

February 1, 2021

Memorandum for: Reviewer of 1220-0175

cc: Tom Nardone  
Dori Allard

From: Rachel Krantz-Kent  
Stephanie Denton

Subject: Expanding incentive-eligibility in the American Time Use Survey

This memorandum describes the American Time Use Survey's (ATUS) proposal to expand the number of cases that are eligible to receive incentives. Currently, incentives are sent to households that did not provide a telephone number in their final CPS interview and to a limited number of households with telephone numbers that do not work, those with telephone numbers that "could not be completed as dialed" and those where the "number changed, no new number given." Incentives are useful in improving response among individuals in this group, who are more likely to be black, have lower education, and lower household income than the population. The ATUS would like to expand incentive-eligible cases to include additional households with telephone numbers that do not work; specifically, to include those with telephone numbers that are "not in service" or "temporarily not in service." It is expected that expanding the incentive eligibility will improve response to the ATUS.

## **I. Current use of incentives in the ATUS**

Since the ATUS began in 2003, BLS has provided incentives to households without telephones and those who have not provided a telephone number to the US Census Bureau. Because ATUS is a telephone-only survey, these cases would not be able to participate if they did not call in to the Jeffersonville Telephone Center. These households receive a pre-paid \$40 debit card with their advance letter, and later receive a PIN after completing the survey.

No-telephone-number households account for approximately 5% of the CPS sample and are more likely to be black, have less education, and to have lower household incomes than the rest of the population. There were approximately 1,680 no-telephone-number cases in 2010. Because these households may differ from telephone households on unobservable characteristics, including their time-use patterns, and because providing incentives to this small group was not cost prohibitive, OMB approved a BLS request to expend additional effort and expense to secure their responses. Incentive cases had a response rate of 40.1 percent in 2010 (total 2010 response rate was 56.9 percent).

In regular survey production, cases with non-viable call outcome codes are investigated; however, Directory Assistance often cannot confirm the number and additional research by Census call center staff does not result in a new number. These cases have very low response rates and, like the no-telephone-number-households, are also more likely to be black, to have less education, and to have lower household incomes than members of households that provide phone numbers.

In 2008, OMB approved an expanded definition of no-telephone-number households in the ATUS, to include cases that were assigned the following call outcome codes after the first week in the sample:

- 108 Number not in service
- 109 Number changed, no new number given
- 124 Number could not be completed as dialed

While this expansion was approved by OMB, it was not fully implemented. The definition of a no-telephone-number household was expanded to include only those cases with call outcome codes of 109 and 124; this partial implementation was done as a test, to see if response rates were impacted positively and also to ensure staffing resources were sufficient to handle the expansion. Currently, an incentive letter and a debit card are sent to each case assigned these outcome codes after the case's first of 8 weeks in the sample.

Codes included	Before incentive expansion		After incentive expansion					
	2007		2009		2010		2009-2010	
	Number of cases	Percent of these cases resulting in completions	Number of cases	Percent of these cases resulting in completions	Number of cases	Percent of these cases resulting in completions	Number of cases	Percent of these cases resulting in completions
109 - number changed, no new number given	6	0.0	0	0.0	6	50.0	6	50.0
124 - number could not be completed as dialed	84	7.1	67	22.4	138	31.2	205	28.3
Total	90	6.7	67	22.4	144	31.9	211	28.9

**Table 1. Cases with 109 and 124 call outcome codes in their first week in sample before and after the incentive expansion**

Table 1 shows the positive effect on response rates of expanding the definition of no-telephone-number households to include cases with call outcome codes of 109 and 124. After these cases were converted to incentive cases in the first week, they were sent a letter and incentive card requesting they contact an ATUS interviewer to participate in the survey. In 2009-10, 211 cases were converted to incentive cases because they had these call outcome codes. Of these cases, 28.9 percent (61 cases) resulted in a

completed interview and 3.3 percent (7 cases) were assigned final outcome codes of "not eligible" or "other" based on information provided by individuals who called the interviewers to explain why the designated person (DP) was unable to complete the survey. They provided information about DPs who were ill, institutionalized, and no longer members of the household, and who were thus unable to participate in the survey.

**II. Proposed expansion of incentive eligibility in the ATUS**

Because expanding incentives to cases with certain call outcome codes has had a positive effect on response rates, the ATUS would like to further expand the definition of no-telephone-number households to include those with the following call outcome codes after the first week in sample:

- 108 Number not in service
- 127 Temporarily not in service

The response rate for cases with these call outcome codes is very low. In 2009-10, only 7.5 percent of the 1,540 cases assigned an outcome code of 108 (number not in service) completed an interview by the end of the 8-week fielding period. Those assigned a code of 127 (temporarily not in service) had a slightly higher, but still low, completion rate of 13.4 percent by the end of the fielding period. See Table 2. Because there are a relatively large number of cases assigned these outcome codes, there is strong potential that an expansion of the no-telephone-number definition will positively impact survey response.

