

American Time Use Survey (ATUS) Data Dictionary:
2023 Survey Methodology Data
Variables about ATUS
June 2024

The American Time Use Survey (ATUS) is sponsored by the Bureau of Labor Statistics
and conducted by the U.S. Census Bureau.

Important Information about the ATUS Survey Methodology Data Dictionary

Introduction

The American Time Use Survey (ATUS) is sponsored by the Bureau of Labor Statistics and conducted by the U.S. Census Bureau. The purpose of this document is to provide information about the variables related to the quality and outcome of the interviews. This data dictionary describes the 2023 Case History file and the 2023 Call History file.

This document lists all the variables available on these two files and their valid values. It also provides directions on how to read the data dictionary. The ATUS User's Guide contains information about the sample selection, survey administration, data collection, and coding process (available on the ATUS Web site at www.bls.gov/tus/atususersguide.pdf).

Two additional data dictionaries describe other 2023 ATUS data files.

- ATUS-CPS Data Dictionary: Describes the variables available on the ATUS-CPS file as well as some variables on the Activity Summary file. The ATUS-CPS file contains data from the Current Population Survey (CPS) for persons selected to be surveyed for the ATUS and for members of their households. (The information on the ATUS-CPS file was collected two to five months before the ATUS interview and in some cases was out of date at the time the ATUS was conducted.)
- ATUS Interview Data Dictionary: Describes the variables that were collected and assigned in the ATUS interview. The variables described are available on the Roster file, Activity file, Activity Summary file, Who file, Respondent file, and Eldercare Roster file.

These additional data dictionaries are available on the ATUS Web site at www.bls.gov/tus/dictionaries.htm.

Valid Values

Each variable has a number of valid values or a range of valid values. For example, the variable TUINTDQUAL has two valid values: 1 for "Yes, interview should be used" and 2 for "No, interview should not be used." The variable TUAVGDUR, on the other hand, has a range of valid values – any entry between 0 and 1440 is considered valid. Individual valid values or a range of valid values are listed under most variables in the data dictionary.

Many ATUS variables have the following possible valid values:

Value	Description
-1	Blank
-2	Don't know
-3	Refused

Because so many variables have these possible values, they are not shown as valid entries for each variable.

TUCASEID, the primary identifier for ATUS cases, does not have a list either of valid values or a range of valid values. Also, variables that include both alpha and numeric characters (TUHINTID, TUINTID, TUA_ID, TUC_ID, and TUV_ID) do not have a list of either valid values or a range of valid values.

2023 Case History File

This file contains case-specific variables collected in ATUS in 2023 (that is, variables for which there is one value for each person selected to participate in ATUS). These include interviewer identifiers and case level outcome codes. The file also contains two data quality variables, TUINTDQUAL and TUDQUAL2, which include information about the interviewer's perception of data quality. The file contains information about persons selected to participate in ATUS, including both those who did and did not complete the interview. (Because only one person per household is selected to participate in ATUS, in this file TUCASEID identifies an individual.)

There is one record for each ATUS case.

Below is a simplified example. The TUCASEID identifies each ATUS case, so the example contains information from five cases selected to be in the ATUS sample. Each example case has associated variables listing the final outcome code (TRFNLOUT), the total number of reported activities (TUTOTACTNO), the average duration of reported activities (TUAUSDUR), and an interviewer identification number (TUINTID). Note that two of the cases do not report information for TUTOTACTNO and TUAUSDUR; this is because they were noncontacts, as is indicated by the value of TRFNLOUT. The actual ATUS Case History file contains additional variables and many more lines.

TUCASEID	TRFNLOUT	TUTOTACTNO	TUAUSDUR	TUINTID
20230112101733	001.001	30	48	ZV97
20230212100884	188.001	-1	-1	CA40
20230504110537	001.001	30	48	CA40
20230908110961	001.001	34	42.4	ZV97
20231210110111	188.001	-1	-1	ZV97

2023 Call History File

This file contains call-specific variables collected in ATUS in 2023 (that is, variables for which there is one value per interview attempt). These include interviewer identifiers, call level outcome codes, and the date of each call attempt. The file contains information about persons selected to participate in ATUS, including both those who completed the interview and those who did not. (Because only one person per household is selected to participate in ATUS, in this file TUCASEID identifies an individual.)

There is one record for each ATUS call attempt.

