Web Diary Feasibility Test: Preliminary Findings

Ian Elkin, Michelle Freeman, John Gloster, Lauren Kirkpatrick, and Brett McBride

Consumer Expenditure Survey Division/U.S. Census Bureau

July 16, 2013

BUREAU OF LABOR STATISTICS
U.S. DEPARTMENT OF LABOR

www.bls.gov

Web Diary Team Overview

Motivation

▶ To encourage contemporaneous reporting, improve accuracy through access across locations and household members, provide a platform for individual diaries, allow for a multiportal approach, and to improve response rates by offering alternative response modes to the traditional paper diary.

Objective

▶ To understand the operational issues regarding implementing a web mode for CE and to understand the data quality and response rates associated with web collection.

Presentation Outline

I. Web Diary Logistics

II. Web Diary Instrument

III. Web Diary Materials and Training

IV. Preliminary Results

I. WEB DIARY LOGISTICS

Web Diary Logistics

- Data Collection Period – Jan, Feb, Mar 2013

- Test Closeout – Apr 30, 2013

- Starting Sample Size – 1,300 (Nationwide, less HI/AK)

- FR Workload – Approximately 2-3 extra cases/mo. per FR

Web Diary Logistics

- Separate online WD application (ASD)
- Debriefing Qs (for both R and FR)
- Naming conventions developed for:
  - ▶ ASD production input files
  - ▶ ASD Web Data output / MCS CAPI Data output
  - ▶ NPC Web/CAPI data for Visual Basic keying

Web Diary Logistics

- All research cases are "double placed"
- FRs provide username and password to Respondent via CAPI instrument
- New outcome codes for Web Diary (final disposition)
- Test Limitations
  - ▶ English only
  - ▶ No Multi-CU HHs or Replacement HHs
  - ▶ No Reinterview
- New materials
  - ▶ FR Talking Points (FR)
  - ▶ User Guide (FR)

Web Diary Flow of Data

- Expenditure Data delivered to DSD from ASD
  - ▶ Weekly (every Monday, 12:00am)
  - ▶ Cumulative, flat ASCII file
- Expenditure Data delivered from DSD to NPC for keying
  - ▶ Weekly, Tuesday afternoon
  - ▶ CEPB unduplicates for Case IDs already sent to NPC in prior weeks
- Recall Data delivered from DSD to NPC
  - ▶ Monthly, five working days after closeout
  - ▶ Converted to same file structure as Expenditure Data for NPC read-in
- NPC delivers keyed expenditure and recall data to DSD
  - ▶ DSD merges files and converts to SAS datasets per BLS specification
  - ▶ DSD conducts parallel data review and releases data to BLS

II. WEB DIARY INSTRUMENT

Web Diary CAPI Instrument

- Screener Qs for both research and production
  - HM_NET – "Does this household have internet access at home?"
  - EM_ACCS – "Is this through… (PC, tablet, mobile phone)?"
- Username and Password populated on "placement" screen
- "Web" placed as a fill before "Diary" on respective CAPI screens.
- Identical CAPI instrument used for both research and production cases

Web Diary CAPI Instrument

- Additional interviewer instructions serve as cues for FRs

- In order to facilitate the collection of receipts as well as recalled data, a recall/receipts tab added for final pickup to allow for FR data entry

- Additional outcome codes created to:
  - Separately identify research vs. production cases
  - Prevent additional programming for ROSCO

