

# **MEPS HC-195: 2017 Jobs File**

**February 2019**

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The MEPS instrument design changed beginning in Spring of 2018, affecting Panel 23 Round 1, Panel 22 Round 3, and Panel 21 Round 5. For the Full-Year 2017 PUFs, the Panel 22 Round 3 and Panel 21 Round 5 data were transformed to the degree possible to conform to the previous design. For the Full-Year 2018 PUFs, Panel 22 Rounds 1 and 2, collected under the old design, were transformed to the degree possible to conform to the new design. **Data users should be aware of possible impacts on the data and especially trend analysis for these data years due to the design transition.**

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## **A. Data Use Agreement**

Individual identifiers have been removed from the micro-data contained in these files. Nevertheless, under sections 308 (d) and 903 (c) of the Public Health Service Act (42 U.S.C. 242m and 42 U.S.C. 299 a-1), data collected by the Agency for Healthcare Research and Quality (AHRQ) and/or the National Center for Health Statistics (NCHS) may not be used for any purpose other than for the purpose for which they were supplied; any effort to determine the identity of any reported cases is prohibited by law.

Therefore in accordance with the above referenced Federal Statute, it is understood that:

1. No one is to use the data in this data set in any way except for statistical reporting and analysis; and
2. If the identity of any person or establishment should be discovered inadvertently, then (a) no use will be made of this knowledge, (b) the Director Office of Management AHRQ will be advised of this incident, (c) the information that would identify any individual or establishment will be safeguarded or destroyed, as requested by AHRQ, and (d) no one else will be informed of the discovered identity; and
3. No one will attempt to link this data set with individually identifiable records from any data sets other than the Medical Expenditure Panel Survey or the National Health Interview Survey. Furthermore, linkage of the Medical Expenditure Panel Survey and the National Health Interview Survey may not occur outside the AHRQ Data Center, NCHS Research Data Center (RDC) or the U.S. Census RDC network.

By using these data you signify your agreement to comply with the above stated statutorily based requirements with the knowledge that deliberately making a false statement in any matter within the jurisdiction of any department or agency of the Federal Government violates Title 18 part 1 Chapter 47 Section 1001 and is punishable by a fine of up to \$10,000 or up to 5 years in prison.

The Agency for Healthcare Research and Quality requests that users cite AHRQ and the Medical Expenditure Panel Survey as the data source in any publications or research based upon these data.

## **B. Background**

### **1.0 Household Component**

The Medical Expenditure Panel Survey (MEPS) provides nationally representative estimates of health care use, expenditures, sources of payment, and health insurance coverage for the U.S. civilian noninstitutionalized population. The MEPS Household Component (HC) also provides estimates of respondents' health status, demographic and socio-economic characteristics, employment, access to care, and satisfaction with health care. Estimates can be produced for individuals, families, and selected population subgroups. The panel design of the survey, which includes 5 Rounds of interviews covering 2 full calendar years, provides data for examining person level changes in selected variables such as expenditures, health insurance coverage, and health status. Using computer assisted personal interviewing (CAPI) technology, information about each household member is collected, and the survey builds on this information from interview to interview. All data for a sampled household are reported by a single household respondent.

The MEPS-HC was initiated in 1996. Each year a new panel of sample households is selected. Because the data collected are comparable to those from earlier medical expenditure surveys conducted in 1977 and 1987, it is possible to analyze long-term trends. Each annual MEPS-HC sample size is about 15,000 households. Data can be analyzed at either the person or event level. Data must be weighted to produce national estimates.

The set of households selected for each panel of the MEPS HC is a subsample of households participating in the previous year's National Health Interview Survey (NHIS) conducted by the National Center for Health Statistics. The NHIS sampling frame provides a nationally representative sample of the U.S. civilian noninstitutionalized population and reflects an oversample of Blacks and Hispanics. In 2006, the NHIS implemented a new sample design, which included Asian persons in addition to households with Black and Hispanic persons in the oversampling of minority populations. The linkage of the MEPS to the previous year's NHIS provides additional data for longitudinal analytic purposes.

### **2.0 Medical Provider Component**

Upon completion of the household CAPI interview and obtaining permission from the household survey respondents, a sample of medical providers are contacted by telephone to obtain information that household respondents can not accurately provide. This part of the MEPS is called the Medical Provider Component (MPC) and information is collected on dates of visits, diagnosis and procedure codes, charges and payments. The Pharmacy Component (PC), a subcomponent of the MPC, does not collect charges or diagnosis and procedure codes but does collect drug detail information, including National Drug Code (NDC) and medicine name, as well as date filled and sources and amounts of payment. The MPC is not designed to yield national estimates. It is primarily used as an imputation source to supplement/replace household reported expenditure information.

### **3.0 Survey Management and Data Collection**

MEPS HC and MPC data are collected under the authority of the Public Health Service Act. Data are collected under contract with Westat, Inc. (MEPS HC) and Research Triangle Institute (MEPS MPC). Data sets and summary statistics are edited and published in accordance with the confidentiality provisions of the Public Health Service Act and the Privacy Act. The National Center for Health Statistics (NCHS) provides consultation and technical assistance.

As soon as data collection and editing are completed, the MEPS survey data are released to the public in staged releases of summary reports, micro data files, and tables via the [MEPS website](#). Selected data can be analyzed through MEPSnet, an on-line interactive tool designed to give data users the capability to statistically analyze MEPS data in a menu-driven environment.

Additional information on MEPS is available from the MEPS project manager or the MEPS public use data manager at the Center for Financing, Access, and Cost Trends, Agency for Healthcare Research and Quality, 5600 Fishers Lane Rockville, MD 20857 (301-427-1406).

## C. Technical and Programming Information

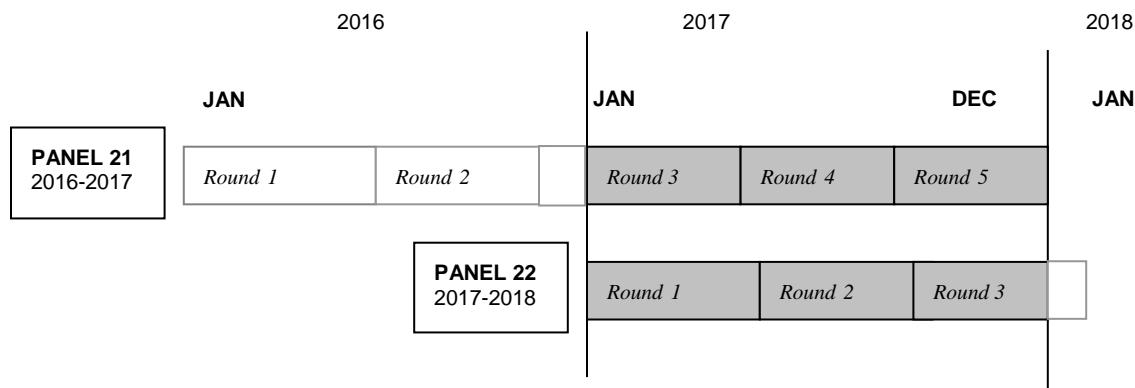
Section C of this document offers a brief overview of the data provided in MEPS public use release HC-195, as well as the content and structure of the codebook, reserved code values, and variable naming conventions. It is followed by Section D containing the Variable-Source Crosswalk, and Appendix 1 containing sample SAS program code. A copy of the survey instrument used to collect the information on this file is available on the [MEPS website](#).