Below is a simplified example. The TUCASEID identifies each ATUS case and TUATTMPTNO identifies each call attempt. The example contains information from two cases selected for the ATUS sample. The first case (20230201111692) was called three times, and the third call attempt resulted in a complete interview. The second case (20230502110133) was called twice before resulting in a complete interview. The variable TRFNLCLL gives the outcome of each call. An anonymous interviewer identification number (TUHINTID) is associated with each call attempt. In general, the TUHINTID for the final call attempt will match the interviewer identification number for the case (TUINTID) on the Case History file, but not always. In some situations, an ATUS supervisor performs some action on the case after the final interview, causing the TUINTID to be the anonymous identification number of the supervisor rather than the final interviewer.

TUCASEID	TUATTMPTNO	TUATTMDATE	TRFNLCLL	TUHINTID
20230201111692	1	20230208	195.001	WW90
20230201111692	2	20230208	188.001	ZJ93
20230201111692	3	20230208	001.001	CA40
20230502110133	1	20230513	199.001	KP84
20230502110133	2	20230527	001.001	ZV97

ATUS Naming Conventions and Definitions

ATUS variables are named according to specified rules. All variables on the two survey methodology files begin with “TU” or “TR,” which indicates that the variables were assigned or computed through the ATUS interview process. The characters that follow “TU” or “TR” consist of a descriptive name.

Not all ATUS variables are on the data files. Some variables are omitted to protect the confidentiality of ATUS respondents as required by law.

