

An Early Look at the Consumer Expenditure Survey Gemini Redesign Proof of Concept Test

**Laura Erhard, Jennifer Edgar,
Nhien To**

Office of Prices and Living Conditions
Division of Consumer Expenditure Survey

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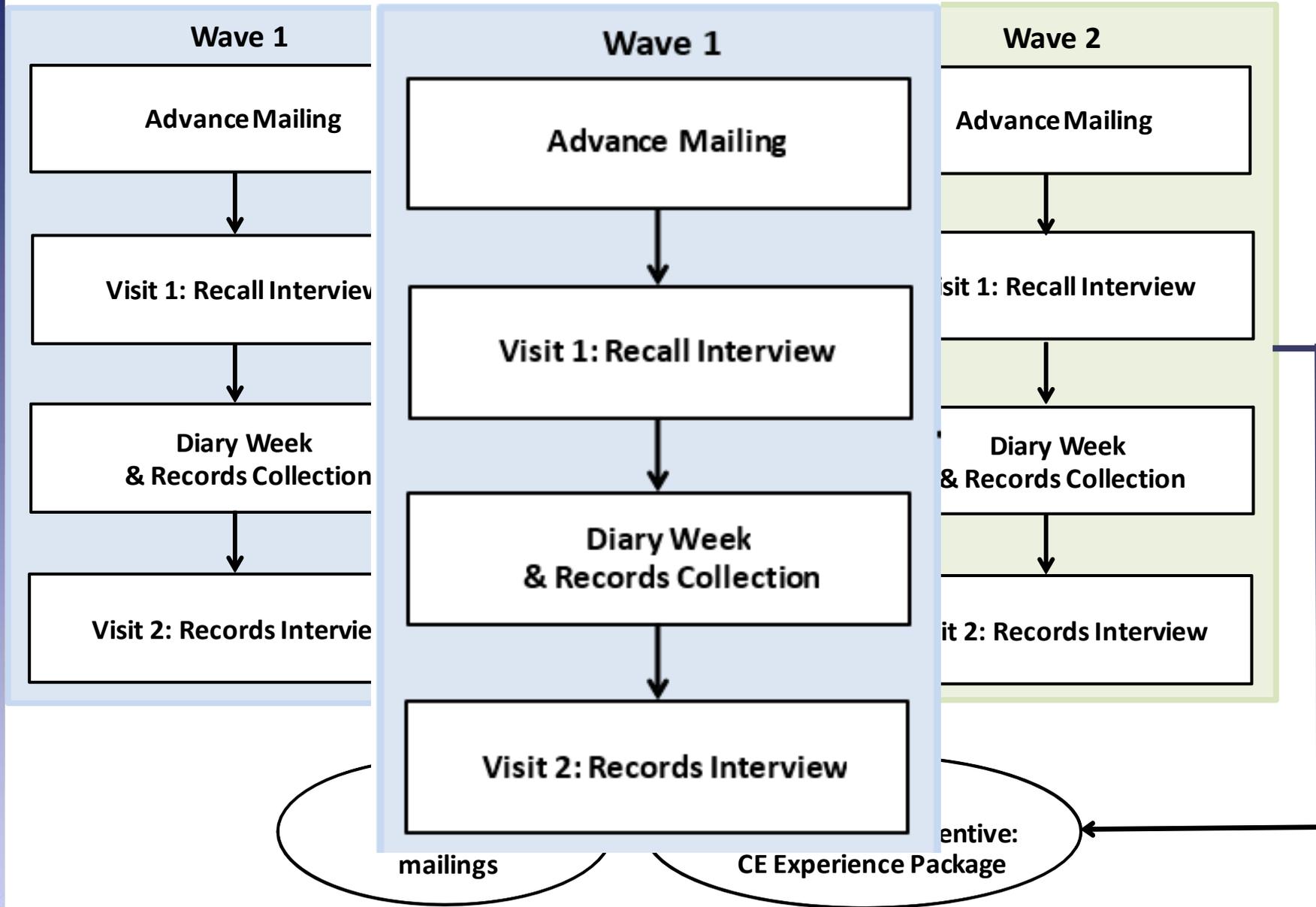
Outline

- Background
 - ▶ CE's Gemini Project
 - ▶ Proof-of-Concept test (POC)
- POC test design
- Field staff feedback
- Preliminary results
- Key findings
- Next steps

What is the Gemini Project?

