The Consumer Expenditure Survey’s New Design and Implementation Plans

Laura Paszkiewicz
Office of Prices and Living Conditions
Division of Consumer Expenditure Survey
FCSM
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Outline

1. Gemini Project to Redesign CE
   a. Background
   b. Redesign
   c. Road Ahead
BACKGROUND
Current CE Design

- 5 waves of personal interviews
- 3 month recall
- Large or recurring expenditures

- 2 one-week household paper diaries
- Contemporaneous recall
- Small, frequently purchased items

Consumer Expenditure Survey Estimates
Redesign Motivation

- Evidence of measurement error
- Changes in technology and spending behaviors
- Need for greater operational flexibility
- High level of burden – linked to data quality
Redesign Objectives

- Verifiable reduction in measurement error, with a particular focus on underreporting
- Reduction in burden
Data Requirements

- Annual expenditure estimates of total household spending for the US population
- Month of expenditure(s) for each expenditure category
- Data collected at a minimum of two points in time, one year apart
- Minimum set of expenditure/non-expenditure data elements from each household
Required level of detail

Current Design –

- Apple: $41.61
- Orange: $26.74
- Banana: $43.81
- Pineapple: $109.19
- Kiwi: $39.95

Redesign –

- Total: $261.29
Key Proposal Inputs

CE relied on several sources for proposal inputs:

- Expert panels
- External discussion events
- Ongoing research on key topics
- National Academies’ Committee on National Statistics (CNSTAT)
- Westat independent proposal
- Census staff and Field Representative (FR) input
DESIGN PROPOSAL
Wave 1

- Advance mailing

Visit 1: Recall Interview

Diary Week & Records Collection

Visit 2: Records Interview

Wave 2

- Advance mailing

Visit 1: Recall Interview

Diary Week & Records Collection

Visit 2: Records Interview

12 months between waves

Post Wave 1 Non-monetary Incentive: CE Experience Package

Respondent engagement mailings
Comparison of Design Features

**Redesigned CE**
- 4 interview waves, 1/qtr
- Two, independent Samples
- Household level diary
- Two weeks diary keeping
- More Expenditure Detail
- No incentives
- Paper Diary

**Current CE**
- 2 interview waves, 12 months apart
- Single, integrated Sample
- Individual Diaries
- One week diary keeping
- Less Expenditure Detail
- Performance-based Incentives
- Web-based diary

**U.S. Civilian non-institutionalized population**
- 3-month Interview recall
- Total Annual expenditures
- In-person Interviews

**Total Annual expenditures 3-month Interview recall**
WAVE 1
Visit 1: Personal Interview
Visit 1: Recall-based expenditures
Visit 1: Training
Visit 1: Incentive
Diary Week
Diary: Content
Diary Week: Incentive(s)
Visit 2: Personal Interview
Visit 2: Records-based expenditures

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Visit 2: Incentive
WAVE 2
Design Overview: Wave 2
Topics addressed during development:

- Wave 1 and 2 topics:
  - Incentive amounts and structure
  - Exact survey content (records vs. recall)
  - Use of records as data input
  - Length of Wave 1 and Wave 2 visits
- Diary topics:
  - Acceptance of annotated grocery receipts
- Other topics:
  - When the experience package will be sent
Development & Implementation Timeline

Design Proposal and Planning
- Approved redesign proposal released (July 2013)
- User impact of redesign (July-December 2013)
- Roadmap developed (September 2013)

Field Tests (Develop, Field, Analyze)
- Individual and Web Diaries (2012-14)
- Proof-of-Concept Test (2015)
- Large-Scale Feasibility Test (2018)
- Dress Rehearsal (2021)
- Implementation (2023)
Design Features Recommended by CNSTAT

- One sample design
- Modular design with a core survey
- Increased use of technology, especially to encourage ‘in the moment’ reporting
- Increased use of records
- Reduced proxy reporting
- Mixed mode data collection
- Large incentives
Design Features
Recommended by Westat

- One sample design
- Two or three waves of data collection
- Individual diaries
- Use of a web-based diary to allow respondents to enter data via their Smart Phone, tablet or home PC
- Monitoring of incoming diary data during reporting periods with potential interviewer interventions
- Increased use of records
- Use of respondent-level incentives
Design Overview: Major Issues Addressed

1. Incentives → addresses respondent motivation
2. Technology → encourages real-time data capture
3. Individual diaries → reduces proxy reporting
4. Shortened interview length, reduced survey content, and increased record use → improve data quality
Design Team (past and present)

- Kathy Downey, formerly Bureau of Labor Statistics
- Jennifer Edgar, Bureau of Labor Statistics
- Dawn V. Nelson, U.S. Census Bureau
- Laura Paszkiewicz, Bureau of Labor Statistics
- Adam Safir, Bureau of Labor Statistics
Contact Information

Laura Paszkiewicz
Senior Economist
Branch of Research and Development
Consumer Expenditure Survey

www.bls.gov/cex
202-691-5119
paszkiewicz.laura@bls.gov