### 1.0 General Information

In the Employment section, MEPS collects complete job-related information in the round in which a job is first reported. While they vary by job type (see Section 2.0), the data reported for a job in its first survey round may include earnings by type (gross salary, tips, etc.), start and stop dates, hours and weeks worked, establishment size and industry, occupation, presence of retirement and other benefits, self-employment versus other status, temporary or seasonal situations, and health insurance availability. Minimal data updates are available for later rounds in which the job continues.

Each Full-Year Jobs file contains job records from two MEPS panels. The 2017 Jobs file provided in this release, MEPS HC-195, contains job-level information collected in Rounds 3 through 5 for Panel 21 and Rounds 1 through 3 for Panel 22 of the Medical Expenditure Panel Survey (i.e., the rounds for the MEPS panels covering calendar year 2017), as illustrated below.

#### MEDICAL EXPENDITURE PANEL SURVEY CALENDAR 2016 THROUGH 2018



In order to obtain complete information for a job, users must note the round in which the job is first reported. This is because MEPS collects complete Jobs information in that round only, as noted above.

For the first year panel, in this case Panel 22, data from Rounds 1, 2, and 3 are included in the 2017 Jobs file. Complete information for any Panel 22 job is available, whether that job was first reported in Round 1, 2, or 3. This is the case for any first year panel (the panel that began its first year of interviewing in the given year) in a Full-Year Jobs file.

For the second year panel (the panel that continued with its second year of interviewing in the given year), in this case Panel 21, data from Rounds 3, 4, and 5 are included in this file. If the Round 3, 4, or 5 job continued from Round 1 or Round 2, users must look back to the Jobs file from the previous year (2016) to obtain complete information for the job. Appendix 1 includes sample SAS code to assist users in obtaining this information. Users should note that, because of differences in sample composition between the current year and the previous year files (i.e., a person was included in the previous year's delivery but not the current year or vice versa), or because more accurate information was received in Round 4 or Round 5 comments following the delivery of the Rounds 1 – 3 Jobs records in the previous year, there occasionally may not be a corresponding Round 1 or Round 2 job in the previous year file.

This file is being released as a research file and has undergone the standard quality control procedures usually performed on MEPS data files. The file includes a total of 55,035 records, with each record representing a unique job for a person by round. This file presents information about jobs starting on or before 12/31/2017 only. The 2018 Jobs file release will present information on Panel 22 jobs starting in 2018.

## **2.0 Data File Information**

### **Jobs Records**

Each record in the 2017 Jobs file represents one job reported by a person in a round. The unique record identifier is the variable JOBSIDX, which comprises a person identifier (DUID + PID), a round identifier (RN), and a job number (JOBSN). A panel indicator (PANEL) is included on the file to distinguish Round 3 jobs held by Panel 21 persons from Round 3 jobs held by those in Panel 22.

All persons age 16 and older in the MEPS are asked to report on jobs held. Depending on an individual's job history, these reported jobs may be held:

- at the interview date,
- in the round but prior to the interview date, or
- prior to the round.

Only those persons reporting a job in a round will have a record on the 2017 Jobs file for that round.

### **Initial Reporting Round**

Most persons held only one job at the first interview date – their “Current Main Job.” For persons who held more than one job at the round’s interview date (a current job), respondents were asked to identify the main job. This job was classified as the “Current Main Job” and any other simultaneously held job was classified as a “Current Miscellaneous Job.” The MEPS also obtained some information on any former job (Former Main Job or Former Miscellaneous Job) held in the reference period but not at the interview date. For those persons neither working at the interview date nor earlier in the reference period, limited information on the last job the

person held was collected. Additionally, for those persons age 55 or older who were identified as having retired from a job, the MEPS obtained some job-level information (Retirement Job).

The variable SUBTYPE indicates the type of job record – current main (1), current miscellaneous (2), former main (3), former miscellaneous (4), last job outside reference period (5), or retirement job (6). When a job is initially reported, MEPS asks for detailed information about any “Current Main Job” and basic information about other job types. Refer to the questionnaire to see which information was asked for each job type. The following variable list identifies when a variable could be set based on the job SUBTYPE. Self-employed and wage-earner status at a job also defines when a variable may be set.

#### Variables Set for Each SUBTYPE

Variable	Self-Employed Jobs	Wage Earner Jobs	Current Main	Current Miscellaneous	Former Main	Former Miscellaneous	Last Job Outside Reference Period	Retirement
JOBTYPE	x	x	x	x	x	x	x	x
JSTRTM	x	x	x	x	x	x		
JSTRTY	x	x	x	x	x	x		
JSTOPM	x	x			x	x	x	x
JSTOPY	x	x			x	x	x	x
RETIRJOB	x	x						x
SUBTYPE	x	x	x	x	x	x	x	x
JOBHASHI	x	x		x	x	x	x	x
NUMEMPS		x	x		x			
ESTMATE2		x	x		x			
MORELOC		x	x		x			
BUSINC	x		x		x			
PROPRIET	x		x		x			
TYPEEMPL		x	x		x	x if not self-employed & retired	x	x
YLEFT		x			x		x	

Variable	Self-Employed Jobs	Wage Earner Jobs	Current Main	Current Miscellaneous	Former Main	Former Miscellaneous	Last Job Outside Reference Period	Retirement
YNOBUSN	x				x		x	
HRSPRWK	x	x	x	x	x			
HRS35WK	x	x	x		x			
SICKPAY		x	x		x			
PAYDRVST		x	x		x			
PAYVACTN		x	x		x			
RETIRPLN		x	x		x			
SESNLJOB	x	x	x	x	x			
TEMPJOB	x	x	x	x	x			
WKLYAMT	x	x		x				
EMPLINS	x	x	x					
OFFRDINS	x	x	x	x	x	x	x	x
DIFFPLNS	x	x	x	x	x	x	x	x
ANYINS	x	x	x	x	x	x	x	x
INUNION	x	x	x	x	x	x	x	x
PROVDINS	x	x	x	x	x	x	x	x
HHMEMBER	x		x	x	x	x	x	x
TOTLEMP	x		x	x	x	x	x	x
TOTNEMPB	x		x	x	x	x	x	x
RTOTEMPB	x		x	x				
SALARIED		x	x		x			
HOWPAID		x	x		x			
DAYWAGE		x	x		x			

