

Supporting Statement  
Consumer Expenditure Surveys: Quarterly Interview and Diary

**A. Justification**

**1. Necessity of the Consumer Expenditure Surveys**

The purpose of this revision request is to obtain clearance for the two Consumer Expenditure (CE) Surveys: the Quarterly Interview Survey (CEQ) and the Diary Survey (CED). Additionally, as part of an ongoing effort to improve data quality, maintain or increase response rates, and reduce data collection costs, CE is seeking clearance to make the following changes.

Three major changes will be implemented in the Diary Survey (CED). First, in an effort to alleviate burden and slow or reverse the decline in response rates, CE has developed an alternative version of the paper diary form. The new version consolidates the four main diary categories into two, facing, diary pages so that all expenses for a single day can be entered without flipping pages. An effort was also made to reduce the amount of instructions and examples so that respondents are not confused or intimidated. A complete list of changes to the diary form is included in Attachment A. A full, PDF version of the diary form is included as Attachment D.

Second, the earliest placement date and last placement date restrictions for the Diary will be removed allowing Field Representatives to place the diary on any day within the collection month. Data analysis shows that the monthly expenditures cycles that the earliest and last placement dates were put in place to capture are not statistically significant and were most likely the result of normal random fluctuations in the data that are expected in the survey's data rather than actual expenditure cycles. See Attachment X for more details.

Third, in order to simplify procedures and reduce costs, all Diaries will be double placed. With this new procedure, Field Representatives (FRs) will have the entire month to place the diaries instead of 7 days. This should drastically reduce the number of diaries CE loses to the non-interview Type A – Placed Too Late outcome code. As a result, the second Field Representative interview to pick up the Week 1 Diary and place the Week 2 Diary will be eliminated. Data analysis shows that double placements do not appear to have any negative effects on the Diary Survey. Approximately 27% of eligible cases and 33% of completed diaries are currently double placed. See Attachment Y for more details.

Additionally, CE will delete several tax questions that were deleted from CEQ in 2015 as data received from the IRS have enabled CE to calculate this data rather than collect it.

Several changes will also be implemented in CEQ in order to keep the CEQ questionnaire current. These changes include changes to question wording, deletions, additions, and section restructurings. Questions were added for solar panels, internet away from home charges, and alternative fuels such as electrical vehicle charging; health insurance questions were revamped to make them clearer and to align with the structure of the National Health Interview Survey (NHIS); questions were combined and reworded such as streaming videos to be combined with

Consumer Expenditure Surveys

1220-0050

November 2016

rental of movies and combining book purchases with book club subscriptions; questions were deleted on purchases occurring in the current month and on purchases of apps, games, and ringtones; questions on refinancing of a property and on construction and repair of property were streamlined. For a full list of all changes see Attachment Z.

The Bureau of the Census conducts the CE Surveys for the Bureau of Labor Statistics (BLS) in support of the Consumer Price Index (CPI) program. The continuing CE Surveys provide a constant measurement of changes in consumer expenditure patterns for economic analysis, and obtain data for future CPI revisions. The CPI program anticipates the need for CE surveys to collect outlet information to serve as outlet frames for most commodities and services (C&S) items as issues with TPOPS collection have resulted in prohibitively high costs. To support this objective, CE will test the addition of outlet questions in several sections of the CEQ survey instrument. In all sections except vehicles, CE will add these questions to the fourth interview only; because vehicle purchases are not reported often, questions on the purchase location for vehicles will be asked in all four interviews. For additional background on this change and a list of all additional questions see Attachment AA.

Finally, the Incentives/Outlets Test study questions will be deleted.

The major collection tool used for the CEQ is the CE Quarterly Interview Computer Assisted Personal Interview (CAPI) instrument. This instrument collects information about the household and consumer unit (CU) characteristics and the expenditure information for the CU. (See Attachment B for a full list of all 2017 Interview Instrument requirements.)

The CED requires each selected sample unit to keep two one week diaries of expenditures over two consecutive weeks. The CED collects information on small, relatively inexpensive items that respondents may not be able to recall in a retrospective interview. Given the nature of the type of data collected, a longer reference period would cause a reduction in accuracy of reporting for the CE Surveys. The CED uses both a CAPI instrument (see Attachment C for the 2015 Diary Instrument requirements which are unchanged for 2016), and the paper CE-801, Record of Your Daily Expenses (Attachment D). The Diary CAPI instrument collects information about household and CU characteristics and provides checks for reporting certain types of expenditures.