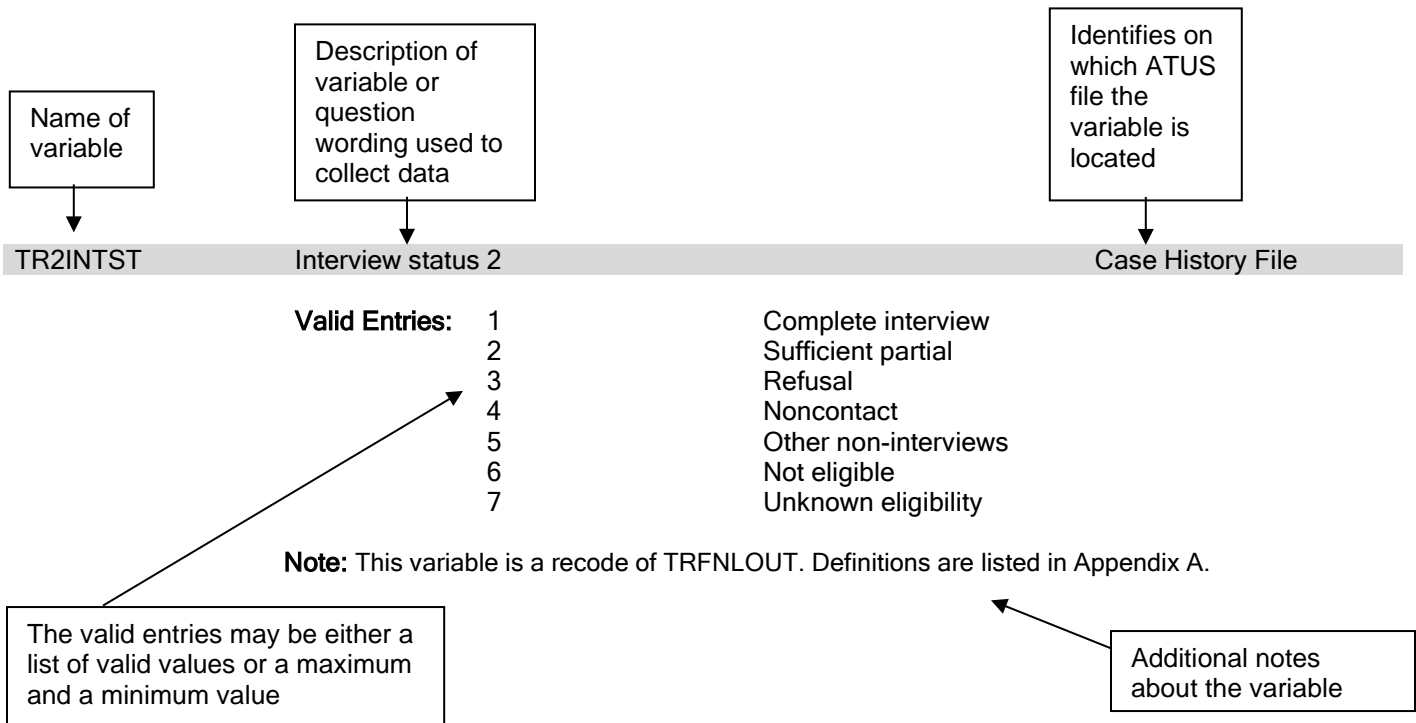
ATUS Interviewers and Coders

Four of the variables available on the Case History file and one of the variables on the Call History file are unique anonymous identification numbers: TUHINTID, TUINTID, TUA_ID, TUC_ID, and TUV_ID. Every person who interviews or codes ATUS data is assigned a unique anonymous identification number, and each person can both interview and code. A case is never interviewed and coded by the same person. All cases are coded twice to ensure accuracy and consistency, and those cases that have been coded differently are resolved by an adjudicator. A person’s unique identification number is always the same, whether that person is coding, interviewing, or adjudicating.

Organization of the Survey Methodology Data Dictionary

Variables are listed in the data dictionary in alphabetical order.

Below is a sample entry from the ATUS survey methodology data dictionary:



Linking ATUS Files

Each of the ATUS files contains useful information, but in order to produce most estimates, the files must be linked. All of the files contain the variable TUCASEID, which is the ATUS identification number. Two other variables that can be used for linking in conjunction with TUCASEID are TULINENO (person line number) and TUACTIONITY_N (activity line number). For more information on linking ATUS data files, please see www.bls.gov/tus/other-documentation/howto.htm#linking.

The ATUS files can also be linked to CPS files by using variables on the ATUS-CPS file. More information about linking to the CPS files is available in Appendix K of the ATUS User's Guide (www.bls.gov/tus/atususersguide.pdf).

2023 ATUS Data Dictionary: Public Survey Methodology Data

Name	Description	File
TR1INTST	Interview status 1	Case History File
	Edited Universe:	All cases
	Valid Entries:	1 Complete interview or sufficient partial
		2 Eligible non-interview (refusal, noncontact, other non-interview)
		3 Not eligible
		4 Unknown eligibility
	*Note	This variable is a recode of TRFNLOUT. Definitions are listed in Appendix A.
Name	Description	File
TR2INTST	Interview status 2	Case History File
	Edited Universe:	All cases
	Valid Entries:	1 Complete interview
		2 Sufficient partial
		3 Refusal
		4 Noncontact
		5 Other non-interview
		6 Not eligible
		7 Unknown eligibility
	*Note	This variable is a recode of TRFNLOUT. Definitions are listed in Appendix A.

2023 ATUS Data Dictionary: Public Survey Methodology Data

Name	Description		File
TRFNLCLL	Final call outcome		Call History File
	Edited Universe:	All call attempts	
	Valid Entries:	001.001	Complete interview
		002.001	Sufficient partial
		020.007	Not eligible: vacant
		020.011	Not eligible: person underage
		020.005	Not eligible: not used as a regular residence
		020.002	Not eligible: other type of living quarters
		020.015	Not eligible: person not a household member
		020.022	Not eligible: person in Armed Forces
		021.001	Other: person institutionalized through closeout
		021.002	Other: person absent, ill, or hospitalized through closeout
		021.003	Not eligible: person moved out
		022.002	Unknown eligibility: sample unit not found/unreached
		024.001	Other: language barrier
		025.001	Other: unconverted hearing barrier
		172.001	Not eligible: removed from sample
		172.002	Other: invalid input
		176.001	Refusal: Congressional case
		179.001	Refusal: hostile breakoff
		181.001	Refusal: refusal by person or gatekeeper
		182.001	Refusal: manual override by supervisor
		183.001	Unknown eligibility: exceeded unproductive call maximum
		185.001	Sufficient partial with planned callback
		186.001	Refusal: pre-refusal based on explicit refusal or hostile breakoff
		188.001	Noncontact: incomplete callbacks
		188.003	Not eligible: temporarily unavailable (institutionalized)
		188.002	Noncontact: temporarily unavailable (absent, ill, or hospitalized)
		191.001	Other: unresolved language barrier
		192.001	Other: hearing barrier
		193.001	Unknown eligibility: privacy detectors
		194.001	Noncontact: never contacted, confirmed number
		195.001	Unknown eligibility: never contacted, unconfirmed number
		199.001	Unknown eligibility: never tried, no telephone number household
	*Note	These are final call outcome codes introduced in 2005 and do not correspond to final call outcomes (TUOUTCOMECODE) from 2004	

