

## SUPPORTING STATEMENT

### A. JUSTIFICATION

#### 1. Necessity of the Information Collected

The purpose of this request for review is for the Bureau of Labor Statistics (BLS) to obtain approval for the 2014-15 collection of the Eating and Health Module in the American Time Use Survey (ATUS). The proposed questions appear in Attachment A. As part of the ATUS, the module will survey individuals ages 15 and over from a nationally-representative sample of approximately 2,190 sample households each month. If approved, the Eating and Health Module questions will be asked immediately after the ATUS and will follow up on some of the information ATUS respondents provide in their time diary. (The time diary is a section of the ATUS interview in which respondents report the activities they did over a 24-hour period that mainly encompasses "yesterday," or the day before the interview.) The Eating and Health Module is sponsored by the Economic Research Service (ERS) of the U.S. Department of Agriculture.

The proposed Eating and Health Module will collect data about eating and drinking behavior, food assistance participation, grocery and food shopping, and meal preparation. The module will also collect some general health information and information about physical exercise.

The collection of the Eating and Health Module in 2014-15 is another effort to gather data on individuals' eating behavior and general health in the ATUS. The Eating and Health Module, as described above, was attached to the ATUS in 2006-08, and collected under the OMB Number 1220-0175. The proposed 2014-15 version of the module will be similar to the 2006-08 EH Eating and Health Modules. Unlike the previous Eating and Health Modules, the 2014-15 version will not include questions to collect times when respondents did any secondary drinking and questions about meals children obtained at school. Also, because the 2006-08 Eating and Health Modules took less time to administer than anticipated, several new questions were added to the 2014-15 module, including questions about soft drink consumption, grocery and meal shopping, meal preparation, food affordability, and physical exercise done in the last week.

The ATUS is the Nation's first federally-administered, continuous survey about time use in the United States. The survey is sponsored by BLS and conducted by the U.S. Census Bureau. In the ATUS, a nationally-representative sample of persons from households completing their final month of interviews for the Current Population Survey (CPS) is drawn for the ATUS. From each household, one person age 15 or older is selected for a one-time ATUS interview. The primary focus of the interview is on collecting a time diary, although additional questions are asked about the respondent's household composition, work activity during the prior week, and other subjects.

Time-use data are considered important indicators of both quality of life and the contribution of non-market work to national economies. They measure, for example,

time spent caring for children, volunteering, working, sleeping, and doing leisure and other activities.

Collection of time-use data fits well within the BLS mission, as outlined in Title 29, United States Code, Section 1:

“The general design and duties of the Bureau of Labor Statistics shall be to acquire and diffuse among the people of the United States useful information on subjects connected with labor, in the most general and comprehensive sense of that word, and especially upon its relation to capital, the hours of labor, the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity.”

Collection of time-use data in conjunction with eating and health data fits well within the BLS strategic goal to produce timely and accurate data on the economic conditions of workers and their families.

## 2. Needs and Uses

The data from the proposed Eating and Health Module support the BLS mission of providing relevant information on economic and social issues. Time use data allows researchers to analyze the choices people make in how they spend their time, along with the time and income constraints they face. The data from the proposed Eating and Health Module can be used for research on the inter-relations and inter-associations of time use patterns and body mass index (BMI), food assistance participation, grocery shopping, and meal preparation. These data will enhance the understanding of peoples' overall well-being.

The data from the Eating and Health Module also closely support the mission of the module's sponsor, ERS, to improve the nation's nutrition and health. By analyzing the module data, the association between time-use patterns and nutrition and health can be studied. Some of the questions that can be answered include:

- What is the association between eating patterns and BMI and obesity?
- What are the time-use patterns of food assistance program participants and low-income nonparticipants?
- What is the association between time-use patterns and eating and activity levels?
- How does time-use vary by health status?

With the exception of asking about secondary child care, the ATUS asks respondents to identify only their primary (or main) activities; however, many Americans eat while doing other things, such as driving or working. Asking respondents to report eating as a secondary activity provides information both for estimating the total time spent eating and also for understanding eating patterns. USDA has considerable research interest in eating behavior, as ERS conducts research to monitor and evaluate food consumption from several different perspectives—what people eat, where people buy their food, and how food consumption choices relate to diet quality and nutrition. In addition, ERS research analyzes the degree to which food and eating choices influence the type of

crops that America's farmers grow, the prices farmers receive for those crops, and how those crops are transformed into finished products.

