

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 an extension without change for the 2013 collection of the Well-being Module to 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 Well-being 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 Well-being Module is sponsored by the National Institute on Aging (NIA) of the National Institutes of Health (NIH).

The core of the proposed Well-being Module will collect data about how people experience their time, specifically how happy, tired, sad, stressed, and in pain they felt yesterday. Respondents will be asked these questions about three randomly-selected activities from the time diary; a few activities, such as sleeping and private activities, will never be selected. The module also will collect data on whether people were interacting with anyone while doing the selected activities, how meaningful the activities were to them, and some general health questions.

The collection of the Well-being Module in 2013 is the third effort to gather data on individuals' well-being in the ATUS. The Well-being Module, as described above, was attached to the ATUS in 2010 and 2012, and collected under the OMB Numbers 1220-0175 (in 2010) and 1220-0185 (in 2012). The proposed 2013 version of the module will be identical to the 2012 Well-being module. The 2012 Well-being module included two additional questions not collected in the 2010 Well-being Module on individuals' life satisfaction and their emotional experience yesterday. These questions were added in 2012 because they provide information useful in research on well being.

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.”

2. Needs and Uses

The data from the proposed Well-being Module support the BLS mission of providing relevant information on economic and social issues. While the core ATUS provides information about how people spend their time, the Well-being Module provides information about how they experience their time. The data provide a richer description of daily activities such as work. For example, they can be used to measure how workers feel (tired, stressed, in pain) during work episodes compared to non-work episodes, and how often workers interact on the job. The data also can be used to measure whether the amount of pain workers experience varies by occupation and disability status.

Data on life satisfaction provide more comprehensive information about people’s well-being beyond the point-in-time information collected by the affect questions, and could be compared to the activity-level data. For example, data on life satisfaction could provide information about whether people who are more satisfied with their life spend their time differently than those who are not as satisfied. They also could be used as an indicator of the average well-being of various subpopulations, such as older Americans or those in poor health. Such information is important for public policy.

The data from the Well-being Module closely support the mission of the module’s sponsor, NIA, to improve the health and well-being of older Americans. By analyzing the module data, the experience of pain and aging can be studied. Some of the questions that can be answered include:

- Do older workers experience more pain on and off the job?
- Is the age-pain gradient related to differences in activities or differences in the amount of pain experienced during a given set of activities?
- Do those in poor health spend time in different activities?

The Well-being Module data files are intended to be used as a data set for researchers. Use of these data files has been encouraged by NIA in NIH research grants. Data from the 2010 Well-being Module have only been available since November 2011; however, they already are being used in several research applications. See Attachment M for

more information about research using the ATUS Well-being Module data to date. Some examples include:

- Time-Use, Emotional Well-Being, and Unemployment: Krueger and Mueller (2012) used ATUS Well-being Module survey data in their analysis of differences in the time-use and emotional well-being of employed and unemployed workers.¹
- Episode-based pain studies: Arthur Stone (Stony Brook University) and Angus Deaton (Princeton University) have recently begun work using the 2010 Well-being module data to examine the hypothesis that people with different employment statuses (working/nonworking) and occupations (using standard labor categories) experience different levels of pain throughout the day—and not just on the job.
- Transportation studies: Archer et al (2012) used 2010 Well-being Module data to develop a multivariate model designed to measure how activity-travel episodes affect subjective well-being. They found that “activity duration, activity start time, and child accompaniment significantly impact feelings of well-being for different activities” (including travel).²
- Assessing Validity of Short Versions of the Day Reconstruction Method (DRM)- Vicki Freedman, Richard Gonzalez, Lindsay Ryan, Norbert Schwarz, Jacqui Smith, and Robert Stawski, use ATUS Well-being Module data along with other survey data to compare DRM—which involves asking respondents to reconstruct and describe episodes of the previous day and the feelings they experienced during each—with shorter survey approaches that retain a subset of DRM features.³

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

¹ Krueger, A.B., and Mueller, A. (2012). Time use, emotional well-being and unemployment: Evidence from longitudinal data. *American Economic Review*, 102(3), 594–599.

² Archer, M., Paleti, R., Konduri, K., and Pendyala, R. (2012). “Modeling the connection Between Activity-Travel Patterns and Subjective Well-Being. Submitted for Presentation and Publication, 92nd Annual Meeting of the Transportation Research Board.

³ A brief description of this research in progress can be found at <http://micda.psc.isr.umich.edu/project/detail/35382> (accessed July 17, 2012).