**Table 2. Percent of completed interviews for cases assigned call outcome codes 108 and 127 after their first week in sample, 2009 and 2010**

Codes included	2009		2010		2009-2010	
	Number of cases	Percent of these cases resulting in completes	Number of cases	Percent of these cases resulting in completes	Number of cases	Percent of these cases resulting in completes
108 - Number not in service	790	7.0	750	8.1	1,540	7.5
127 - Temporarily not in service	117	14.5	100	12.0	217	13.4
Total	907	8.0	850	8.6	1,757	8.2

**III. Financial impact**

Annually in 2009-2010, about 1,680 cases received incentives. Expanding the incentive program to include households with outcome codes of 108 and 127 would add approximately 880 new cases to this group per year (this number is a rounded annual average of cases assigned these codes in 2009-2010). This would yield a total number of incentive cases of about 2,560 per year.

In 2009-2010, the average response rate for incentive cases with non-viable household numbers (call outcome codes of 109 and 124) was 28.9 percent. Assuming those with outcome codes of 108 and 127 would also have a response rate of 28.9 percent, about 255 new cases per year would be expected to respond to the survey. This additional response would increase costs by approximately \$20,600 [(\$40 card + \$40.60) X 255 new cases] per year. Sending debit cards to 635 cases that do not respond to the survey would incur some additional expense. This expense is estimated to be about \$23,200 [(36.60) X 635 cases]. The total cost of an incentive card expansion is thus estimated to be \$43,800.

Costs for each completed incentive case are estimated as follows:

Debit card:	\$40.00
ATM transaction fee:	\$ 4.00
Card production:	\$ 5.00
Census debit card management:	\$31.60

The \$31.60 Census management fee covers the costs of tracking and managing the debit cards. Per requirements at Census' National Processing Center (NPC), the debit cards are stored in a secure area and two people must be present at all times when working with the debit cards. This is for the security of the debit cards and the employees involved. This two-person requirement accounts for the majority of costs associated with managing the debit cards, by essentially doubling the staff time, salary, benefits, and overhead costs associated with them.

Debit card staff have a number of responsibilities: they receive the debit cards, check them in, pull cards to mail, track and monitor cards, prepare weekly reports on card status, handle replacement cards when necessary, post "undeliverable as addressed" for packages returned by the USPS, destroy unused cards for expired panels, and monitor the debit card system for fraud. These activities are labor intensive, but also necessary to maintain the ATUS debit card operation.

The \$5.00 per card production fee covers a \$3.50 per card fee charged by the bank that produces the debit cards, as well as a \$300 monthly account maintenance fee that amounts to \$1.50 per card.

## **V. Increase in respondent burden**

The increase in total respondent burden from adding incentive cases is likely to be small—only about \$1,100 per year. Table 3 provides amended estimates of the FY2011 respondent burden that was calculated in the 2010 ATUS OMB Clearance Package. The calculations for FY2011 show the burden and cost of expanding incentives for the last two months of FY2011. The burden for these 2 months is estimated to be only 15 hours, amounting to \$200. Total respondent burden in FY2012, is expected to increase by 89 hours, at a cost of \$1,100. The respondent burden for the added incentive cases was calculated using a response rate of 28.9 percent and a wage rate of \$12.44 per hour. This wage rate is an estimate of the median hourly earnings for all wage and salary workers (paid hourly rates) in 2009, and it was the wage rate used to calculate the total respondent burden in the 2010 OMB Clearance.

**Table 3. Estimated Respondent Burden for FY 2011 (Hours and Dollars)**

Form	Total Respondents	Frequency	Average time per response	Estimated total burden (hours)	Estimated total burden (dollars)
Full production	13,200	One time	21 minutes for 12 months	4,620	\$57,500
Added incentive cases	43	One time	21 minutes for 3 months	15	\$200

**Table 4. Estimated Respondent Burden for FY2012 (Hours and Dollars)**

Form	Total Respondents	Frequency	Average time per response	Estimated total burden (hours)	Estimated total burden (dollars)
Full production	13,200	One time	21 minutes for 3 months; 16 minutes for 9 months	3,795	\$47,200
Added incentive cases	255	One time	21 minutes for 12 months	89	\$1,100