“...aims to redesign the Consumer Expenditure (CE) survey to improve data quality through a verifiable reduction in measurement error—particularly error caused by underreporting.”

CE Redesign: New Protocol



Proof-of-Concept Test

- Ensure that the basic underlying structure and components of the new design are feasible
- Designed to mirror the proposed design to the fullest extent possible



POC Design



POC Design – Advanced Mailing

- Advanced letter sent via priority mail
 - ▶ Contained \$2 bill (token cash incentive)
 - ▶ Contained CE advance mailing language modified to include language for the POC Visit 1/Ind. Diary/Visit 2 design
 - ▶ Included mentions of the incentives

VISIT 1

POC Design – Visit 1 Recall

- Visit 1 (V1) interview very similar to current CE Quarterly Interview
- V1 conducted with a modified production CAPI instrument

Section Description

Home Furnishings

Appliances and Household Equipment

Entertainment Expenses

Trips and Vacations

Miscellaneous Expenses

POC Design – V1 Diary Placement

- Gathered all available household members
- Discussed Diary keeping tasks with members
- Identified Diary mode to each participating member, provide user IDs/passwords or paper diary
 - ▶ Main respondent decided on mode for absent members when choice was needed
 - ▶ Collected email and phone number of each individuals, asking permission to contact mid-week
- Left materials for respondents

POC Design – V1 Records Instructions

- The Field Representative (FR) described the records interview and requested the respondent to collect relevant records from the reference period (3 months prior to the V1 interview)
- The respondent was provided with a detailed checklist identifying which records to collect



RECORDS CHECKLIST

FOR THE MONTHS OF

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

COLLECT AND ORGANIZE YOUR HOUSEHOLD'S RECORDS IN 3 STEPS



FIND IT AT HOME OR ONLINE



FILE, SAVE, OR PRINT



CHECK THE BOX

Housing

- Mortgage loan statement
principal, interest, escrow payments
- Purchase or Sale of a property
Closing costs, HUD-1 statement
- Rent
- Real Estate or Property Taxes
- HOA or Condo Fees
- Maintenance and repairs
plumbing, gutters, landscaping, construction jobs
- Household operations
moving fees, storage, security

Utilities

- Telephone/Cell phone bill
- Cable/Satellite TV bill
- Internet bill
- Electricity/Natural gas bill
- Water/Sewer bill

Vehicles

- Bill of sale or lease agreement
new, used, or leased cars, boats, campers, motorcycles
- Financing agreements
- Licensing, registration, and inspection fees and property taxes

Insurance

- Homeowner's/Renter's insurance statement
- Health insurance statements
- Vehicle insurance statement
- Life insurance statements
- Other insurance
long term care, supplementary health, pet insurance, umbrella policies, flood insurance

Medical Care

- Out-of-pocket payments
copayments, coinsurance, reimbursable expenses
- Doctor's appointments, dental visits, eye exams
- Lab tests, x-rays, hospital stays
- Adult care
nursing or convalescent homes, daycare
- Eye glasses and hearing aids
- Rental equipment
- Prescriptions

Remember to get all...

- Paystubs
- Checkbook registers
- Credit Card statements
- Bank statements

DIARY WEEK

POC Design – Diary Week: Respondents

- Respondents kept an open-ended diary
- Diary kept online (accessible either via web or mobile device) OR filled out a paper diary...respondent choice
- Main respondent recorded expenditures for ineligible respondents, household expenses, and for any household member not participating.

Categories:

- Food and Drink Away From Home
- Food and Drink For Home Consumption
- Clothing, Shoes Jewelry, & Accessories
- All Other Products & Services

- Help was available via a call-center help desk and email

POC Web Diary Screenshots

The screenshot shows the 'CONSUMER EXPENDITURE DIARY SURVEY' web interface. At the top left is the 'United States Census Bureau' logo. The main header is 'CONSUMER EXPENDITURE DIARY SURVEY'. Below the header are navigation tabs: 'Information', 'User Guide', 'User Settings', and 'Logout'. A green banner reads 'Enter Your Expense Below'. The form contains the following fields:

- Date: June 8, 2015
- Description: bread
- Cost: \$4.59
- Category: Food and Drink for Home Consumption
- Type of packaging: Fresh (selected)
- Purchased for someone outside your household

Buttons for 'Cancel' and 'Save' are present. Below the form is a 'Summary of Expenses' table:

	Date	Description	Cost	Category
Delete Edit	June 7	Jeans	\$49.99	Clothing, Shoes, Jewelry, and Accessories
Delete Edit	June 7	chipotle	\$7.50	Food and Drink Away from Home

The screenshot shows the mobile app interface for the 'CONSUMER EXPENDITURE DIARY SURVEY'. The URL bar shows 'https://respond.census.gov'. The app header includes 'Info', 'CE Diary', and 'Logout'. The form contains the following fields:

- Date: May 9, 2015
- Description: eggs
- Cost: \$3.99
- Category: Food and Drink for Home Consumption
- Type of packaging: Fresh (selected)
- Purchased for someone outside your household

Buttons for 'Cancel' and 'Save' are present. The app interface also shows standard mobile navigation icons at the bottom.

POC Design – Diary Week: FRs

- FRs had access to a summary report of web diaries for their cases:
 - ▶ # Successful Log-ins, # Unsuccessful Log-ins, #Expenditure Reports
 - ▶ Details on expenditures reports (date, expense, description, Amount)
- FRs were instructed to call the main respondent within 2 days of placement if a R hasn't logged in OR if R hasn't made entries
 - ▶ Phone calls were made to the reference person (main respondent)
 - ▶ FR was encouraged to follow-up with individuals that provided contact information
- FRs were instructed to call the household mid-week regardless of entries, to see if there are questions and remind them to collect records for V2

VISIT 2

POC Design – V2 Diary Pick Up

- FR Collected Paper diaries
- Conducted diary recall process with main R and any available HH members
 - ▶ Asked if any entries were not entered into the diary and collected those missed entries (dependent on how far from the diary keeping week)

Visit 2 – Records Interview

- Conducted records interview with respondent

Section Description

Housing Characteristics

Rented Homes

Owned Homes

Utilities and Fuels

Rented and Leased Vehicles

Owned Vehicles

Insurance Other than Health

Health Insurance

Medical Expenses

Occupations and Income

Assets and Liabilities

Debriefing Questions

- Respondent debriefing questions related to V1 interview, diary keeping, records collection, and V2 interview:
 - ▶ Reactions to the incentives, general feedback, technical difficulties with web diaries, records collection task, etc.
- FR debriefing questions after each visit
 - ▶ After V1: recall, diary placement, and records training
 - ▶ After V2: diary week contacts, diary recall, and records.



Field Staff Feedback

- Generally positive, liked the design
- Really liked offering incentives
 - ▶ Didn't work for everyone, but...
 - ▶ For those that it did, helped keep engagement through second visit
- A lot to ask of respondents in the week between surveys (diary + record collection), BUT some feedback appreciated combining the samples – saving travel time and reducing the number of total waves.

Preliminary Results - July

Response Rates:

POC Response Rate = 53.1%

2014 CE Interview Response Rate = 66.4%

2014 CE Diary Response Rate = 65.0%

	N	%
Eligible Addresses	337	100.0
Refusals + Noncontacts	127	37.7
Incompletes	31	9.2
Completed all components of POC test	179	53.1

Preliminary Results - July

Individual Diaries:

Total eligible members	334
Total diaries placed	329
Average number of eligible household members	1.9
Average number of diaries placed per household	1.8
Average number of diaries with entries per household	1.7

Preliminary Results - July

Mode Choice:

	N	%
Members eligible for <i>web</i> diary	249	100
Web diaries placed	118	47.4
Paper diaries placed	129	51.8

Preliminary Results - July

Web Diaries:

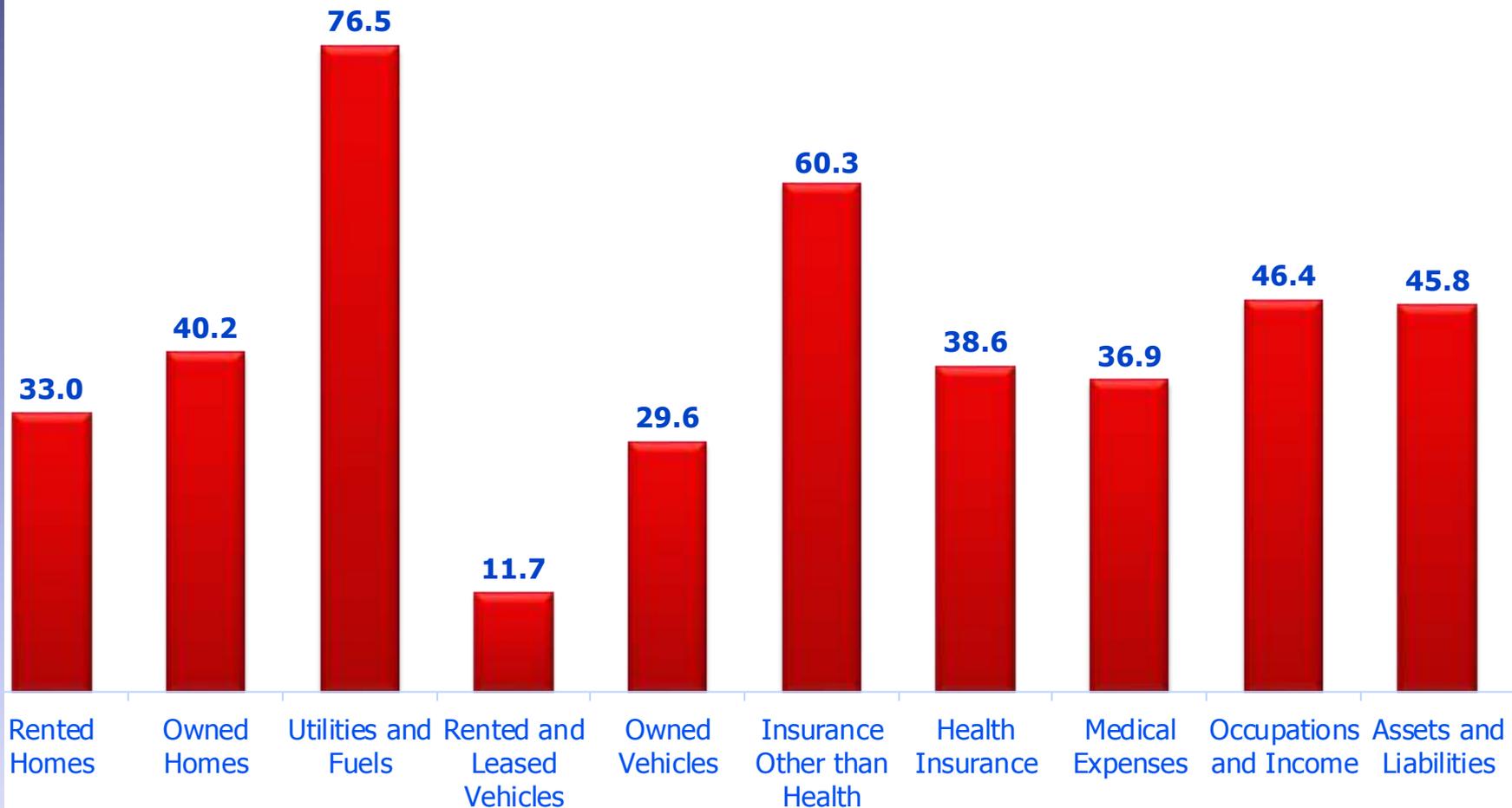
	N	%
Web diaries with log in attempts	117	100.0
Only unsuccessful log in attempts	11	9.4
At Least 1 successful log ins	106	90.6
Multiple successful log ins	82	70.1
Web diaries with >0 entries	99	84.6
Average number of entries (>0 log ins)	15.9	n/a

Preliminary Results - July

Records:

Complete interviews	179
% Used at least 1 record	88.8 %
Average number of sections with record use per household (out of 10)	4.2

Percent record use by section



Key Findings (so far)

- Those who agreed to the survey, were likely to complete all components
- Anecdotally – incentives were effective in continued cooperation and motivation
- Take up rate for the web diary was lower than expected
- Respondents were unwilling to provide email addresses, especially for non-present household members
- Despite the dramatic change from current production, FRs thought the new design was better overall

Next Steps

- POC Data Analysis
 - ▶ Comparisons to CE production data
 - ▶ Effectiveness of incentives
 - ▶ Length of interview

GO/NO-GO decision on Gemini Redesign

- Large Scale Feasibility Test (fielding 2019)

Contact Information

Laura Erhard Senior Economist

Branch of Research and Program Development
Consumer Expenditure Survey

www.bls.gov/cex

202-691-5119

erhard.laura@bls.gov