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 a few efforts to collect data on how people experience their time on an episodic basis. The ATUS first ran a Well-being Module in 2010. This module was largely identical to the 2012 and proposed 2013 Well-being Module. Running the proposed 2013 Well-being Module will add significant information beyond what has been collected in 2010 and 2012. An additional year of the Well-being Module provides researchers with the ability to use larger samples by pooling data across years. For some purposes, the number of observations needed to make valid statistical inferences exceeds the annual sample size. This is especially true for comparing a self-reported well-being score across smaller population subgroups.

Further, the 2012 Well-being Module was the first version of the survey that included the overall life satisfaction (evaluative) and “yesterday” well-being questions. To examine the sensitivity of these measures and changes over time, at least one additional year of data collection is needed. A 2013 ATUS Well-being Module, collected for the full calendar year, would double the sample of respondents who answered these evaluative well-being questions.

More generally, collecting the Well-being Module for a third year will help determine the value of developing national measures of well-being and encourage discussion of whether and, if so, how measures of subjective well-being might have a role in assessing the effects of public policies. A third year of Well-being Module data could also help answer questions about survey issues related to data quality and reliability (e.g., nonresponse bias, question ordering, context effects) should it be collected elsewhere on a more permanent basis.

In recent years, a few independent surveys have collected data on Americans' well-being. A couple of these surveys have used a time diary in conjunction with episodic-level questions about respondents' emotional experience, however, these surveys lack the scope and representativeness of the ATUS data. One study used the Day Reconstruction Method (DRM) to collect data on time use, episodic-level affect data, and information about respondents' overall life satisfaction in 2004. This survey was smaller in scale than the ATUS (the analytical focus was on 909 women who reported working in their time-use diary) and relied on a convenience sample rather than a nationally-representative sample.⁴ Another independent survey, the Princeton Affect

⁴ Alan B. Krueger, Daniel Kahneman, David Schkade, Norbert Schwarz, Arthur A. Stone. “A Survey Method for Characterizing Daily Life Experience: The Day Reconstruction Method.” *Science*, (Dec 2004), pp 1776-80.

and Time Survey (PATS) was modeled on the ATUS and the DRM, and collected time-use and affect data from nearly 4,000 respondents in 2006.⁵ Since 2008, Gallup and Healthways have collected information on well-being using a series of affect and health questions, including a Cantril Ladder question to measure overall life satisfaction. These data are collected from 1,000 respondents every day of the year and are used to create the Gallup-Healthways Well-Being Index.⁶ However, the survey does not use a time-diary. Other independent surveys have included questions to measure respondents' overall life satisfaction.

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 Well-being Module through the 2013 calendar year may allow for more detailed analyses of several important subpopulations. Time-use patterns change little from year to year, so multiple years of the ATUS can be combined. It is not known how much affect data change from year to year, but if they do not change much between 2010, 2012 and 2013, the module data also can be pooled, providing a sufficient number of observations for subgroups to expand the number of meaningful and detailed analyses that can be done. For example, while much useful analysis can be done with one year's data on individuals' well-being, the cell sizes become small when looking at individuals by specific demographic, household, or other characteristics. If the affect data in 2010, 2012, and 2013 are different enough such that they cannot be combined across years, then the differences between the years would be of analytical interest.

A 2013 Well-being Module will allow researchers to take advantage of an important change that was made to the ATUS in 2011. Questions that identify eldercare providers and eldercare activities were added to the survey. The well-being of eldercare providers is of interest to the NIA and policy makers because the elderly population is growing, along with a reliance on informal care providers to assist them. A 2013 Well-being Module would allow researchers an additional year of data with which to study the well-being of eldercare providers.

Additionally, the proposed 2013 Well-being Module includes two important questions that were not run in 2010: one to measure respondents' overall life satisfaction and a second that provides more information about their overall emotional experience

⁵ Alan B. Krueger, Daniel Kahneman, David Schkade, Norbert Schwarz, Arthur A. Stone. "National Time Accounting: The Currency of Life." Chapter in NBER book [Measuring the Subjective Well-Being of Nations: National Accounts of Time Use and Well-Being](#) (2009), Alan B. Krueger, editor. University of Chicago Press, (p. 9 - 86),

⁶ More information on the Gallup-Healthways Well-Being Index is available on the survey's website: <http://www.well-beingindex.com/default.asp>.

yesterday. These questions will provide an additional dimension to analyses of the activity-level affect data.