Variable	Self-Employed Jobs	Wage Earner Jobs	Current Main	Current Miscellaneous	Former Main	Former Miscellaneous	Last Job Outside Reference Period	Retirement
HRSPRDY		x	x		x			
MAKEAMT		x	x		x			
PERUNIT		x	x		x			
MORE10		x	x		x			
MORE15		x	x		x			
MOREMINM		x	x		x			
GROSSPAY		x	x		x			
GROSSPER		x	x		x			
SALRYWKS		x	x		x			
HRSALBAS		x	x		x			
EARNTIPS		x	x		x			
EARNBONS		x	x		x			
EARNCOMM		x	x		x			
TIPSUNIT		x	x		x			
TIPSAMT		x	x		x			
BONSUMIT		x	x		x			
BONSAMT		x	x		x			
COMMUNIT		x	x		x			
COMMAMT		x	x		x			
HRLYWAGE		x	x		x			
STILLAT	x	x	x					
MAIN_JOB	x	x	x					
DIFFWAGE		x	x					

Variable	Self-Employed Jobs	Wage Earner Jobs	Current Main	Current Miscellaneous	Former Main	Former Miscellaneous	Last Job Outside Reference Period	Retirement
WORKSTAT	x	x	x					
STLFTPTB	x	x	x					
Y_CHANGE	x	x	x					
STILLWRK	x	x		x				
OFFTAKEI	x	x	x	x				
NOWTAKEI	x	x	x	x				
ESTBTHRU	x	x	x	x				
INSESTB	x	x	x	x				
WHY_LEFT	x	x			x	x		

It is important to note that the retirement job classification in the variable SUBTYPE is independent of any retirement response in the following variables:

- YLEFT, which relates to the question why a person left a previous job;
- YNOBUSN, which relates to the question why a person no longer has a self-employed business;
- WHY\_LEFT, which relates to the question why a person left a job in the current round.

### Job Updates and Inapplicable (-1) Values

The MEPS used dependent interviewing in Rounds 3, 4, and 5 for Panel 21 and in Rounds 2 and 3 for Panel 22 (see section RJ in the Employment section of the questionnaire). In these rounds, the MEPS asked about current main and current miscellaneous jobs held at the previous round interview date to determine whether the jobholder continued to work at these jobs. For other job types (former, last, or retirement) reported in the previous round, MEPS does not ask any follow-up questions. These jobs, by definition, are no longer held by the person and therefore are not included on the file except in the round they are first reported.

With dependent interviewing, if a person still held a Current Main Job from the previous round, the MEPS asked whether the job was still the main job. For most jobholders, it was reported that they still worked at the same job and it was still their main job. If, in a subsequent interview, a job was no longer held, it was designated as a former job for that follow-up round. It is also

possible, although unusual, for a job to change from main to miscellaneous (or vice versa) in a round subsequent to the initial report.

If job status remained the same for a continuing job (either main or miscellaneous), the MEPS asked only a subset of the employment questions as a review. Because the MEPS asked only this subset of questions if job status for a person did not change in later rounds, many job-level variables on the subsequent round's job records are coded as inapplicable (-1); the complete information is on the record for the job in the first round in which it was reported. Thus, it is important to determine whether a job in a subsequent round continues from the previous round when working with the job records. In rounds where this applies, the variables STILLAT (for jobs that were current main in the previous round) and STILLWRK (for jobs that were current miscellaneous in the previous round) indicate whether a person still holds the job at the subsequent round interview date. The variable SUBTYPE on the subsequent round record indicates whether the job is main or miscellaneous in that subsequent round. Note that if a Panel 21 job included in this 2017 file is continued from a Round 1 or 2 job, much of the information will be contained in the 2016 Jobs file (HC-185). Use that file to obtain the desired job characteristics. Appendix 1 provides a sample SAS program showing how to do this.

Any new job reported in a round following the initial interview is collected the same way as in the first interview round.

Variables that relate only to the review of a job reported in a previous round (Y\_CHANGE, MAIN\_JOB, OFFTAKEI, NOWTAKEI, WHY\_LEFT, STILLAT, STILLWRK, DIFFWAGE, WORKSTAT, ESTBTHRU, INSESTB, RTOTEMPB) were not asked in Round 1, and these variables are coded as inapplicable (-1) on a Jobs record for the round in which the job is initially reported.

Beginning in Panel 22 Round 3 and Panel 21 Round 5, CAPI asks a question to indicate whether the person continues working in the same work status (either full-time or part-time) as the prior round (RJ40). Prior to Panel 22 Round 3 and Panel 21 Round 5, a similar question with different response categories was asked (RJ04). These two questions are used to construct a new variable STLFTPTB for the 2017 JOBS file. STLFTPTB is a YES/NO variable and is constructed for all reviewed JOBS in all Panels and Rounds of this 2017 delivery.

When a person changes work status between full-time and part-time (and vice versa), the person is asked to report the reason for the work status change. Prior to Panel 22 Round 3 and Panel 21 Round 5, the same question was asked, regardless of whether the change was from full-time to part-time, or from part-time to full-time (RJ05). Beginning Panel 22 Round 3 and Panel 21 Round 5, that question was dropped, and instead, different questions for reason for work status change are asked of people moving from full-time to part-time (RJ55) and people moving from part-time to full-time (RJ50). Information from these variables are used to set a single variable Y\_CHANGE. Categories in the two new questions are different from the old single question. For persons in Panel 22 Round 3 and Panel 21 Round 5, new values are converted into the prior schema where possible. Otherwise, the variable was set to "91 Other." Crosswalks are available in these tables:

For persons moving from Part-time to Full-time

Categories Prior to Panel 22 Round 3/Panel 21 Round 5			Categories Beginning Panel 22 Round 3/Panel 21 Round 5		
	As Collected (RJ05)	As Recorded (Y_CHANGE)		As Collected (RJ50)	As Recorded (Y_CHANGE)
Promotion or Demotion	1	1			
Change in Responsibility	2	2			
Change in Amount of Work Business Brings In	3	3			
Change in Shift Time	4	4	Change in Schedule or Shift	1	4
			Change in Pay	2	91
			Benefits/Health Insurance	3	91
Change in Number of Employees Available to Work	5	5			
Illness/Disability	6	6			
Temporary Leave	7	7			
Maternity/Paternity Leave	8	8			
Going to School/Finished School	9	9			
Change in Home or Family Situation	10	10	Family, School, Temporary Leave	4	10
Needed Time Off/Wanted to Work More	11	11			
Other	91	91	Other	91	91
Refused	-7	-7	Refused	-7	-7
Don't Know	-8	-8	Don't Know	-8	-8