A subsample of approximately 10 percent of households in the Quarterly Interview Survey and 9 percent in the Diary Survey will participate in an additional CAPI interview, referred to as reinterview, for the purpose of instituting quality control over the performance of the interviewing staff. There are no changes to the 2016 Interview CAPI Reinterview instrument. (See Attachment E - Final CEQ RI Instrument Specs and Attachments.) The Diary Reinterview Instrument for 2016 will not change, nor have changes been made since 2004. (See Attachment F - CED RI Instrument Specs and Attachments).

A separate Information Booklet is used for each survey. Minor changes have been made to both the Quarterly Interview Survey Information Booklet CE-305 (Attachment G) for 2017, and to the Diary Interview Survey Information Booklet CE-805 (Attachment H) to support the changes made to the instruments.

## Consumer Expenditure Surveys

1220-0050

November 2016

Before the interviewer's visit, each CEQ and CED sample household receives an Advance Letter, the CE-303L1, 2 or 5 (Attachment I(a)) or CE-803(L) (Attachment I(b)). These letters explain the nature of the information the BLS wants to collect and the uses of the CEQ or the CED data, as appropriate; informs the respondents of the confidential treatment of all identifying information they provide; requests the respondents' participation in the survey; describes the survey's compliance with the relevant provisions of the Privacy Act and the Office of Management and Budget (OMB) disclosure requirements; and provide a link to the address of the respondent's informational webpage. Each of the advance letters and several of the brochures in the portfolio are available in the following languages: Arabic, Chinese, Korean, Spanish, Russian, Vietnamese, and Polish.

At the first interview for both the CEQ and the CED, the field representative gives the respondent a portfolio filled with information on CE, CPI and the Census Bureau (Attachment J). Also available to respondents is the respondent Web page. This page contains information about the CE surveys, frequently asked questions, and links to the most recent CE data. Respondents who participate in the Interview Survey are also provided with a "Home File" in which to save their bills and receipts for use at the next CEQ interview.

After each interview for the CEQ or after completion of the week 2 Diary, each participating household receives a Thank You letter, CE-303(L)6 or CE-803(L)6 (Attachment K) as well as a certificate of appreciation, CE-900 (Attachment L).

As appropriate, Census Field representatives may also provide supplemental flyers on the Quarterly Interview or the Diary Survey (Attachments M and N).

The BLS conducts the CE Surveys under the authority of Title 29, Section 2 of the United States Code. The Census Bureau collects information in the CE Surveys under the authority of Title 13, United States Code, Section 8b, that allows the Census Bureau to undertake surveys for other agencies.

## 2. **Uses of the Data**

The Bureau of the Census conducts the CE Surveys for the Bureau of Labor Statistics (BLS) in support of the Consumer Price Index (CPI) program. The continuing CE Surveys provide a constant measurement of changes in consumer expenditure patterns for economic analysis, and obtain data for future CPI revisions.

The BLS will use data collected in the CE Surveys to 1) provide data required for updating cost-weights used to calculate the CPI; 2) provide a continuous flow of data on income and expenditure patterns for use in economic analysis and policy formulation; and 3) provide a flexible consumer survey vehicle that is available for use by other Federal Government agencies. Public and private users of price statistics, including Congress and the economic policymaking agencies of the executive branch, rely on data collected in the CPI in their day-to-day activities. Data users and policymakers widely accept the need to regularly update the weights used in the CPI.

### **3. Collection Methods**

Since April 2003, the CEQ is collected using CAPI. The CAPI laptop instrument has streamlined the interviewing process and improved accuracy by eliminating the need for interviewers to make difficult decisions about correct branching and skip patterns during the interview. Where appropriate, screening questions in the instrument are used to determine eligibility for the administration of more detailed questions to each respondent. CAPI implementation for the Diary Household Characteristics Survey occurred in January 2004. Edit checks alert the Field Representative to irreconcilable data during the interview so that the correct data can be obtained and verified by the respondent.

### **4. Efforts to Identify Duplication**

To our knowledge, no other Federal agency is collecting this information.

