



IPUMS CPS and IPUMS Time Use

Linking CPS (to CPS and ATUS): A Brief Overview

April 28, 2021

QUESTIONS & ANSWERS

The following are questions received during the live webinar and their answers. For additional questions or clarification, email IPUMS at ipums@umn.edu.

General questions

1. Can IPUMS CPS data be accessed via API?

An IPUMS microdata API is in the works, but is not available for beta testing yet. But stay tuned!

2. What are harmonized data? Does IPUMS CPS include all the same questions as the BLS CPS?

IPUMS recodes the original public use CPS data from the Census Bureau to have the same values and labels across months and years. These recoded variables are “harmonized”. The vast majority of original variables are harmonized by IPUMS. For variables that are not harmonized, you can access the unharmonized (original, unrecorded) variables via IPUMS. [Read more about it.](#)

3. How many people per CPS household are interviewed each month?

Yes. One adult provides information for all household members.

4. Is the number of households/respondents the same across months?

No, there is some variation in the number of responding households across months. This table documents [monthly sample sizes](#). H corresponds to Households and P corresponds to People.

5. How is sampling done for the CPS?

CPS sampling is described in this technical paper:
<https://cps.ipums.org/cps/resources/earner/tp-66.pdf>

6. What variable identifies the month-in-sample in CPS?

The IPUMS CPS variable for month-in-sample is called [MISH](#).

7. What is the reference period for CPS monthly data?

The reference period for the CPS basic monthly labor force items is the week that contains the 12th of the month. This is the week prior to the week interviews are conducted. In the ASEC, some variables regarding employment and variables regarding health insurance and income reference the previous year.

8. Has the ATUS time diary instrument changed across months or years?

No, the time diary instrument has not changed substantially. There has been some change in the ways [activities are coded](#), the [locations people can report doing activities](#), and the secondary activities people can report ([eldercare](#) added in 2011).

9. Why were the original CPS linking keys changed?

Sometimes these changes are due to changes in data processing procedures at the Census Bureau, sometimes this is done to protect privacy of individuals whose participation in the survey span a change such as which geographic areas are identified in the data or sample size increases.

10. How many times a month is a CPS household interviewed?

A household is interviewed once each month.

11. Can a household be in the CPS more than once (e.g. once in 1994 and once in 2004)?

We are uncertain if this is possible. If it is, there is no way to identify them in the public use data to our knowledge.

12. Do all individuals in the CPS have a CPSIDP value, even if they are not present in all 8 months of the panel?

Yes. All individuals that appear in the CPS have a CPSIDP value. This CPSIDP value is unique to that individual across months. If an individual does not participate in all months of the survey or moves out of the household before the rotation completes, the CPSIDP will only appear in the data in the months that individual is included. Note that ASEC oversample records are currently unlinkable using CPSIDP; all of these records have a CPSIDP value of 0,

13. Are the given weights representative at the state-level for the basic monthly and ASEC surveys?

CPS data are representative at the state level. The provided weights are appropriate for state-level analyses.

Data availability

14. Are ASEC data available via IPUMS CPS?

ASEC data from 1962 forward are available via IPUMS. Accessing CPS data is described in [this tutorial](#).

15. When will the 2020 ATUS be released?

We expect 2020 ATUS data to be released by the Bureau of Labor Statistics in late June or early July and quickly processed and available via IPUMS shortly thereafter.

16. How many times is each individual in the ATUS?

The ATUS is a single interview about time use for a single 24-hour period. There is no 4-8-4 rotation pattern like the CPS. However, ATUS respondents can be linked back to the CPS (and the 4-8-4 rotation pattern). Researchers may use [YEAR CPS8](#) and [MONTH CPS8](#) in IPUMS ATUS to identify the last month of participation in the CPS. [CPSIDP](#) can be used to easily link observations between the CPS and ATUS.

17. The ATUS well-being module was fielded in 2010, 2012, and 2013. When will it be fielded again?

With support from NICHD and NSF, the IPUMS Time Use team has sponsored a 2021 well-being module. Data are currently being collected, but we have not heard yet about a public release date.

18. Does IPUMS CPS have information about Bangladeshi immigrants?

The CPS does contain birthplace information; see the IPUMS CPS variable [BPL](#).

19. What is the most recently linked ASEC and ATUS so far?

The 2019 ASEC and the 2019 ATUS data can be linked. Once the 2020 ATUS data are out (in June or July), the 2020 ATUS can be linked to the 2020 ASEC.

20. How specific are CPS geographic identifiers? Can you differentiate between urban and rural areas?

You can use CPS to generate state-level estimates. Additional geographic units identified in the CPS include metropolitan area, city, and county. Because all ATUS respondents were previously in the CPS, you can also get these geographic units in the ATUS. There is no

indicator of urban versus rural in the CPS.

21. Are college students living physically away from home (in school dorms or off-campus) counted as part of the CPS household?

No. Only persons living in the household at the time of the interview are included in the data.

Linking

22. Which CPS months can be linked?

See the [RoPES tool](#).

23. Are there any training exercises for linking CPS/ATUS data via IPUMS?

We have several hands-on exercises for linking [CPS data](#) and [CPS/ATUS](#) data and Stata code to accompany them.

24. Since the ATUS only samples households who were part of CPS MIS 8, do you have to link households only from MIS 8 or can you link to other months?

You can link the ATUS observation to any CPS months in which they appeared in that survey. Use [YEAR CPS8](#) and [MONTH CPS8](#) in IPUMS ATUS and [YEAR](#) and [MONTH](#) in IPUMS CPS.

