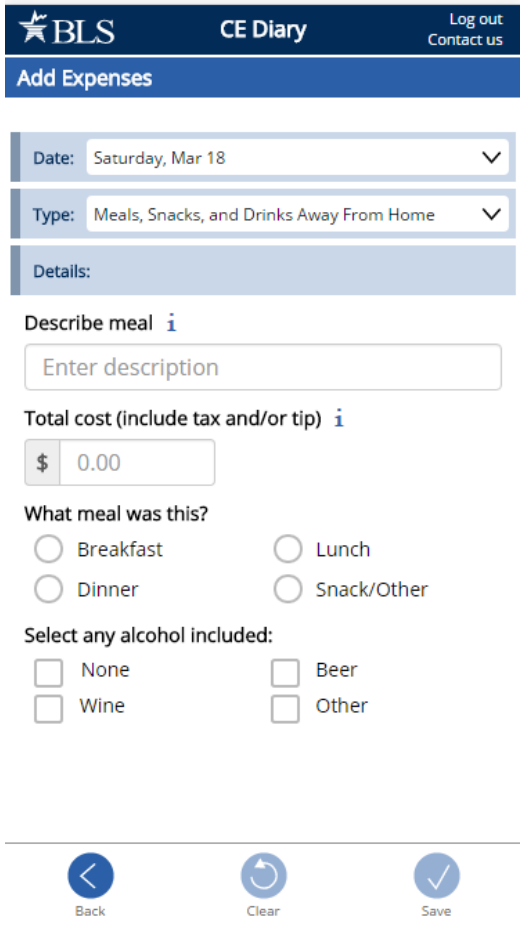
- Survey Methods Symposium & Microdata Users' Workshop
- Conference Presentations
  - Midwest Economic Association (MEA)
  - American Council on Consumer Interests (ACCI)
  - Southern Economic Conference (SEA)
  - American Association for Public Opinion Research (AAPOR)
  - Joint Statistical Meetings (JSM)

# Modernization & Innovation

# Large Scale Feasibility Test

- To be fielded by Census Bureau in 2019



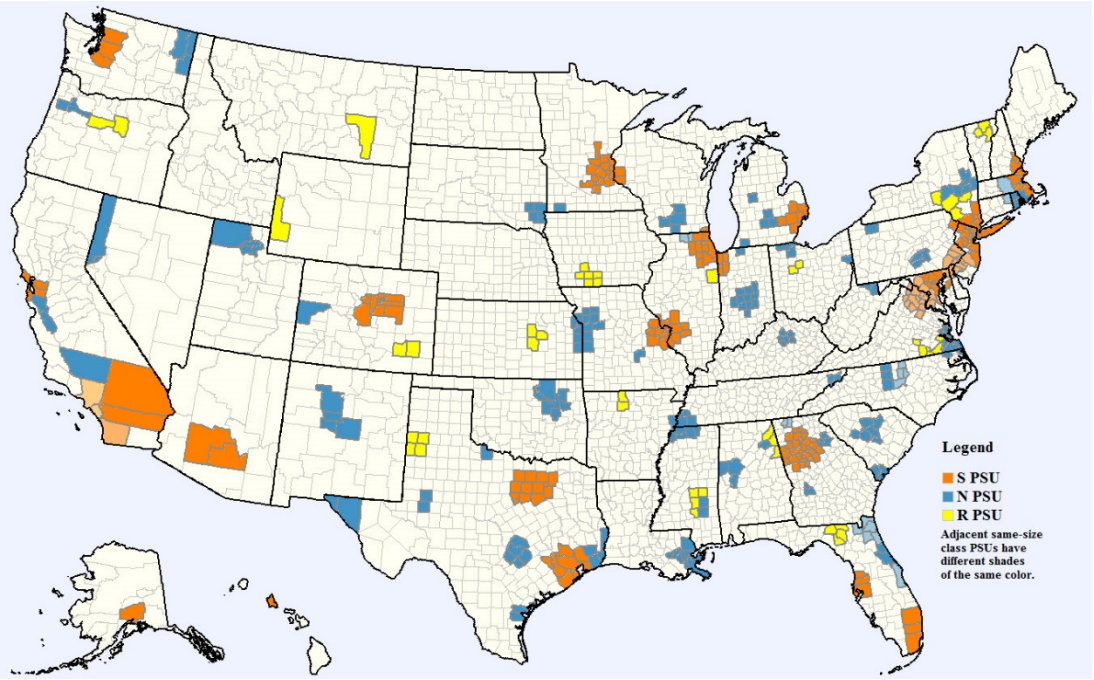
# Linked Data Projects

- Work with Census to evaluate linked IRS data for potential production use in CE. Project should be completed by the end of FY19 and it will result in recommendations on next steps for linking CE with IRS data to create nonresponse weighting adjustments.
- In previous work, CE staff explored the benefits of matching admin and private sources of data to CE records to evaluate matching effectiveness and quality (mixed results)
- In addition to the data sources already explored (IRS and CoreLogic housing data), other datasets available through CARRA include from SSA, HUD, CMS, IHS, and NCHS

# Experimental State Weights

## Simulated Design of 2010 CE PSUs

- Experimental state level weights for California, Florida, and New Jersey have been published
- Enables users to generate statistically valid state-level expenditure estimates from CE public-use microdata



# CE Website

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

- Tables
- Microdata
  - Documentation
  - Data files
- Questionnaires
- Publications
- Glossary
- FAQs
- Information for respondents
- CE Redesign (Gemini Project) information

# Thank You!