7. Special Circumstances

Affect data in the Well-being Module are collected for randomly-selected activities. These 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). 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. One comment was received as a result of the Federal Register notice published in 78 FR 2446 on January 11, 2013. The comment, which was faxed to BLS on January 11, 2013, expressed the opinion that the survey does not benefit the citizens of the country. When published, the Well-being module data and associated documentation will be available to the public for free from the ATUS Web site. These nationally-representative data will facilitate research on numerous topics that will provide insight on Americans' state of well-being and the factors that influence it. Such research could be used to improve Americans' well-being by influencing public policy in ways that seek to optimize it.
- b. The following people have been consulted concerning the development of the survey:

National Institute on Aging (NIA)

Richard Suzman
Director, Division of Behavioral and Social Research (BSR)
National Institute on Aging
U.S. National Institutes of Health
Gateway Building Room 533
7201 Wisconsin Avenue
Bethesda, MD 20815
(301) 496-3131

Bureau of the Census

Richard A. Schwartz

Chief, Consumer Expenditure Survey Branch
Demographic Surveys Division
Bureau of the Census
4600 Silver Hill Rd, Rm. 6H041
Washington, D.C. 20233-8400
(301) 763-7491

9. Paying Respondents

Participants in the Well-being 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. These households account for about 9 percent of the ATUS sample, and are more likely to be black, Hispanic, 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 2,300 cases are expected in 2013. 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 Well-being Module questions may be sensitive. After the respondents complete the main ATUS interview, the CATI instrument will randomly select three activities, and respondents will be asked, on a scale from 0 to 6, how happy, tired, stressed, sad, and in pain they felt during the activity, and also how meaningful the activity was. These affect questions will not be asked for certain personal activities (e.g., sleeping or grooming). For the remaining activities for which these questions will be asked, none of the 28 participants in the 2008 cognitive testing thought the questions were too personal (see Attachment D).

During the 2008 cognitive testing of the well-being questions, participants were also asked how they reacted to being asked how they felt during an activity. The majority (23 out of 28) either had no reaction or felt neutral about the questions (e.g., "the questions were fine"). The remaining 5 participants did not express discomfort with the questions. Their comments were mainly about the nature of the scale or how interesting or revealing the questions were to them. Finally, when asked their reaction to the explanation of why the government was collecting these data, only 1 out of the 28 felt that the government should not collect the information.

The proposed 2013 Well-being Module includes two additional questions that were not included in the 2010 Well-being Module but were included in the 2012 module. One question is a measure of overall life satisfaction and the second question collects data about respondents' overall emotional experience yesterday. In 2011, the sensitivity of each of these questions was cognitively tested in the context of the ATUS. Participants in the testing did not perceive the questions as sensitive; however, some participants thought others might think they were sensitive. When asked to provide additional information about why others might find the questions sensitive, participants in the testing provided general responses indicating some people are more private and do not like to share information about themselves (see Attachment K).

12. Estimate of Respondent Burden

The estimated respondent burden for the proposed 2013 Well-being Module is 1,100 hours. This is based on an average respondent burden of approximately 5 minutes. The 2010 Well-being Module lasted an average of 4.5 minutes and was completed by about 12,800 respondents. The additional two questions to the module are expected to lengthen its duration to approximately 5 minutes in 2013 as it did in 2012.

The overall annualized dollar cost to the respondents for collection of the 2013 Well-being Module is expected to be \$14,050 per year. This estimate assumes a wage rate for all respondents of \$12.77 an hour, the median hourly earnings for workers paid by the hour in the 3rd quarter of 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 2013 Well-being Module is approximately \$180,000. This cost is to be borne by the NIA of the NIH and largely represents the charge by the Census Bureau for conducting the module. Census activities for this supplement include collecting data, monitoring calls, processing survey microdata, developing imputation methods and creating edited variables, developing statistical weights, and developing public use files. The \$180,000 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.

15. Changes in Respondent Burden

The overall respondent burden is expected to be the same as it was for the 2012 Well-being Module. Response time is expected to average 5 minutes per respondent. The number of respondents to the 2013 Well-being Module is expected to be about the same as in 2010, when there were approximately 12,800 respondents.

16. Time Schedule for Information Collection and Publication

The proposed 2013 Well-being Module will be collected for the duration of the 2013 calendar year. Processing of the module will be done as the data come in, and final data processing will be completed by mid-2014. The 2013 Well-being Module public use files and accompanying documentation will be posted on the ATUS Web site at www.bls.gov/tus.

As with the 2010 and 2012 Well-being Module data files, the 2013 data files are intended for use by researchers and no news release is planned. NIA recently funded a significant set of awards for research on the topic of subjective well-being. Because the module data are the only national data on hedonic well-being that are linked to activities and time use, several of the awards will make use of these data.

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.