Similar information with or without modifications does not exist. The CPI requires consumer expenditure data in order to produce item cost-weights estimates for the U.S. urban population, and for several major metropolitan areas. Additionally, to estimate cost weights for the population covered by the “CPI for Urban Wage Earners and Clerical Workers,” the BLS needs occupation and income from respondents to determine if we should use their expenditures in this index.

The only data source that approaches the CPI needs is the Personal Consumption Expenditures (PCE) published by the Bureau of Economic Analysis. However, these data do not allow the BLS to tabulate by the demographic characteristics and geographic areas necessary for producing estimates of cost weights for indexes published by the BLS as well as for many other analytical uses of the data. The PCE estimates, in addition to being too aggregated and lacking the statistical qualities of the CE, also cover the institutional population that is out-of-scope for the CPI.

### **5. Impact on Small Businesses**

Not applicable: the collection of information on the CE questionnaires involves individuals or households, not small businesses.

### **6. Consequences of not collecting the data**

Before 1979, the BLS collected consumer income and expenditure data every 10 to 15 years as a major component of large-scale periodic projects to update and revise the CPI. By conducting the consumer expenditure surveys continuously, the BLS is able to provide, more frequently, up to date data, thereby increasing the overall quality and efficiency of the CPI revisions. If the BLS does not conduct the CE Surveys on a continuing basis, current information necessary for timely and accurate updating of the CPI would not be available. In addition, the BLS would not be able to respond to the continuing demand-from the public and private sectors-for current information on consumer spending and income.

## Consumer Expenditure Surveys

1220-0050

November 2016

Data from the CE are the basis for determining the market basket of the CPI. The CPI market basket is updated approximately every two years and the updated market basket is two years old at the time of introduction.

In addition, the current sample sizes for the CE and rapid data processing allow the BLS to produce superlative measures of consumer price trends of an acceptable degree of reliability and on a basis much closer to real time than would be possible in the absence of a large sample. Such indexes are widely regarded as closer approximations to a cost-of-living index than the current CPI.

### 7. Special Circumstances

The CED requests that each selected sample unit keep two one-week diaries of expenditures over two consecutive weeks. The CED collects information on small, relatively inexpensive items that respondents may not be able to recall in a retrospective survey. Given the type of data collected, the BLS requests Diary Survey respondents to record responses in fewer than 30 days after receipt of it.

### 8. Consultations

BLS received two public comments on the Federal Register notice published in the Federal Register, 81 FR 42731, on June 30, 2016. The comments received concerned the methodology of the Gemini project, collection procedures, validation of CE data, alternative sources of CE data, suggestions for additional collection of data elements, and impact of changes to data collection on estimates. BLS carefully evaluated all of the comments received from the public; responses below are from BLS.

#### *Gemini Project Methodology*

One of the comments concerned the methodology of the Gemini project and a concern that the new methodology would fail to provide a measure of total expenditures over an annual period that matches the collection of annual household income. Furthermore, the commenter feels that researchers and policy makers need the ability to measure changes in consumer spending between periods.

The primary purpose of the Gemini project is to address measurement error. Evidence of underreporting exists, resulting from perceived (and real) respondent burden due to survey length and complexity, panel or questionnaire conditioning, increasing telephone administration of a survey originally designed for personal visit interviews, proxy reporting by a single household member, recall effects stemming from a 3-month reference period, and other sources of measurement error.

CE recognizes the importance of collecting data that allows for measuring changes in spending by consumer units over time. However, CE must balance this need against respondent burden. The proposed Gemini design will allow CE to introduce the ability to identify a 12-month change in income and expenditures while balancing burden added by the redesign's plan of integrating the

quarterly and diary survey into one sample. The expectation is that the resulting design will provide higher quality data, while still meeting the requirements of the stakeholders. In terms of the loss of the 12 month panel, as CE is an address-based sample, we are not a panel following households.