Obesity is the most common food- and nutrition-related health problem in America. Health professionals and economists have been conducting research to discover whether excess caloric intake or insufficient exercise is to blame for America's growing obesity problem. The Eating and Health Module, used in conjunction with the core ATUS, can help identify the types of activities and eating patterns that are associated with obesity, a healthy weight, overall health, and well-being. Data on time spent in sedentary and active pursuits, along with eating patterns (secondary eating and soft drink consumption), demographic characteristics, and labor force information, will provide researchers the ability to analyze time use for various subgroups by Body Mass Index (BMI). Self-rated health status is an inexpensive measure that has been found to provide meaningful information on health and well-being. Self-reported general health status has been found to predict mortality and morbidity and is used in other Federal surveys to assess overall well-being.<sup>1</sup>

The Supplemental Nutrition Assistance Program (SNAP)—formerly named the Food Stamp Program—is the Nation's largest food and nutrition assistance program and is administered by USDA. The Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides Federal grants to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk. Understanding the time constraints that low-income households face, both those with and without SNAP and/or WIC recipients, is of particular interest to policymakers and program administrators.

The 2006-08 Eating and Health Modules produced data that has been used in a variety of research products that inform policy and programs on eating and other behaviors. ERS featured tables and a summary of findings from the 2006-08 modules in a web product on USDA's Web site<sup>2</sup>. Other examples of ERS research using the 2006-08 data include, but are not limited to:

- Nonresponse Bias Analysis of Body Mass Index Data in the Eating and Health Module—Findings showed that any nonresponse bias associated with height and weight data appears small and would not affect future analyses of correlations between Body Mass Index (BMI) and time use (August 2012).<sup>3</sup> (See Attachment O.)
- Investigating the Time Use Patterns of Obese Americans—This article examines time spent on various activities by individuals in different body mass index (BMI) groups. Across all BMI groups, those who were obese over the 2006-08 period spent the

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<sup>1</sup> See Hennessy, C.H., D.G. Moriarty, M.M. Zack, P.A. Scherr, R. Brackbill, "Measuring Health-Related Quality of Life for Public Health Surveillance," *Public Health Report 1994*; 109: 665-72

<sup>2</sup> Tables and summary findings from the 2006-08 Eating and Health Modules are available on the USDA Web site: [http://www.ers.usda.gov/data-products/eating-and-health-module-\(atus\)](http://www.ers.usda.gov/data-products/eating-and-health-module-(atus)) and [http://www.ers.usda.gov/data-products/eating-and-health-module-\(atus\)/summary-findings.aspx](http://www.ers.usda.gov/data-products/eating-and-health-module-(atus)/summary-findings.aspx).

<sup>3</sup> Hamrick, Karen. (August 2012). Nonresponse Bias Analysis of Body Mass Index in the Eating and Health Module. United States Department of Agriculture, Economic Research Service. Technical Bulletin No. (TB-1934) 36 pp, August 2012

longest amount of time watching TV and the shortest amount of time engaged in sports and exercise (June 2012).<sup>4</sup> (See Attachment P.)

- How Much Time Do Americans Spend on Food?—This report uses data from the 2006-08 ERS Eating & Health Module of the American Time Use Survey to present an overview of Americans' eating and other food-related time use patterns (November 2011).<sup>5</sup> (See Attachment Q.)
- Shopping For, Preparing, and Eating Food: Where Does the Time Go?—Describes time use patterns of SNAP participants and low-income nonparticipants (December 2009).<sup>6</sup> (See Attachment R.)
- Working Parents Outsource Children's Meals—Describes time use patterns of employed persons and whether children in the household obtain meals at school (March 2009).<sup>7</sup> (See Attachment S.)
  
- How Much Time Do Americans Spend Eating?—Describes time Americans spent on eating and drinking beverages in 2006 (June 2008). (See Attachment T.)