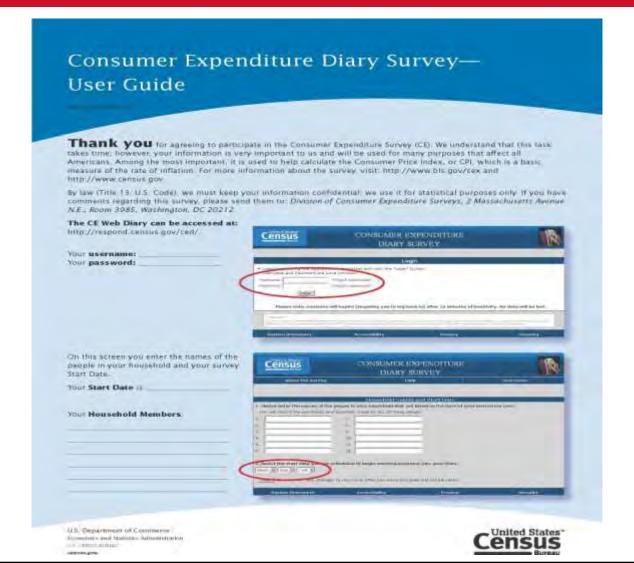# III. WEB DIARY MATERIALS AND TRAINING

Materials

- Materials (both R and FR)
- Two documents:
  - ▶ "Consumer Expenditure Diary Survey User Guide"
  - ▶ "FR Talking Points"

Consumer Expenditure Diary Survey User Guide

- The Survey User Guide was designed as a reference guide for R.
- The User Guide provided instructions on
  - ▶ URL for the Web Diary
  - ▶ Username and Password
  - ▶ Start date for entering expenses
  - ▶ Creating a household roster
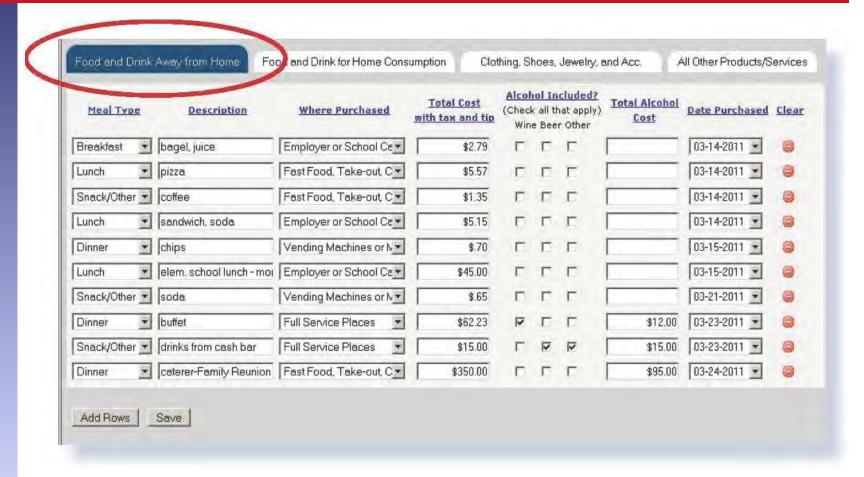 - ▶ Contacting the FR and Regional office with questions and other concerns

Consumer Expenditure Diary Survey User Guide

Consumer Expenditure Diary Survey User Guide

▶ **How and where to enter expenses**

- **Food and Drink Away From Home**

- **Food and Drink for Home Consumption**

- **Clothing, Shoes, Jewelry and Accessories**

- **All Other Products and Services**

▶ How to save work and add rows

▶ How to submit completed Web Diary expenses

Consumer Expenditure Diary Survey User Guide
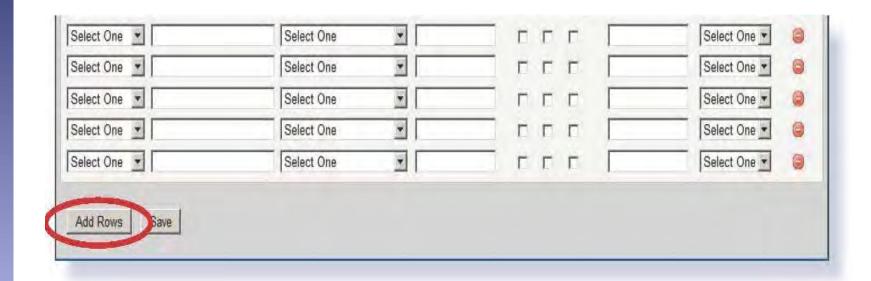
Consumer Expenditure Diary Survey User Guide