#### *Collection Procedures*

Two of the comments focused on collection procedures including the need to focus on collection of data through personal interview rather than self-reports; to add additional methods of collection such as online data collection and allowing respondents to scan their receipts; and to refer respondents to written and online records more often during interviews. CE is actively investigating the use of electronic data collection in the Diary. However, tests have resulted in several issues that must be addressed prior to implementation in the full sample. Earlier research on online diaries found that implementation of this collection mode under the applied protocol resulted in lower response rates, lower expenditure amounts, higher rate of total recall, lower placement rates, and higher ineligible rates. CE remains committed to online data collection and plans additional testing and possible phased in implementation of online collection in 2019 once the above risks have been mitigated. CE is not currently investigating receipt scanning as a collection method. However, in the Diary survey, as a last resort, receipts can be collected in lieu of completing a diary. To avoid a refusal case at placement, Field Representatives are instructed that receipts can be used for the Diary expenditures and to instruct the respondent to record as many expenditures as possible. Respondents should keep receipts from all other expenditures. CE currently has no plans to move away from conducting both self-reports of expenditures through a record keeping type of survey (diary) combined with a personal interview. In this way, the advantages of allowing for daily self-reports of easily forgotten items can be combined with the advantages of using a personal interview to ask specific questions aiding recall.

#### *Validation of CE data*

One commenter asked that CE perform validation of its data through comparison of CE data to outside data sources. CE regularly performs validation of its data, comparing CE results with other internal and external surveys. Comparisons between CE and the following sources are currently available on the CE public website:

- Personal Consumption Expenditures
- Residential Energy Consumption Survey
- National Health Expenditure Accounts
- Medical Expenditure Panel Survey & NHEA
- Current Population Survey
- American Community Survey
- Panel Study of Income Dynamics
- Survey of Consumer Finance

## Consumer Expenditure Surveys

1220-0050

November 2016

- American Housing Survey
- CE Diary to Interview

Additionally, BLS is in the process of adding additional comparisons to National Health Expenditure Accounts covering 2011 to 2014, USDA Food multi-year comparison, and CPS income comparisons table for 2014.

### *Alternative sources of data/Linkage of data*

Both commenters recommend that CE investigate other sources of expenditure and income data to supplement CE data collection. CE is actively working in this area, including:

- 1) Evaluating the feasibility of using CoreLogic housing data as a replacement or complementary data source for CE housing estimates based on match rates and comparison of response distributions;
- 2) Comparing CE data with data from Zillow to use as a benchmark for comparison of CE respondent-provided data against CE data from outside sources as well as to evaluate if this data can be used to improve or replace CE data;
- 3) Investigating measurement error in respondent-reported income in CE data by linking to IRS data, and evaluating related non-response adjustment and imputation procedures. The resulting linked data is protected under title 26, and limited to Census staff working with the data who are sworn to use the data for statistical purposes only.

### *Suggestions for additional collection of data elements*

Both commenters also requested the collection of additional data elements. One commenter requested the return of owned vehicle make and model on the public use microdata file and the other requested the “blue book value” of the vehicle. Due to disclosure risks, vehicle model was dropped beginning with the 2003 data set release; vehicle make data is still available. Vehicle model will not be added back into the public use microdata file. Information collected for BLS by the Census Bureau operates under the Title 13, U.S.C., Section 9 prohibiting the publication or release of any information that would permit identification of any particular establishment, individual, or household. CE will investigate including an estimate of the car’s value. Also requested by both commenters was additional information on major life events of a consumer unit. CE has looked in to methodology of collecting data on major life events to aid in recall of expenditures. However, concerns were raised regarding the sensitive nature of this data and must be weighed against the need to gain respondent cooperation and maintain response rates.

### *Impact of data collection changes*

One commenter was concerned with the impact of data collection changes regarding income and health insurance. Changes to both the CE Diary and Interview surveys occur on a biannual basis with the questionnaire changes reflecting a mix of both survey improvement and changes in end-user requirements. To ensure these changes are implemented correctly and that they properly reflect the reason for the change, CE regularly evaluates and reports on the impact of questionnaire changes. BLS will continue to evaluate the impact of questionnaire changes and to act quickly to take corrective actions should the BLS determine that the enacted questionnaire change is not collecting data appropriately.

Consumer Expenditure Surveys

1220-0050

November 2016

*Research Access to internal CE Survey Data*

BLS is considering the implications of providing BLS data in the research centers in the future across the various offices and programs. However, the current BLS contract with Census prohibits any access to CE raw data outside of the BLS headquarters building. Researchers are always welcome to apply to do research using BLS internal data here at the BLS national headquarters.