A comprehensive list of articles and publications using data from the 2006-08 modules is available on the ERS Web site: [http://www.ers.usda.gov/data-products/eating-and-health-module-\(atus\)/readings.aspx](http://www.ers.usda.gov/data-products/eating-and-health-module-(atus)/readings.aspx) (also see Attachment U).

### 3. Use of Information Technology

The U.S. Census Bureau, which collects and processes the data for BLS, uses state-of-the-art methods to conduct interviews and record respondent information. Census Bureau interviewers conduct all interviews over the telephone, completing the respondent's time-use diary using Computer Assisted Telephone Interviewing (CATI). Using an automated call scheduler and hourly reports from the system, cases are presented to interviewers in an order that accounts for the respondents' designated interview days, pre-set appointment times, CPS information on the best time to call respondents, and other information.

The ATUS questionnaire and coding instrument are built in Blaise, a windows-based software package developed by Statistics Netherlands and adopted as the Census Bureau standard. The software's graphical user interface (GUI) enables the usage of data entry grids that accept many entries on one screen. This feature enables the

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<sup>4</sup> Hamrick, Karen. (June 2012). [Investigating the Time Use Patterns of Obese Americans](http://www.ers.usda.gov/amber-waves/2012-june/investigating-time-use-patterns.aspx#UrHrx_Yo6Hs). *Amber Waves*, United States Department of Agriculture, Economic Research Service. [http://www.ers.usda.gov/amber-waves/2012-june/investigating-time-use-patterns.aspx#UrHrx\\_Yo6Hs](http://www.ers.usda.gov/amber-waves/2012-june/investigating-time-use-patterns.aspx#UrHrx_Yo6Hs) (accessed December 18, 2012).

<sup>5</sup> Hamrick, Karen, Andrews, M., Guthrie, J., Hopkins, D., and McClelland, K. (November 2011). How Much Time Do Americans Spend On Food. *Economic Information Bulletin*, No. (EIB-86).

<sup>6</sup> Andrews, M., and Hamrick, K. (December 2009). Shopping For, Preparing, and Eating Food: Where Does the Time Go? *Amber Waves*, United States Department of Agriculture, Economic Research Service. <http://webarchives.cdlib.org/sw1tx36512/http://www.ers.usda.gov/AmberWaves/December09/Findings/ShoppingFood.htm> (accessed December 18, 2013).

<sup>7</sup> Guthrie, J, and McClelland, K. (March 2009). Working Parents Outsource Children's Meals. *Amber Waves*, United States Department of Agriculture, Economic Research Service. <http://webarchives.cdlib.org/sw1tx36512/http://www.ers.usda.gov/AmberWaves/March09/Findings/OutsourceMeals.htm> (accessed December 18, 2013).

interview to be flexible, making reporting easier for respondents. It also facilitates efficient and accurate coding of diary activities.

A debit card tracking system is in place to manage incentive payments to “no-telephone-number” households in the sample.

#### 4. Efforts to Identify Duplication

There have been few efforts to collect data on time-use and how it relates to BMI, food assistance participation, grocery shopping, and meal preparation. The ATUS first ran Eating and Health Modules in 2006-08. These modules were similar to the proposed 2014-15 Eating and Health Module. However, unlike the proposed 2014-15 version, they did not include questions about soft drink consumption, reasons for purchasing groceries at a specified store, frequency of purchasing prepared meals, food safety practices, and physical exercise done in the last week.

The 2006-08 modules asked respondents about the time they spent engaging in secondary drinking, that is, drinking beverages while doing another activity. The survey results showed that secondary drinking was a less-clearly defined activity than was secondary eating. The proposed module substitutes questions about soft drink consumption to more precisely collect information about caloric beverage intake. Questions on children's participation in school meal programs were dropped from the proposed module because the 2006-08 data on this topic were underutilized. The additional questions in the proposed 2014-15 Eating and Health Module will add significant information beyond what was collected in 2006-08.