2023 ATUS Data Dictionary: Public Survey Methodology Data

Name	Description		File
TRFNLOUT	Final outcome code		Case History File
	Edited Universe:	All cases	
	Valid Entries:	001.001	Complete interview
		002.001	Sufficient partial
		020.005	Not eligible: not used as a regular residence
		020.007	Not eligible: vacant
		020.011	Not eligible: person underage
		020.015	Not eligible: person not a household member
		020.022	Not eligible: person in Armed Forces
		021.001	Other: person institutionalized through closeout
		021.003	Not eligible: person moved out
		021.002	Other: person absent, ill, or hospitalized through closeout
		022.002	Unknown eligibility: sample unit not found/unreached
		024.001	Other: language barrier
		025.001	Other: unconverted hearing barrier
		172.001	Not eligible: removed from sample
		172.002	Other: invalid input
		176.001	Refusal: Congressional case
		179.001	Refusal: hostile breakoff
		181.001	Refusal: refusal by person or gatekeeper
		183.001	Unknown eligibility: exceeded unproductive call maximum
		188.001	Noncontact: incomplete callbacks
		188.002	Noncontact: temporarily unavailable (absent, ill, or hospitalized)
		188.003	Not eligible: temporarily unavailable (institutionalized)
		191.001	Other: unresolved language barrier
		193.001	Unknown eligibility: privacy detectors
		194.001	Noncontact: never contacted, confirmed number
		195.001	Unknown eligibility: never contacted, unconfirmed number
		199.001	Unknown eligibility: never tried, no telephone number household
		230.001	Refusal: diary contains less than 5 activities
		231.001	Refusal: don't know/refuse 180 diary minutes or more
		232.001	Refusal: diary contains less than 5 activities and don't know/refuse 180 diary minutes or more
		233.001	Refusal: other data quality issues
	*Note	These are final outcome codes introduced in 2005 and do not correspond to final outcomes (TUFINALCODE) from 2003 and 2004	

2023 ATUS Data Dictionary: Public Survey Methodology Data

Name	Description		File
TRINCEN2	Incentive expansion case		Case History File
	Edited Universe:	All cases	
	Valid Entries:	0	Case was not part of incentive expansion
		1	Case was part of incentive expansion
	*Note	Starting with the April 2023 sample, incentive expansion cases received a \$10 cash incentive. From January 2020 through March 2023, incentive expansion cases received a \$5 cash incentive.	
Name	Description		File
TUA_ID	Unique anonymous adjudicator ID		Case History File
	*Note	1st and 2nd digits AA-ZZ, 3rd and 4th digits 00-99. All cases are coded twice. TUA_ID is the identification number of the adjudicator who reviews cases that were coded differently.	
Name	Description		File
TUATTMDATE	Date of call attempt		Call History File
	Valid Entries:	20221106 20231231	Min Value Max Value
	*Note	Call attempt date is in YYYYMMDD format	
Name	Description		File
TUATTMPTNO	Call attempt number		Call History File
	Valid Entries:	1 999	Min Value Max Value
Name	Description		File
TUATTMWEEK	Which week (out of 8 weeks in sample) call was made		Call History File
	Valid Entries:	0	Attempt made outside of 8-week period
		1	1st week
		2	2nd week
		3	3rd week
		4	4th week
		5	5th week
		6	6th week
		7	7th week
		8	8th week
	*Note	Values of 0 usually reflect administrative changes that did not involve actual telephone contact.	
Name	Description		File
TUAVGDUR	Average duration of all reported diary activities (in minutes)		Case History File
	Valid Entries:	0 1440	Min Value Max Value