For persons moving from Full-time to Part-time

Categories Prior to Panel 22 Round 3/Panel 21 Round 5			Categories Beginning Panel 22 Round 3/Panel 21 Round 5		
	As Collected (RJ05)	As Recorded (Y_CHANGE)		As Collected (RJ55)	As Recorded (Y_CHANGE)
Promotion or Demotion	1	1			
Change in Responsibility	2	2			
Change in Amount of Work Business Brings In	3	3	Hours Cut, Business Slow	1	3
Change in Shift Time	4	4	Change in Schedule or Shift	2	4
Change in Number of Employees Available to Work	5	5			
Illness/Disability	6	6	Illness, Injury, Health Problem	3	6
Temporary Leave	7	7			
Maternity/Paternity Leave	8	8			
Going to School/Finished School	9	9			
Change in Home or Family Situation	10	10	Family, School, Temporary Leave	4	10
Needed Time Off/Wanted to Work More	11	11			
Other	91	91	Other	91	91
Refused	-7	-7	Refused	-7	-7
Don't Know	-8	-8	Don't Know	-8	-8

Also beginning Panel 22 Round 3 and Panel 21 Round 5, changes were made to the categorical responses available for the question asking why a person left a job that continued from the previous round but ended in the current round (WHY\_LEFT). New values are converted into the prior schema where possible. Otherwise, the variable was set to "91 Other." Users may see increases on "91 Other."

Categories Prior to Panel 22 Round 3/Panel 21 Round 5			Categories Beginning Panel 22 Round 3/Panel 21 Round 5		
	As Collected (RJ10)	As Recorded (WHY_LEFT)		As Collected (RJ130)	As Recorded (WHY_LEFT)
Job Ended	1	1	Job Ended, Temporary, Seasonal, Contract, etc.	1	1
Business Dissolved/Sold	2	2	Business Closed or Sold	2	2
Retired	3	3	Retired	3	3
Illness/Injury	4	4	Illness, Injury, Any Health Problem	4	4
Laid Off	5	5	Terminated, Fired, Dismissed	5	91
Quit to Have a Baby	6	6	Laid Off, Let Go	6	5
Quit to Go to School	7	7	Quit - Family Reason, Maternity Leave	7	8
Quit to Take Care of Home or Family	8	8	Quit - School	8	7
			Quit – Any Other Reason	10	91
Quit Because Wanted Time Off	9	9	Quit – Job Related	9	91
Quit to Take Other Job	10	10			
Unpaid Leave	11	11			
Other	91	91	Other	91	91
Refused	-7	-7	Refused	-7	-7
Don't Know	-8	-8	Don't Know	-8	-8

### Exceptions to the Inapplicable (-1) Rule

Unlike the situation explained above for most variables on the file, for certain variables a value other than inapplicable (-1) does not necessarily mean that a job is newly reported. There are two distinct situations in which this special treatment is used, due to internal processing needs.

The first type of exception occurs when questions related to the affected variables are skipped over as inapplicable (-1) during the interview in rounds subsequent to the one in which the job was initially reported, but have their originally reported response carried forward from round to round. This group includes the following 14 variables: EMPLINS, HRSPRWK, HRS35WK, JOBTYPE, JSTRTY, JSTRTM, MORELOC, NUMEMPS, OFFRDINS, PROVDINS, TYPEEMPL, JOBHASHI, HRSALBAS, and RETIRJOB.

The second type of exception occurs for certain questions that are asked during the review of a job in rounds following the round in which the job was initially reported. If there is no change based on the review, the value for the affected variable is copied forward from the previous

round. If there is a change, the variable is updated to reflect the new information. These five variables are: JSTOPY, NOWTAKEI, OFFTAKEI, SUBTYPE, and TOTLEMP.

Variables related to earnings (such as HRLYWAGE, GROSSPAY, SALARIED) are treated similarly to the five variables just discussed. In the review section, the MEPS attempted to obtain information regarding changes in wages for the same job from round to round. If there were no wage changes (indicated by the DIFFWAGE variable), then the most recent round's information was carried forward. If changes were recorded, then the relevant variables were updated. For every new job reported for a person, the MEPS attempted to obtain current wage information.

### **Top-Coding, Bottom-Coding, Editing, and Confidentiality**

For reasons of confidentiality, earnings variables on the file were top-coded. The earnings variables include HRLYWAGE, BONSAMT, COMMAMT, TIPSAMT, DAYWAGE, WKLYAMT, GROSSPAY, and MAKEAMT. A value of '-10' for one of these variables on a record indicates that the variable had a positive value and that the hourly rate for that earnings variable for the record was greater than or equal to \$96.15. Beginning in 2005, the process by which the top-code value for the Jobs file is derived incorporates the wage top-code process used in the Full-Year Use file top-coding process. The purpose of this change in top-coding procedures is to ensure confidentiality for each person across files.

Beginning with the 2004 Use file process, top-coding was changed to consider updated wages in any round – that is, in addition to using wages from the first report of a Current Main Job, updated wages from that job reported in any subsequent round are also included in deriving the top-code value. On the Use file, any person who has a wage for any job in any round that is greater than or equal to the top-code value will have all wages for all jobs top-coded, regardless of round. Any person whose wages are top-coded on the Full-Year 2017 Use file has *all* wages on *all* jobs top-coded in the 2017 Jobs file.

Moreover, because other jobs where wages are reported are included in the 2017 Jobs file but not summarized in the Full-Year 2017 Use file (i.e., newly reported former main jobs and current/former miscellaneous jobs), and these wages may exceed the current year top-code value, wages for these jobs and all jobs belonging to the same jobholder are top-coded on the 2017 Jobs file. In turn, the wages of these persons are top-coded in the Full-Year 2017 Use file as well.

Note too that there are some jobs where respondents indicate that a supplemental wage, such as a commission, tip, or bonus, is greater than or equal to the wage top-code value, but, at that same job, base wage such as the annual salary is not. For these cases, only the tips, commissions, or bonus amounts were top-coded on the job where they are greater than or equal to the wage top-code value. All other wage amounts on all jobs for these persons were left as reported.

For some persons in Panel 21, whose wages were imputed in Round 1 or Round 2 and copied forward into the Full-Year 2017 Use PUF wage variable HRWG31X, the updated Round 3 wage as reported in the 2017 Jobs file may meet or exceed the wage top-code value. For these cases, the main wage at the job is set to '-9' (not ascertained) and all other wage responses remain as reported.

Limited editing of wage variables was performed during data preparation in 2017 as compared to prior years. Starting in 2018, we will use the same editing process used in 2016.

To further improve the quality of wage reports, beginning in Panel 20 Round 3/Panel 19 Round 5, CAPI prompts the respondent to confirm wages reported in the Employment Wage section if a wage amount falls outside a specified wage range. Ranges vary depending on the unit of pay as follows:

<b>Unit of Pay</b>	<b>Wage Range</b>
PER YEAR	\$5,000.00 - \$200,000.00
PER MONTH	\$375.00 - \$20,000.00
PER 2-WEEK PERIOD	\$150.00 - \$10,000.00
PER WEEK	\$75.00 - \$5,000.00
PER DAY	\$10.00 - \$750.00
PER HOUR	\$1.00 - \$125.00

These changes are fully reflected on all wage variables in the 2017 Jobs File.