▶ How and where to enter expenses

- Food and Drink Away From Home

- Food and Drink for Home Consumption

- Clothing, Shoes, Jewelry and Accessories

- All Other Products and Services

▶ **How to save work and add rows**

▶ How to submit completed Web Diary expenses

Consumer Expenditure Diary Survey User Guide
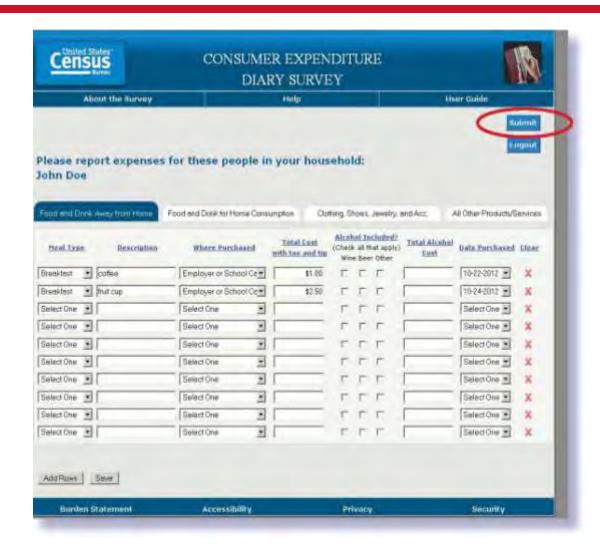
Consumer Expenditure Diary Survey User Guide

▶ How and where to enter expenses
- – Food and Drink Away From Home
- – Food and Drink for Home Consumption
- – Clothing, Shoes, Jewelry and Accessories
- – All Other Products and Services

▶ How to save work and add rows

▶ **How to submit completed Web Diary expenses**

20

Consumer Expenditure Diary Survey User Guide

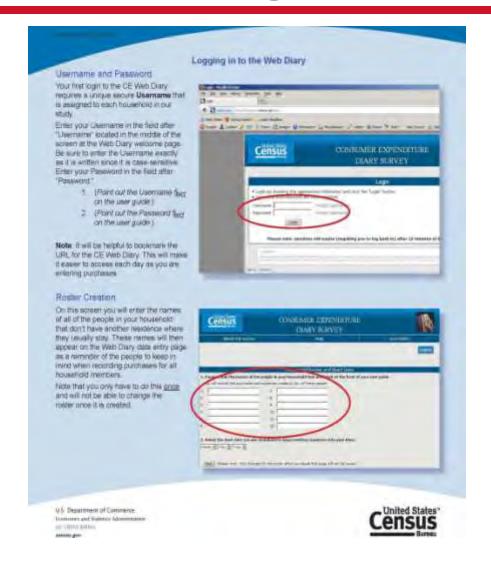# Consumer Expenditure Diary Survey User Guide

FR Talking Points

- For the Census FRs, the Web Diary Team created – FR Talking Points

- Similar in nature to the User Guide created for respondents

- The FR Talking Points also reminded FRs to emphasize to respondents which expenses not to record in the Web Diary

- The primary goal of the FR Talking Points was to provide a resource to FRs to thoroughly explain the Web Diary instructions to the respondent

FR Talking Points

Training - Web Diary VTC

- Video teleconference (VTC) was held at the end of November 2012 for Regional Office staff

- HQ virtual presentation to all Regional Offices
  - Background and Overview of WD Feasibility Test
  - Logistics and CAPI Instrument Changes
  - Walk-through of the Web Instrument
  - Question and Answer session

Training - Web Diary Self-Study

- FR training incorporated into November 2013 Refresher Training
- FRs had 4 hours to review materials (Self-study)
  - Introduction and Summary
  - Web instrument data entry
  - Practice interviews
- Each FR given
  - Unique username and password to log-into diary for independent walk-through
  - Respondent User Guide
  - FR Talking Points

IV. PRELIMINARY RESULTS

Web Diary Preliminary Results

- Help Desk
- Response Rates
- Diary Maintenance
- Training
- Other Issues

Web Diary Operational Issues

- No centralized "help desk" for respondents
  - ▶ Respondents were instructed to call (800) # as a direct line to DSD staff
    - General inquiries or surveys questions handled by Regional Office CE staff (or FRs)
    - Other technical issues, comments, or complaints forwarded to FSB via phone or email
    - Calls most often related to username/password issues, log-in after closeout, etc.
- DSD routed all non-password-related technical issues to ASD
  - ▶ Both FSB and DSD maintain Web Diary Issues Database for tracking and documentation