The 2014-15 Eating & Health Module will complement other food data collection efforts, as did the 2006-08 ATUS Eating & Health Modules. The ATUS is a time use survey, and the Eating & Health Module is adding to the ATUS core survey in order to utilize the time diary data for research on food assistance, food markets, diet and health, and food safety. The National Household Food Acquisition and Purchase Survey (FoodAPS) collected extensive information on the economic decisions in food purchases, but did not collect time diary information. The CPS-Food Security Supplement (FSS) collects extensive information on whether or not a household is food secure, the amount of the household's food expenditures, and whether or not the household receives food assistance benefits, but does not collect any time use information. The National Health and Nutrition Examination Survey (NHANES) collects extensive medical and food intake data, but no time use information. The BLS Consumer Expenditure Survey collects extensive information on households' expenditures, but no information about time use.

The focus of the Eating and Health Modules is time use research, and the 2014-15 module will allow for identification of respondents in various categories (e.g., food assistance participants) or with certain behaviors (e.g., fast food purchasers) in order to study their time use patterns, or how time-use influences overall food decisions. For example, while other surveys collect extensive information on SNAP participants, no other survey collects time diary information. By combining the time diary information in the core ATUS with information collected in the Eating and Health Module, one can analyze the time use patterns of SNAP participants, income-eligible non-participants,

and other subgroups. In this sense, the module enhances the usefulness of the ATUS for research in areas of food assistance, food markets, diet and health, and food safety.

Other surveys which have collected similar information (but do not include time-use information) include:

- National Center for Health Statistics (NCHS) surveys—There were no changes in the Eating & Health Module from 2006-08 to 2014-15 that were in the core territory of NCHS surveys' content. Specifically, the module is not measuring food intake, and the NHANES questions that are used in the module are ones that worked well, and were taken verbatim (general health, height, and weight) or modified slightly (exercise, see above).
- CPS-Food Security Supplement—ERS added to the 2014-15 module the FSS Women, Infants, and Children (WIC) participation question and the screener food sufficiency question (slightly modified to fit the flow of the module). The 2006-08 module contained the FSS Food Stamp Program/SNAP participation question which will continue as the SNAP participation question in the 2014-15 module. Note that although some ATUS respondents can be linked back to the December CPS containing the FSS, only between one-quarter to one-third of the respondents can be matched due to the panel structure. Consequently, linking to the FSS to obtain participation information greatly reduces sample size and also means that estimates are not nationally representative over the year.
- FoodAPS—Because FoodAPS collected information on the economics of food purchases and other food acquisition, there are no overlapping questions other than questions about program participation.

5. Minimizing Burden to Small Entities

The data are collected from individuals in households; their collection does not involve any small businesses or other small entities.

6. Consequences of Less Frequent Collection

Fielding the Eating and Health Module in the 2014 and 2015 calendar years will allow researchers to monitor changes in Americans' time use patterns along with changes in Americans' eating activities, BMI values, and changes in food assistance participation.

Additionally, the proposed 2014-15 Eating and Health Module includes several important questions that were not run in 2006-08, including questions about soft drink consumption, grocery and meal shopping, meal preparation, food affordability, and physical exercise. These questions will provide an additional dimension to analyses of the time-use data and BMI, food assistance participation, grocery shopping, meal preparation, and physical exercise.

7. Special Circumstances

Respondents are asked to identify times during which they were doing any secondary eating while engaging in a primary activity. These primary activities are coded using a classification system not in use in any other Federal survey. A coding lexicon was developed to classify reported activities into 17 major categories, with two additional levels of detail. (ATUS coding lexicons can be found on the Internet at: [www.bls.gov/tus/lexicons.htm](http://www.bls.gov/tus/lexicons.htm)). BLS designed the ATUS lexicon by studying classification systems used for time-use surveys in other countries, drawing most heavily on the Australian time-use survey lexicon, and then determining the best way to produce analytically relevant data for the United States. The coding lexicon developed for the ATUS was extensively tested by U.S. Census Bureau coders and by coders at Westat prior to the start of full production in 2003. The development of the ATUS lexicon is described in "Developing the American Time Use Survey activity classification system," by Kristina Shelley, available at: <http://www.bls.gov/opub/mlr/2005/06/art1full.pdf>.

No other special circumstances apply.