Beginning in Panel 22 Round 3 and Panel 21 Round 5, wage unit response categories changed on PERUNIT and TIPSUNIT variables. The response categories “PER HOUR” and “PER TWO WEEK PERIOD” were removed from CAPI. Users may observe an increase on remaining values.

To calculate the hourly rate for earnings types not reported on an hourly basis, the number of hours per week worked and in some cases the number of weeks worked were used in conjunction with the various amounts. These hours and weeks are included on the file along with the reported earnings amounts, but not the calculated hourly rates. (Earnings variables were not reconciled with income data collected elsewhere in the MEPS.)

Beginning in Panel 22 Round 3 and Panel 21 Round 5, a question asking how many hours were worked per day (EM106) was removed from the CAPI for persons who reported being paid via any of the following categories in their main job: piecework, job/mile, tips, commissions, or bonuses, and then also used “PER DAY” when reporting wages for that job. The associated variable APXHRDAY has been removed from this delivery.

For confidentiality reasons, the establishment size variables NUMEMPS (establishment size for jobs held by wage earners) and TOTLEMP (establishment size for self-employed jobs) were top-coded as ‘-10’ for establishment sizes greater than or equal to 13,000 employees.

It is important to note that the establishment size variable for the self-employed is TOTLEMP, while the establishment size for wage earners can be found in NUMEMPS and ESTMATE1. The variable ESTMATE1 is derived from a question that allowed respondents who did not know the actual establishment size (NUMEMPS) to choose from a number of size ranges.

Beginning in Panel 22 Round 3 and Panel 21 Round 5, the categorical values available to respondents for establishment size changed. There is not a one-to-one correspondence between schemas so a third schema was required. The constructed variable ESTMATE2 contains a third

coding scheme developed from both the pre- and post-2017 ranges. As of 2017, ESTMATE1 is no longer delivered in this file.

#### Changes to Estimated Establishment Size Ranges - JOBS.ESTMATE2

Categories Prior to Panel 22 Round 3/Panel 21 Round 5			Categories Beginning Panel 22 Round 3/Panel 21 Round 5		
	As Collected	ESTMATE2		As Collected	ESTMATE2
Inapplicable	-1	-1	Inapplicable	-1	-1
Refused	-7	-7	Refused	-7	-7
Don't Know	-8	-8	Don't Know	-8	-8
Not Ascertained	-9	-9	Not Ascertained	-9	-9
<10	1	1	2-9	2	1
10-25	2	2	10-25	3	2
26-49	3	3	26-50	4	3
50-100	4	4	51-100	5	4
101-500	5	5	101-200	6	5
501-1,000	6		201-500	7	
1001-5,000	7	6	501+	8	6
5001+	8				

Beginning in Panel 20 Round 3/Panel 19 Round 5, CAPI no longer accepts a value of '0' when self-employed respondents are asked to indicate the total number of employees working at their self-employed business (EM124, RJ08B). This change is fully reflected in the TOTLEMP variable on the 2017 Jobs File.

Beginning in Panel 22 Round 3 and Panel 21 Round 5, CAPI retains both new and updated values of TOTLEMP on separate variables. The 2017 Jobs file contains two new establishment size variables TOTNEMPB and RTOTEMPB that contain the new and updated values respectively for all self-employed jobs in this file. TOTLEMP continues to be part of this delivery and reflects the most current value. It should also be noted that, due to a processing error in the Review of Jobs section, data users may see an increase in values of -9 NOT ASCERTAINED in the RTOTEMPB53 and TOTLEMP53 variables.

In addition to top coding wages and establishment size, beginning with the 2016 Jobs file, the start year of job (JSTRTY) and the stop year of job (JSTOPY) are bottom-coded. This is done because a person's age may be calculated using the job start or stop year and that age may indicate that the jobholder is older than 85 years, the age top-code value. This value is calculated by taking the current delivery year (e.g. 2017), subtracting the age top-code value (i.e. 85 years of age), then adding back 15 (i.e. the age of a person in the year before entering the work force as defined in MEPS). For the 2017 Jobs file, the job start and stop year bottom-code value is 1947.

### **Temporary and Seasonal Jobs**

Two variables on the file pertain to the temporary and seasonal nature of a person's main or miscellaneous job. The variable TEMPJOB indicates whether a main or miscellaneous job is temporary (i.e., is a current main job for a limited amount of time or until the completion of a project). The variable SESNLJOB indicates either that a main or miscellaneous job is available only during certain times of the year or that the individual is working throughout the entire year at that job. Teachers and other school personnel who work only during the school year are considered to work year round. Prior to the 2013 Jobs file, the questions related to temporary and seasonal job characteristics were asked both when a current job was initially reported as well as during a review of that job. As of Panel 17 Round 5/Panel 18 Round 3, these questions are asked of newly reported jobs only. These variables are set to inapplicable (-1) for all subsequent rounds. These questions are not asked of newly reported former miscellaneous jobs, last jobs outside of reference period, and retirement jobs.

### **Reason No Longer at Place of Employment**

In cases where a former job is newly reported, questions are asked regarding why the person is no longer at that place of work. For wage earners, this information is found in YLEFT. For self-employed persons, this information is in YNOBUSN. Response categories for the questions used to create both variables changed beginning in Panel 22 Round 3 and Panel 21 Round 5. New values are converted into the prior schema where possible. Otherwise, the variable was set to "91 Other."

Users may see increases on "91 Other" or "7 Quit to Take Care of Home or Family" on YLEFT. Users may see fewer responses on YNOBUSN for the following categories of Stopped/Left Business: To Have a Baby, To Go to School, To Take Care of Home or Family, Because Wanted Time Off, to Take Other Job.

A separate cross-walk file offers variables for both coding schemes for each variable.