In the past year, the BLS has consulted with the following persons by correspondence and telephone conversations:

Jennifer Epps  
Associate Director for Demographic Programs  
Bureau of the Census

John Gloster  
Associate Director for Demographic Programs  
Bureau of the Census

Richard Schwartz  
Associate Director for Demographic Programs  
Bureau of the Census

Stephen Ash  
Demographic Statistical Methods Division  
Bureau of the Census

Scott Bechtle  
Demographic Statistical Methods Division  
Bureau of the Census

Consultations with these persons continue as specific problems arise.

**9. Payment to Respondents**

As indicated in the 2016 clearance package, BLS is currently testing the effectiveness of providing incentives. After the conclusion of the incentives test, no payment or gift will be provided to respondents. (For additional information on payment to respondents as part of the incentives test, see Attachment BB – Incentives/Outlets Test Overview.)

**10. Assurance of Confidentiality**

The Census Bureau interviewers, Census Bureau employees, and BLS employees with access to CE data hold all information that respondents provide in strict confidence in accordance with Title

## Consumer Expenditure Surveys

1220-0050

November 2016

13, United States Code, Section 9. Census Bureau interviewers, Census Bureau employees, and BLS employees with access to CE data have each taken an oath to this effect, and if convicted of disclosing any information given by the respondent may be fined up to \$250,000 and/or imprisoned up to 5 years. In addition, Title 13 prohibits Census Bureau interviewers, Census Bureau employees, and BLS employees with access to CE data from disclosing information identifying any individual(s) in the CE Surveys to anyone other than sworn Census or BLS employees. Before the interviewer's visit, CEQ or CED respondents will receive the CE-303(L) or CE-803(L) Advance Letters respectively, signed by the Director of the Census Bureau and informing them of the confidentiality of the survey data.

### 11. Justification for the collection of sensitive data

The CE Surveys do not include any questions of a sensitive nature.

### 12. Estimated Annualized Respondent Hour and Cost Burdens

As a result of the phase out of the first wave bounding interview and implementation of a four wave survey in 2015, CE saw the average length of the CEQ interview increase to approximately 65 minutes.

BLS will conduct the CEQ at approximately 48,000 designated addresses, which will result in approximately 26,300 completed interviews. Reinterviews will be conducted on approximately 11 percent of the completed interviews, for a total of 2,900 completed reinterviews yearly. The average time to complete the survey is 65 minutes for the regular interview, and 10 minutes for the reinterview. The Incentives/Outlets test will continue in the first quarter of 2017 and will result in 752 responses with an average time to complete the additional questions of approximately one minute per response. This will result in 13 additional hours of respondent burden. This results in an annual response burden of 28,988 hours yearly. The total annualized cost to respondents, based on burden hours and the federal minimum wage of \$7.25 per hour, is \$210,163.

Estimated Annualized Respondent Hour and Cost Burdens for the Quarterly Interview Survey

Forms	Number of Respondents	Number of Responses per Respondent	Total number of Responses	Avg, Burden per Respondent (in hours)	Total Burden Hours	Hourly Wage Rate**	Total Burden Costs
Interview	6,575	4	26,300	65/60	28,492	\$7.25	\$206,567
Re-Interviews*	2,900	1	2,900	10/60	483	\$7.25	\$3,502
Incentives/Outlets Test	752	1	752	1/60	13	\$7.25	\$94
Total	—	—	29,952	—	28,988	--	\$210,163

Consumer Expenditure Surveys

1220-0050

November 2016

\*Re-Interviews are done on a subset of the original respondents

\*\* Federal Minimum Wage

The BLS will conduct the CED at approximately 12,000 designated addresses per year, of which approximately 6,600 will result in completed interviews and diaries. Respondents complete 2 weekly diaries, resulting in 13,800 weekly diaries being completed per year. Reinterviews will be conducted on approximately 10 percent of the weekly diaries for a total of 1,380 reinterviews. Respondents spend approximately 105 minutes completing each weekly diary, for a total of 23,105 hours of record-keeping. In addition to record-keeping, it takes approximately 20 minutes to complete each of the two regular interviews, and 10 minutes to complete the reinterview, for a total of 4,400 hours of interviewing, and 230 hours of reinterviewing. Total burden hours for the Diary Survey per year 27,730.