25. When linking CPS and ATUS data, should we start with ATUS or CPS?

This depends on your specific research needs. However, you might want to use ATUS as your starting point and locate people in the CPS rather than vice versa. Everyone in ATUS will have been in CPS, but not everyone in CPS appears in ATUS. Therefore, ATUS respondents are your “universe” of people who could have been in the CPS.

26. What are the rules around CPS households being eligible to participate in the ATUS?

Invitations to participate are only issued to individuals who live in CPS households that have completed the 8th interview (MISH 8) of the 4-8-4 rotation. If the entire household turns over after the 8th CPS interview, no one from that household is invited to participate in the ATUS. There is also no requirement that an ATUS respondent participated in any specific CPS supplement (e.g. ASEC) or interview month (May) to be selected for participation in the ATUS.

27. Can we link the CPS Unbanked supplement to ATUS?

A subset of ATUS respondents will definitely link to the CPS Un(der)banked supplement. Because the supplement isn't fielded every year, but sure to think about the gap between participation in the CPS supplement and ATUS. For example, some individuals responding to the 2017 Un(der)banked supplement will be in the ATUS soon after participation (in late 2017 or early 2018 if they were MIS 5-8 during the supplement) while others might not

appear in the ATUS until late 2018 or early 2019.

28. Are the CPS respondent and the ATUS respondent always the same person? How can we tell?

The CPS respondent and the ATUS respondent do not have to be the same person. The CPS respondent is indicated in IPUMS CPS by [HHRESPLN](#). The ATUS respondent in IPUMS ATUS is always [LINENO=1](#). [ATUSDP](#), available via IPUMS ATUS indicates whether the ATUS respondent was also the CPS respondent in the final CPS interview.

29. How would we know whether or not information in a variable has changed between MIS8 and when the individual is in the ATUS?

Information from the last CPS basic monthly interview is included in IPUMS ATUS. MOST variables from the final CPS interview have a variable name with an “_CPS8” suffix (e.g. AGE_CPS8). In this case, you can easily compare AGE and AGE_CPS8 to see if something has changed. And sometimes changes are expected (e.g. age) and other times they are not (e.g. sex).

30. If CPS and ATUS respondents are the same, are variables that you find in both datasets perfectly congruent across the studies (e.g., age, as you pointed out)? In other words, does it matter which age variable you use?

Discrepancies are tricky. Sometimes changes between CPS and ATUS are expected (e.g. age) or reasonable (e.g. usual hours worked) and other times they are not (e.g. sex). This is really a researcher decision, but if you're using ATUS, I'd lean toward prioritizing ATUS data since they are provided by the ATUS respondent. You can always carefully examine data quality flags, too, to inform your decisions.

31. How is a CPS cohort determined as described in the webinar?

A cohort is determined by when they enter the CPS. A cohort is essentially a group of people who start the CPS at the same time.

32. Can we observe changes in household heads in the CPS if a household head moves out?

There is one household respondent that gives information about all household members. This is usually, but not always, the head of the household (see [HHRESPLN](#)). The interviewers make an effort to interview the same person each month, but this is not always possible. A change in the household respondent is not the same as a change in household head. Note that if an individual moves out of a household, they are not followed. In that sense, if the head moves out, there will be a new “reference person.”

33. What is the difference between CPSID and CPSIDP?

CPSID is the household linking key. CPSIDP is a person-level linking key.

34. Does the CPS follow people who move? What happens if an entire family moves?

The CPS samples addresses and follows households rather than people; if people leave a sampled address during the rotation pattern, the people are not followed. If there are new people residing at the address, they are instead interviewed. CPSID(P) does not create links in the event that an entire household has turned over.

35. What kind of temporal changes can you see in the CPS (e.g., income evolution of an individual)?

Short-run income changes can be observed, but income evolution of an individual over a career, for example, is not possible in the CPS.

36. Can you provide examples of articles that link CPS or CPS and ATUS data?

Here is a non-exhaustive list of examples:

<https://link.springer.com/article/10.1007/s13524-017-0642-7>

<https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2017.303666>

<https://link.springer.com/article/10.1353%2Fdem.0.0086?LI=true>

<https://www.sciencedirect.com/science/article/pii/S0049089X16303507>

http://conference.iza.org/conference_files/UniDuisburg_2020/hamermesh_d122.pdf

37. Do you provide any resources for validating linkages?

We have sample Stata code on our website that you can use to validate linkages based on age, sex, and race. There is code available for data in [long format \(person-time\)](#) or [wide format \(multiple time points on a single record\)](#).

38. What is the appropriate way to handle unexpected changes to variables for linked persons? For example, if a person's sex changes from one month to the next how likely is that to be due to miscoded sex?

It is up to the researcher to determine whether they think that a pair of records that disagrees on sex is the same person. The strictest approach would be to consider this an invalid link, but you're likely throwing out some actual links. Our recommendation is to clearly document the validation criteria you use.

39. What weights does IPUMS CPS provide for linked data and how does one access them?

We have released a [preliminary set of weights for use with linked data](#) (variable names start with LNKFW) and [associated documentation](#). We use iterative proportional fitting to adjust the weights of those who link (using CPSIDP) to be representative of those who were eligible to link but did not due to migration, death, or non-response. We do not inflate the weights to be nationally representative at this time.

40. Are replicate weights available for linked data?

We have not developed replicate weights for linked data at this time.