YLEFT for wage-earners

Categories Prior to Panel 22 Round 3/Panel 21 Round 5			Categories Beginning Panel 22 Round 3/Panel 21 Round 5		
	As Collected (EM101)	As Recorded (YLEFT)		As Collected (EM520)	As Recorded (YLEFT)
Job Ended	1	1	Job Ended, Temporary, Seasonal, Contract, etc.	1	1
Retired	2	2	Business Closed or Sold	2	91
Illness or Injury	3	3	Illness, Injury, Any Health Problem	3	3
			Terminated, Fired, Dismissed	4	91
Laid Off	4	4	Laid Off, Let Go	5	4
Quit to Have a Baby	5	5			
Quit to Go to School	6	6	Quit – School	7	6
Quit to Take Care of Home or Family	7	7	Quit – Family Reason, Maternity Leave	6	7
Quit Because Wanted Time Off	8	8			
Quit to Take Other Job	9	9			
			Quit – Job Related Reason	8	91
			Quit – Any Other Reason	9	91
Other	91	91	Other	91	91
Refused	-7	-7	Refused	-7	-7
Don't Know	-8	-8	Don't Know	-8	-8

## YNOBUSN for self-employed

Categories Prior to Panel 22 Round 3/Panel 21 Round 5			Categories Beginning Panel 22 Round 3/Panel 21 Round 5		
	As Collected (EM102)	As Recorded (YNOBUSN)		As Collected (EM530)	As Recorded (YNOBUSN)
Business Dissolved or Sold	1	1	Business Closed or Sold	1	1
Retired	2	2	Retired	2	2
Illness or Injury	3	3	Illness or Injury	3	3
Stopped/Left Business to Have a Baby	4	4			
Stopped/Left Business to Go to School	5	5			
Stopped/Left Business to Take Care of Home or Family	6	6			
Stopped/Left Business Because Wanted Time Off	7	7			
Stopped/Left Business to Take Other Job	8	8			
Other	91	91	Other	91	91
Refused	-7	-7	Refused	-7	-7
Don't Know	-8	-8	Don't Know	-8	-8

### Last Job Outside of Reference Period and Retirement Jobs

Beginning in Panel 22 Round 3 and Panel 21 Round 5, collection details were reduced for last job outside of reference period and retirement jobs in cases where the job ended more than two years prior to the reference period. Users may see changes in frequencies on these variables (HHMEMBER, TOTNEMPB, TOTLEMP, JBDUTIES, JOBTITLE, and TYPEBUSN) for these types of jobs. Note that precise calculation of the two-year cut-off date is not possible for some persons due to allowed negative values on stop year, stop month, and reference period start month. Therefore, variables may be collected for some jobs that ended more than two years prior. For example, because of negative values in the month variable, the HHS MEMBER, TOTNEMPB, TOTLEMP, JBDUTIES, JOBTITLE, and TYPEBUSN variables for a person in 2017 would be collected for any last job outside of reference period or retirement job that ended within the 2015 calendar year, regardless of which month a respondent was interviewed in Panel 22 Round 3 and Panel 21 Round 5 and regardless of which month the job ended in 2015.

### Health Insurance Data

Questions about employment-related health insurance are asked both when any type of job is newly reported and when any continuing job is reviewed. For main jobs, either newly reported or changing from miscellaneous, the variable that indicates whether insurance is held through that

establishment is EMPLINS. For all non-main jobs, the variable JOBHASHI indicates whether insurance is held through that establishment.

For a newly reported job, depending on whether employment-related insurance is held or not, there may be follow-up information gathered which is contained in the following variables:

- OFFRDINS, which notes if insurance was *not* held, whether it was offered;
- DIFFPLNS, which notes if a choice of plans is available where insurance is either offered or held;
- ANYINS, which notes if insurance coverage is available to *any other* employees at the establishment in cases where the jobholder does not hold and is not offered coverage.

For a continuing job, when no insurance was held in the round in which the job was first reported but insurance was offered, OFFTAKEI is asked to determine if it is now held in this round. If not, prior to Panel 19 Round 4/Panel 20 Round 2, there was no follow-up regarding insurance coverage through that job. Beginning in Panel 19 Round 4/Panel 20 Round 2, if insurance is not now held in the current round as indicated at OFFTAKEI, follow-up questions are asked regarding whether insurance was offered to the employee, and, if not, whether insurance was offered to other employees at their establishment. As this change occurred partway through the 2015 delivery year and therefore was not reflected in all rounds, data were edited in the 2015 Jobs file so that all six rounds represented the same flow (i.e. no follow-up questions to OFFTAKEI). Beginning in the 2016 JOBS file, data reflect the current CAPI flow to all follow-up questions from OFFTAKEI (see below).

Consistent with prior years, follow-up questions are asked if insurance is not held through the establishment (NOWTAKEI) where:

- insurance ended in a prior round or
- insurance was never reported through the establishment, nor was the person offered insurance in the round a job was first reported or
- the respondent disavows coverage in the Health Insurance section that was previously indicated in the Employment section of the interview.

Where no insurance is indicated at either OFFTAKEI or NOWTAKEI, these follow-up questions are asked:

- The respondent is asked if health insurance was offered to the jobholder (ESTBTHRU).
- If insurance was not offered, a follow-up question is asked regarding insurance availability to any employees as noted in the variable INSESTB.

Beginning Panel 22 Round 3 and Panel 21 Round 5, if newly reported employment insurance is disavowed in the Health Insurance section, follow-up questions regarding whether insurance is offered and whether more than one plan is available are now asked in the Health Insurance section. This information is used in a new editing process whereby responses in the Health

Insurance section are transferred into the Employment or Review of Jobs sections. Consequently, more information is now available on EMPLINS, JOBHASHI, OFFRDINS, DIFFPLNS, ANYINS, NOWTAKEI, OFFTAKEI, ESTBTHRU, and INSESTB. It should also be noted that, due to a processing error, data users may see an increase in values of -9 NOT ASCERTAINED in these rounds on several insurance-related variables collected in the Review of Jobs section including NOWTAKEI, OFFTAKEI, and ESTBTHRU.

## Skip Patterns

Due to many skip patterns, it is recommended that users of the 2017 Jobs file become familiar with the Employment section in the MEPS questionnaire. To aid users, a crosswalk between variables and MEPS questionnaire numbers is provided in this release. The following examples of variables involved in skip patterns are presented to be illustrative; these examples do not represent the full range of variables affected by questionnaire skip patterns.

In one example of a skip pattern, the MEPS did not obtain job-related benefits such as vacation, sick leave, and pension information for self-employed jobs, so those variables are coded as inapplicable (-1) for those types of jobs. Nor did the MEPS attempt to obtain wage, salary, and information regarding whether the job was in the private sector, federal or local government (TYPEEMPL) for the self-employed. So again, due to the skip pattern, TYPEEMPL is coded as inapplicable (-1) for self-employed jobs.

Conversely, the questions relating to business organization type (BUSINC, PROPRIET) were asked only of the self-employed, so the skip pattern results in those variables being coded inapplicable (-1) for jobs performed by wage earners.

## Industry and Occupation Coding

Industry and occupation codes were assigned by professional coders at the Census Bureau based on verbatim descriptions provided by respondents during the survey interview. The codes are determined at a detailed 4-digit level and then collapsed into broader groups on the file to ensure the confidentiality of the records. INDCODEX contains industry information and OCCCODEX contains occupation information. The page on the MEPS website describing the 2017 Jobs file contains a crosswalk between the detailed and collapsed codes for both industry and occupation.

With the 2010 file, the Census Bureau began using 2007 Industry and 2010 Occupation codes, which were developed for the Bureau's Current Population Survey and American Community Survey. These updated coding schemes incorporate minor changes from the 2003 industry and occupation codes used for the 2002-2009 files; therefore, INDCODEX and OCCCODEX for 2010 and later files will be comparable to those variables on the 2002-2009 files. (Industry and occupation variables for pre-2002 files are not comparable to those for later files.)