8. Federal Register Notice/Consultation Outside the Agency

- a. No Comments were received as a result of the Federal Register notice published in 78 FR 45567 on July 29, 2013.
- b. Several people and agencies were consulted in the development of the 2014-15 Eating and Health Module to the ATUS. Following are key individuals who were involved in this work:

Economic Research Service (ERS)

Karen Hamrick  
Economist  
Economic Research Service  
United States Department of Agriculture  
202-694-5426

Bureau of Labor Statistics

Jennifer Edgar  
Director for the Behavioral Sciences Research Center  
Office of Survey Methods Research  
202-691-7528

ERS partnered with NIH-National Cancer Institute (NCI) and USDA-Food and Nutrition Service (FNS) in the development of the 2014 Eating & Health Module. ERS asked for their suggestions and prioritization of possible survey questions early in the module's development process. Both NCI and FNS had input in determining what topics and specific questions would be included. NCI and FNS made very useful suggestions based on their knowledge of other surveys. NCI suggested slight changes to the NHANES exercise question to avoid the over reporting problems that resulted when gardening

was included in the list of exercise activities. FNS provided useful program information and advice on the wording and other specifics of the food assistance questions.

FNS is fielding the Affordable Care Act (ACA) Impact on SNAP study, an operational study on the coordination of SNAP and ACA pre-and post-implementation of the ACA. In this study, FNS will not be collecting any data from participants but instead will be focusing on the administrative staff of these programs, so there is no overlap with the Eating and Health Module. Since FNS is a partner in the Eating & Health Module, they have been and will continue to be apprised of the module's progress so they will have any useful insights that the module provides.

9. Paying Respondents

Participants in the Eating and Health Module will not receive compensation beyond what they already receive for participating in the ATUS. In the ATUS, the majority of respondents do not receive compensation. BLS offers \$40 incentives to respondents from “no-telephone-number” households only. Persons in these households do not own a phone, have not provided a phone number to the Census Bureau as of CPS month-in-sample 8 (final month), or are among a small number of households that provided Census with nonworking phone numbers. Two OMB-approved incentive expansions were implemented in recent years and, as of 2013, incentives are now sent to individuals for whom the Census Bureau assigned call outcome codes of: *108 Number not in service; 109 Number changed, no new number given; 124 Number could not be completed as dialed; and 127 Temporarily not in service* after the first week of collection. Individuals who are sent incentives account for about 10 percent of the ATUS sample, and are more likely to be black, of Hispanic or Latino ethnicity, to have less education, and to have lower household incomes than members of households that provide phone numbers. The number of such cases is relatively small—approximately 2,500 potential cases each year. Because these households may differ from phone households on unobservable characteristics, including their time-use patterns, and because providing incentives to this small group is not cost prohibitive, BLS believes it is beneficial to expend additional effort and expense to secure their responses.

10. Assurance of Confidentiality

The Census Bureau employees hold all information that respondents provide in strict confidence in accordance with Title 13, United States Code, Section 9. (See Attachment B.) Each interviewer has 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 employees from disclosing information identifying any individual(s) in the ATUS to anyone other than sworn Census employees.

Respondents are informed of their right to confidentiality under Title 13 in the ATUS advance letter, mailed approximately 10 days before the interview date. (See Attachment C.) The ATUS advance letter also advises respondents that this is a voluntary survey.



All Census Bureau security safeguards regarding the protection of data files containing confidential information against unauthorized use, including data collected through Computer Assisted Telephone Interviewing (CATI), apply to ATUS data collection.

The BLS Processing System design requires that ATUS data be securely transferred from the Census Bureau server to the BLS server. This process mirrors the process used to transfer CPS data. Also, all information that personally identifies ATUS respondents is removed from the data and additional measures are taken to mask respondents' identities before Census transmits the files to BLS.

11. Justification for Sensitive Questions

Some of the proposed Eating and Health Module questions may be sensitive. Two of the questions were perceived as sensitive during cognitive testing of the 2006-08 Eating and Health Module (see Attachment D). First, in order to calculate BMI, height and weight was asked. Many of the cognitive study participants felt that weight was a sensitive question. Two people refused to answer the question, and many demonstrated behaviorally that they felt discomfort when asked about their weight. However, even though many people felt uncomfortable when asked about their weight, they also said that they thought weight was an important question because it is an important indicator of overall health. Several participants mentioned their knowledge that obesity is a serious public health problem, and their belief that the government should play a role in conducting research about it.