Estimated Annualized Respondent Hour and Cost Burdens for the Diary Survey							
Forms	Number of Respondents	Number of Responses per Respondent	Total Number of Responses	Avg, Burden per Respondent (in hours)	Total Burden Hours	Hourly Wage Rate**	Total Burden Costs
<b>Reporting</b>							
Interview	6,600	2	13,200	20/60	4,400	\$7.25	\$31,900
Re-Interviews*	1,380	1	1,380	10/60	230	\$7.25	\$1,668
Recordkeeping	6,600	2	13,200	105/60	23,100	\$7.25	\$167,475
Total	--	--	27,780	--	27,730	--	\$201,043

\*Re-Interviews are done on a subset of the original respondents

\*\* Federal Minimum Wage

The total response burden for both surveys combined is 56,718 hours. The total number of responses are 57,732. The total annualized cost to respondents, based on burden hours and the federal minimum wage of \$7.25 per hour, is \$411,206.

Consumer Expenditure Surveys

1220-0050

November 2016

Estimated Annualized Respondent Hour and Cost Burdens Totals			
Forms	Total Burden Hours	Total Number of Responses	Total Burden Costs
<b>Reporting</b>			
Quarterly Survey	28,975	29,200	\$210,069
Diary Survey	4,630	14,580	\$33,568
Incentives/Outlets Test	13	752	\$94
Total	33,618	44,532	\$243,731
<b>Recordkeeping</b>			
Diary Survey	23,100	13,200	\$167,475
Total	56,718	57,732	\$411,206

### **13. Annual Cost to Respondents**

There are no capital and start-up costs and no operational, maintenance, or service costs required of respondents.

### **14. Annual Cost to the Federal Government**

The annual cost to the Federal Government of collecting, processing, reviewing, and publishing the data collected in the CE Surveys was approximately \$40 million in fiscal year 2016. This included approximately \$27 million in costs incurred by the Census Bureau for collecting and processing the data, operational costs associated with maintaining the survey, and development costs. The BLS portion of approximately \$13 million was for costs incurred by the BLS in personnel and other related costs associated with managing the survey, processing the data upon receipt from the Census Bureau, reviewing, and publishing the data, and for research and development.

#### **1. Change in Respondent Burden**

Reporting burden has decreased from 58,835 to 56,718 despite the increase in interview length

Consumer Expenditure Surveys

1220-0050

November 2016

due to the elimination of the second interview in Diary and the decrease in interview time for the remaining two interviews from 24 to 20 minutes. Estimated response burden hours is calculated using actual data collection times over the last two years.

**16. Publication Plan**

Data collection activities for the continuing surveys began in September 1979 for the Diary Survey and in October 1979 for the Quarterly Interview Survey. The Census Bureau delivered the first edited and weighted data tape to the BLS in April 1981. Delivery is now scheduled with Quarterly Interview Survey data to be delivered three weeks after the interview month and Diary Survey data to be delivered two months after the interview month.

In May 1983, the BLS published the first tables from the continuing CE Surveys and selected data from the 1980-81 Diary Surveys. Also, microdata on public use tapes were made available for the first time in June 1983 for the Diary Survey and in October 1984 for the Interview Survey.

The BLS has released Diary and Quarterly Interview Survey public use microdata up to and including 2014. The newest tabular data for midyear July 2014 through June 2015 were published in April 2016. The 2015 tabular data and Diary and Quarterly Interview Survey public use microdata are scheduled to be published the end of August 2016.

**17. Reason for not Displaying the OMB Expiration Date**

The BLS requests not to display the expiration date of the information collection because the Quarterly Interview and the Diary Household Characteristics instruments are automated; the respondent, therefore, never sees the date. The OMB control number for the CE Surveys is included in the advance letter given to respondents (see Attachment I). For the Diary CE-801 there is a significant costs savings in printing a large quantity of forms at one time due to the set up costs involved in printing for the survey instrument. By not printing the date on the form the BLS will be able to continue to use forms in stock, assuming no form changes, once the OMB clearance date has expired and a new expiration date has been approved. The BLS would save both time and money by not having to destroy the old questionnaires and printing new ones.

**18. Certification Statement**

There are no exceptions to the certification statement.