This 2017 Jobs file does not include any weights necessary to extrapolate this data to the U.S. population. To make person-level estimates, link to any of the 2017 MEPS files and use the person-level weight for the appropriate panel. The link should be made through the variable DUPERSID. Note that not all persons in the MEPS have positive weights and job records; only those persons who have either a positive person-level or family-level weight in the 2017 Full-Year Person-Level file are included in the 2017 Jobs file.

## **2.1 Codebook Structure**

For each variable on the 2017 Jobs file, an unweighted frequency is provided in the accompanying codebook file.

## **2.2 Reserved Codes**

The following reserved code values are used:

<b>Value</b>	<b>Definition</b>
-1 INAPPLICABLE	Question was not asked due to skip pattern
-7 REFUSED	Question was asked and respondent refused to answer question
-8 DK	Question was asked and respondent did not know answer
-9 NOT ASCERTAINED	Interviewer did not record the data
-10 TOP-CODED VALUE	Variable was top-coded for confidentiality, as described above

## **2.3 Codebook Format**

This codebook describes an ASCII dataset (with related SAS, SPSS, and STATA programming statements and data user information), although the data are also provided in a SAS transport file. The file contains 79 variables and has a logical record length of 237 with an additional 2-byte carriage return/line feed at the end of each record. The following codebook items are provided for each variable:

<b>Identifier</b>	<b>Description</b>
Name	Variable name (maximum of 8 characters)
Description	Variable descriptor (maximum 40 characters)
Format	Number of bytes
Type	Type of data: numeric (indicated by NUM) or character (indicated by CHAR)
Start	Beginning column position of variable in record
End	Ending column position of variable in record

## **2.4 Variable Source and Naming Conventions**

In general, variable names reflect the content of the variable, with an 8-character limitation. Variables contained on this file were derived from the questionnaire itself or from the CAPI. The source of each variable is identified in Section D. Variable-Source Crosswalk. Sources for each variable are indicated in one of two ways:

1. Variables derived from CAPI or assigned in sampling are so indicated as “CAPI Derived” or “Assigned in Sampling,” respectively;
2. Variables that come from one or more specific questions have those questionnaire sections and/or question numbers listed in the “Source” column.

## **3.0 Longitudinal Analysis**

Panel-specific longitudinal files are available for downloading in the data section of the MEPS website. For each panel, the longitudinal file comprises MEPS survey data obtained in Rounds 1 through 5 of the panel and can be used to analyze changes over a two-year period. Variables in the file pertaining to survey administration, demographics, employment, health status, disability days, quality of care, health insurance, and medical care use and expenditures were obtained from the MEPS full-year Consolidated files from the two years covered by that panel. For more details or to download the data files, please see [Longitudinal Weight Files](#).

### **3.1 Using MEPS Data for Trend Analysis**

MEPS began in 1996, and the utility of the survey for analyzing health care trends expands with each additional year of data; however, it is important to consider a variety of factors when examining trends over time using MEPS. Tests of statistical significance should be conducted to assess the likelihood that observed trends are not attributable to sampling variation. The length of time being analyzed should also be considered. In particular, large shifts in survey estimates over short periods of time (e.g., from one year to the next) that are statistically significant should be interpreted with caution unless they are attributable to known factors such as changes in public policy, economic conditions, or MEPS survey methodology.

For example, as a result of improved methods for collecting priority conditions data implemented in 2007, prevalence measures prior to 2007 are not comparable to those from 2007 and beyond for many conditions. Users should refer to the documentation for the Conditions file (HC-199) for details.

With respect to methodological considerations, in 2013 MEPS introduced an effort to obtain more complete information about health care utilization from MEPS respondents with full implementation in 2014. This effort likely resulted in improved data quality and a reduction in underreporting starting in FY 2014 and could have some modest impact on analyses involving trends in utilization across years.

There are also statistical factors to consider in interpreting trend analyses. Looking at changes over longer periods of time can provide a more complete picture of underlying trends. Analysts may wish to consider using techniques to smooth or stabilize analyses of trends using MEPS data such as comparing pooled time periods (e.g., 1996-97 versus 2011-2012), working with moving averages or using modeling techniques with several consecutive years of MEPS data to test the fit of specified patterns over time. Finally, researchers should be aware of the impact of multiple comparisons on Type I error. Without making appropriate allowance for multiple comparisons, undertaking numerous statistical significance tests of trends increases the likelihood of concluding that a change has taken place when one has not.

**D. Variable-Source Crosswalk**

**FOR MEPS PUBLIC USE RELEASE HC-195**

**SURVEY ADMINISTRATION VARIABLES - PUBLIC USE**

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
JOBSIDX	JOBS ID Number	CAPI Derived
DUPERSID	Sample Person ID (DUID + PID)	Assigned in Sampling
DUID	Dwelling Unit ID	Assigned in Sampling
PID	Person Number	Assigned in Sampling
RN	Round	CAPI Derived
JOBSN	JOBS Number	CAPI Derived
PANEL	Panel to which Jobholder Belongs	Assigned in Sampling

**EMPLOYMENT VARIABLES - PUBLIC USE**

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
JOBTYPE	Self-Employed or Work for Someone Else	EM05, EM08, EM09, EM11, EM14, EM15, EM18, EM22, EM23, EM24, EM27, EM31, EM32, EM33, EM40, EM44, EM46, EM53, EM57, EM58, EM70, EM74, EM76, EM82, EM85A, EM86, EM87, EM88
JSTRTM	Job Start Date – Month	EM10OV1-2, EM16OV1-2, EM25OV1-2, EM34OV1-2, EM47OV1-2, EM60OV1-2
JSTRTY	Job Start Date – Year	EM10, EM16, EM25, EM34, EM47, EM60
JSTOPM	Job Stop Date – Month	EM35OV1-2, EM48OV1-2, EM61OV1-2, EM66OV1-2, EM89OV1-2, RJ09
JSTOPY	Job Stop Date – Year	EM35, EM48, EM61, EM66, EM89, RJ09
RETIRJOB	Person Retired from This Job	EM08, EM09, EM14, EM15, EM22, EM23, EM24, EM31, EM32, EM33, EM44, EM46, EM57, EM58, EM74, EM75, EM76, EM80, EM85A, EM86, EM87, EM88