Web Diary Sample Performance

- Response Rate – 45.89%
- Production Response Rate – 72.11%
- 631 Completed Diaries
- Ineligible Rate – 48.21%
- Production Ineligible Rate – 22.63%
- Screened Out Cases (no internet access/language barriers) – 321 Cases

Sample Size (diaries)	1,375	100.00%
Completes (diaries)	631	45.89%
Refusals (diaries)	744	54.11%

Web Diary Respondent Compliance

- **Web Diary Failure-to-login Cases**
  - ▶ Defined as a placed diary where respondent failed to log into the instrument
  - ▶ Failure-to-login Rate - 28.92%
  - ▶ Receipt and recall data

- **Average Number of Diary Entries per Week**
  - ▶ Web Diary (not including recall data) – 28.51 mean diary entries per week
  - ▶ Production Diary (not including recall data) – 31.60 mean diary entries per week

Web Diary Paradata

- Login Failure Rate – 36.03%
- Mean Time in Instrument – 11.37 Minutes
- Device Information

Personal Computer (PC)	1,305	82.39%
Apple Mac	216	13.68%
Mobile Device	63	3.93%
Total	1,584	100.00%

Web Diary Paradata

- Link Usage

Itemized Instructions	70	22.01%
User Guide	65	20.44%
Instructions	58	18.24%
About	46	14.47%
Privacy	32	10.06%
Burden	25	7.86%
Other	22	6.92%
Total	248	100.00%

Web Diary Debriefing

- **R Cooperation**
  - ▶ Difficult for Rs with little computer experience
  - ▶ Initial response was positive; however, R became less diligent in the last few days, similar to paper diary
  - ▶ "Out-of-sight, Out-of-mind"

- **R Experience**
  - ▶ FRs report that Rs probably did not use materials
  - ▶ Materials needed top use simpler terms for Rs with limited computer experience
  - ▶ Rs reported misplacing materials
  - ▶ More motivational language would allow for easier placement

Web Diary Debriefing

- R Experience (cont.)
  - ▶ Provide flap for receipts in user guide similar to paper diary
  - ▶ Official letter provided by Census describing why the R is being asked to provide their email address
  - ▶ Allow four or five day window after the reporting period ends for the R to enter additional expenses that were forgotten during the reporting period
  - ▶ Rs frustrated that they had to enter purchase date for each expense

Web Diary Debriefing

- FR Experience
  - ▶ Self-study training inadequate, thought classroom training would have been superior
  - ▶ Recall and receipts were not handled in an intuitive way
  - ▶ Difficult to enter receipts and recall data without having access to what was entered by the respondent
  - ▶ Send the R reminder emails or text messages
  - ▶ Complete a demonstration of the web diary before the FR leaves
  - ▶ Let Rs customize their usernames and passwords

Main Issues

- Issues and expected resolutions

Lower Response Rate	Offer multiple survey modes & improved FR training
Lower Expenditures and Failure-to-login	Tailored follow-up through paradata monitoring
Help Desk	Offer dedicated help desk through Census

Input into Individual Diaries Field Test

- Targeted Sampling
- Paradata Monitoring
- Streamlined and Efficient Design
- Straightforward R Materials
- Comprehensive FR Training
- Additional Follow-up Procedures
- Receipt/Recall Procedures

Acronym Definitions

- WD – Web Diary
- FR – Field Representative
- R – Respondent
- CU – Consumer Unit
- HH - Household
- CAPI – Computer-assisted Personal Interviewing
- MCS – Master Control System
- FSB – Financial Surveys Branch
- CEPB – Consumer Expenditure Programming Branch
- DSD – Demographic Surveys Division
- ASD – Application Support Division
- NPC - National Processing Center
- ROSCO – Regional Office Survey Control

Contact Information

Ian J. Elkin
elkin.ian@bls.gov