In addition to weight being perceived as sensitive, the module contains two questions that ask about household income. The two questions ask the respondent to indicate whether or not his or her household's monthly income (last month) was more or less than a certain amount. Respondents who answer "more" to the first question are done with the interview. Those who answer "less" are asked whether their income was more or less than a lesser amount than was asked in the first question. During cognitive testing of 2006-08 Eating and Health Module questions, several people indicated that income questions might be sensitive for some people. However, no one refused the income questions, and no one indicated that these questions were particularly sensitive for them. In addition, one person said that she thought that although questions about income are sensitive in general, the ERS module questions were less sensitive than others since they asked for a "more" or "less" response rather than for a specific income figure.

The proposed 2014-15 Eating and Health Module includes several additional questions that were not included in the 2006-08 Eating and Health Module. None of these questions were perceived as sensitive during cognitive questioning in the context of the ATUS (see Attachment E).

12. Estimate of Respondent Burden

The estimated respondent burden for the proposed 2014-15 Eating and Health Module is 1,050 hours annually. This is based on an average respondent burden of

approximately 5 minutes. The 2006-08 Eating and Health Module lasted an average of 3.5 minutes and was completed by about 12,600 respondents annually. The additional questions to the 2014-15 module are expected to lengthen its duration to approximately 5 minutes.

The overall annualized dollar cost to the respondents for collection of the 2014-15 Eating and Health Module is expected to be \$14,100 per year. This estimate assumes a wage rate for all respondents of \$12.80 an hour, the median hourly earnings for workers paid by the hour in 2012.

13. Estimate of Cost Burden

a. Capital start-up costs: \$0

b. Total operation and maintenance and purchase of services: \$0

14. Cost to the Federal Government

The total estimated cost of the 2014 Eating and Health Module is approximately \$287,000 per year. Subject to any changes to the module or its fielding, the estimated cost for the 2015 module is expected to be similar. This cost is to be borne by the ERS of the USDA and largely represents the charge by the Census Bureau for conducting the module. Census activities for this supplement include programming the collection instrument, collecting data, monitoring calls, processing survey microdata, developing imputation methods and creating edited variables, developing statistical weights, and developing public use files. The \$287,000 per year also includes BLS activities of data review and verification, developing and conducting training, developing documentation to support the module, the administration of the interagency agreement, and the release of the data.

Due to sequestration, the FY 2014 expenses outlined above do not reflect the long-term annual costs of the program. Specifically, FY 2014 expenses reflect curtailed spending as well as a hiring freeze, both of which may impact the quality and quantity of some BLS data.

15. Changes in Respondent Burden

The annual respondent burden for the 2014-15 Eating and Health Module is expected to be about 300 hours greater than it was for the 2006-08 Eating and Health Modules. This is because the 2006-08 modules lasted an average of 3.5 minutes per respondent and the 2014-15 module is expected to average 5 minutes per respondent. The annual number of respondents to the 2014-15 Eating and Health Module is expected to be about the same as in 2006-08, when there were approximately 12,600 annual respondents.

16. Time Schedule for Information Collection and Publication

The proposed 2014-15 Eating and Health Module will be collected in calendar years 2014 and 2015. Processing of the module will be done as the data come in, and final data processing will be completed by mid-2016. The 2014-15 Eating and Health Module public use files and accompanying documentation will be posted on the ATUS Web site at [www.bls.gov/tus](http://www.bls.gov/tus).

As with the 2006-08 Eating and Health Module data files, the 2014-15 data files are intended for use by researchers and ERS plans to write a news release to accompany the release of the data files.

17. Request to Not Display Expiration Date

The Census Bureau does not wish to display the assigned expiration date of the information collection because the instrument is automated and the respondent, therefore, would never see the date.

18. Exceptions to the Certification

There are no exceptions to the certification.