2023 ATUS Data Dictionary: Public Survey Methodology Data

Name	Description	File
TUC_ID	Unique anonymous coder ID	Case History File
	*Note	1st and 2nd digits AA-ZZ, 3rd and 4th digits 00-99. All cases are coded twice. TUC_ID is the identification number of the first coder.
Name	Description	File
TUCASEID	ATUS Case ID (14-digit identifier)	All Files
Name	Description	File
TUCPSDP	Is the ATUS designated person the same as the CPS respondent?	Case History File
	Valid Entries:	1 Yes, same person
		2 No, different person
	*Note	The CPS respondent does not have to be the same for all eight months of CPS. TUCPSDP identifies whether the ATUS designated person is the same as the CPS respondent for the final (month 8) CPS interview.
Name	Description	File
TUDQUAL2	Collected from interviewer after interview: why do you think the data should not be used?	Case History File
	Valid Entries:	1 Respondent intentionally providing wrong answer
		2 Respondent trying to provide correct answer, but could not correctly remember his/her activities
		3 Respondent deliberately reported very long duration activities
		4 Other
	*Note	The interviewer is asked this question if TUINTQUAL = 1
Name	Description	File
TUHINTID	Unique anonymous ATUS interviewer ID for each call attempt	Call History File
	*Note	1st and 2nd digits AA-ZZ, 3rd and 4th digits 00-99
Name	Description	File
TUINCENT	Incentive/non-incentive case	Case History File
	Valid Entries:	0 Non-incentive case
		1 Regular incentive case
		2 Hard to reach cases (see note below)
	*Note	Starting with the April 2023 sample, regular incentive cases (those without a phone number) and hard to reach cases (those ages 15-24) received a \$10 cash incentive. From October 2021 through March 2023, those without a phone number received a \$5 cash incentive.
Name	Description	File
TUINTDQUAL	Collected from interviewer after interview: is there any reason this interview should not be used?	Case History File
	Valid Entries:	1 Yes
		2 No

2023 ATUS Data Dictionary: Public Survey Methodology Data

Name	Description	File
TUINTID	Unique anonymous ATUS interviewer ID	Case History File
	*Note 1st and 2nd digits AA-ZZ, 3rd and 4th digits 00-99	
Name	Description	File
TUINTRODATE	Day of month in which the case was introduced (panel day)	Case History File
	Valid Entries: 0 31	Min Value Max Value
Name	Description	File
TUINTROPANMONTH	Month in which the case was introduced (panel month)	Case History File
	Valid Entries: 1 12	Min Value Max Value
Name	Description	File
TUINTROPANYEAR	Year in which the case was introduced (panel year)	Case History File
	Valid Entries: 2022 2023	Min Value Max Value
Name	Description	File
TULNGSKL	Non-English language	Case History File
	Valid Entries: 0	No non-English language assigned
		1 Spanish language assigned
		2 Other non-English language assigned
	*Note	This variable is used to assist in assigning interviewers. The language could have been assigned in a previous Current Population Survey interview rather than an ATUS interview. Additionally, it could have been assigned after contact with an individual other than the designated respondent.
Name	Description	File
TUTOTACTNO	Total number of activities reported in diary	Case History File
	Valid Entries: 1 91	Min Value Max Value
	*Note	New values for TUTOTACTNO were introduced in 2005; For cases in 2005 and later, where total activities numbered 1, 2, 3, and 4, TUTOTACTNO = 1, 2, 3 and 4 respectively.
Name	Description	File
TUV_ID	Unique anonymous verifier ID	Case History File
	*Note	1st and 2nd digits AA-ZZ, 3rd and 4th digits 00-99. All cases are coded twice. TUV_ID is the identification number of the second coder.

Appendix A

TR1INTST

TR1INTST	TR1INTST Definition	TRFNLOUT CODE Values	
1	Complete and sufficient partial	001.001	002.001
2	Eligible non-interview	021.001 024.001 172.002 179.001 188.001 191.001 230.001 232.001	021.002 025.001 176.001 181.001 188.002 194.001 231.001 233.001
3	Not eligible	020.005 020.011 020.022 172.001	020.007 020.015 021.003 188.003
4	Unknown eligibility	022.002 193.001 199.001	183.001 195.001

TR2INTST

TR2INTST	TR2INTST Definition	TRFNLOUT CODE Values	
1	Complete	001.001	
2	Sufficient partial	002.001	
3	Refusal	176.001 181.001 231.001 233.001	179.001 230.001 232.001
4	Noncontact	188.001 194.001	188.002
5	Other	021.001 024.001 172.002	021.002 025.001 191.001
6	Not eligible	020.005 020.011 020.022 172.001	020.007 020.015 021.003 188.003
7	Unknown eligibility	022.002 193.001 199.001	183.001 195.001