VARIABLE	DESCRIPTION	SOURCE
SUBTYPE	Job Sub Type	EM and RJ Sections
JOBHASHI	Does Person Have Health Insurance at This Job	EM17, EM26, EM39, EM52, EM69, EM81
STILLAT	Still Work at Establishment/Main Job	RJ01
MAIN_JOB	Still Main Job or Business	RJ01A
DIFFWAGE	Any Change in Wage Amount	RJ02
WORKSTAT	Full or Part Time	RJ04
STLFTPTB	Still Work Full or Part Time-RJ Post	Constructed
Y_CHANGE	Why Change in Full/Part Time Status	RJ05
STILLWRK	Still Work at Establishment/Miscellaneous Job	RJ06
OFFTAKEI	Offered Insurance and Now Take	RJ07
NOWTAKEI	Now Offered and Take Insurance	RJ08
ESTBTHRU	Offered Insurance, Did Not Take (Review)	RJ08AA
INSESTB	Insur Offered Any Employees (Review)?	RJ08AAA
WHY_LEFT	Reason Why Not at Job Now	RJ10
NUMEMPS	Establishment Size-Non-Self-Employed Job	EM91
ESTMATE2	Estimated Estab Size-Combined	Constructed
MORELOC	More Than One Location	EM93
BUSINC	Business Incorporated	EM94
PROPRIET	Proprietorship or Partnership	EM95
TYPEEMPL	Employee Type	EM96
YLEFT	No Job Reason	EM101
YNOBUSN	Why No Business	EM102
HRSPRWK	Number of Hours Worked Per Week	EM104, EM111
HRS35WK	Work at least 35 Hours Per Week	EM105
SICKPAY	Does Person Have Paid Sick Leave	EM107

VARIABLE	DESCRIPTION	SOURCE
PAYDRVST	Is There Paid Sick Leave for Dr's Visits	EM108
PAYVACTN	Does Person Get Paid Vacation	EM109
RETIRPLN	Does Person Have Pension/Retirement Plan	EM110
SESNLJOB	Is Job Seasonal?	EM105D, EM111D
TEMPJOB	Is Job Temporary?	EM105C, EM111C
WKLYAMT	Usual Weekly Gross Income	EM112
EMPLINS	Have Health Insurance through This Job	EM113
OFFRDINS	Offered Insurance But Chose Not to Take	EM114
DIFFPLNS	Choice of Different Health Insurance Plans	EM115
ANYINS	Is Insurance Offered To Any Employees?	EM115A
INUNION	Belong to Labor Union at Job	EM116
PROVDINS	Who Provides Health Insurance	EM117
HHMEMBER	Any Other HH Member Work at This Business	EM122
TOTLEMP	Establishment Size-Self-Employed Job	EM124, RJ08B
TOTNEMPB	Newly Reported Establishment Size-Self-Employed Job	EM124
RTOTEMPB	Updated Establishment Size-Self-Employed Job	RJ08B
SALARIED	Is Person Salaried, Paid by the Hour, etc.	EW01
HOWPAID	How Is Person Paid	EW02
DAYWAGE	Person's Daily Wage Rate	EW03
HRSPRDY	Number of Hours Person Worked in One Day	EW04
MAKEAMT	How Much Money Does Person Make	EW05
PERUNIT	Period for which Person Is Paid	EW05OV1
MORE10	Person Makes More or Less than \$10/Hour	EW08, EW14, EW20
MORE15	Person Makes More or Less than \$15/Hour	EW09, EW15, EW21
MOREMINM	Person Makes More or Less than Minimum Wage	EW10, EW16, EW22

VARIABLE	DESCRIPTION	SOURCE
GROSSPAY	Person's Salary Before Taxes (Gross)	EW11
GROSSPER	Period in which Gross Salary Was Earned	EW11OV1
SALRYWKS	Number of Weeks Per Year on which Salary is Based	EW12
HRSALBAS	Hours on which Salary Is Based	EW17
EARNTIPS	Does Person Earn Tips	EW23_01
EARNBONS	Does Person Earn Bonuses	EW23_02
EARNCOMM	Does Person Earn Commission	EW23_03
TIPSUNIT	Period on which Tip Earnings are Based	EW24AOV1
TIPSAMT	How Much Are Person's Tips	EW24A
BONSUNIT	Period on which Bonuses are Based	EW24BOV1
BONSAMT	How Much Are Person's Bonuses	EW24B
COMMUNIT	Period on which Commissions Are Based	EW24COV1
COMMAMT	How Much Are Person's Commissions	EW24C
HRLYWAGE	How Much Person Makes Per Hour	EW07, EW13, EW18
INDCODEX	Condensed Industry Code	EM98
OCCCODEX	Condensed Occupation Code	EM99, EM100

## **Appendix 1. Sample SAS Program**

```

5      *** APP17.sas ***;
6
7      OPTIONS LS=132 PS=79;
8
9      ****
10     *** Program Name: SAMPLE.SAS
11     ***
12     *** Description: This job provides an example of how to get job info
13     *** from Round 1 or Round 2 in the FY2016 JOBS file when
14     *** a Round 3 current main job in the FY2017 JOBS file
15     *** is a continuation job.
16     ***
17     *** This example creates a dataset of Round 3 continuation
18     *** JOBS records with a SICKPAYX variable copied from the
19     *** Round 1 or Round 2 newly reported job.
20     ***
21     ****
22
23     libname jobs16 "c:\mydata\jobs16";
24     libname jobs17 "c:\mydata\jobs17";
25
26     *** Select continuing Panel 21, Round 3 Current Main JOBS
27     *** (SUBTYPE=1, STILLAT=1) from the FY 2017 JOBS file and
28     *** print selected variables from the first 20 observations
29
30     data j17r3;
31         set jobs17.jobs17;
32         if panel=21
33         and rn=3
34         and subtype=1
35         and stillat=1
36         and sickpay=-1;
37     run;
38
39     proc print data=j17r3 (obs=20);
40         title 'Print Sample of Continuation Round 3 Records';
41         var dupsid panel rn jobsn subtype stillat sickpay;
42     run;
43
44
45     *** Select newly reported Panel 21 Current Main JOBS records from
46     *** the FY 2016 JOBS file and print selected variables from the
47     *** first 20 observations.
48
49     data j1612;
50         set jobs16.jobs16;
51         if subtype=1
52         and stillat=-1
53         and panel=21
54         and rn in (1,2);
55     run;
56

```

NOTE: There were 55035 observations read from the data set JOBS17.JOBSS17.  
 NOTE: The data set WORK.J17R3 has 5983 observations and 79 variables.  
 NOTE: Compressing data set WORK.J17R3 decreased size by 3.57 percent.  
 Compressed is 27 pages; un-compressed would require 28 pages.  
 NOTE: DATA statement used (Total process time):  
 real time 0.45 seconds  
 cpu time 0.06 seconds

NOTE: There were 20 observations read from the data set WORK.J17R3.  
 NOTE: The PROCEDURE PRINT printed page 1.  
 NOTE: PROCEDURE PRINT used (Total process time):  
 real time 0.03 seconds  
 cpu time 0.03 seconds

NOTE: There were 59068 observations read from the data set JOBS16.JOBSS16.  
 NOTE: The data set WORK.J1612 has 8486 observations and 77 variables.  
 NOTE: Compressing data set WORK.J1612 decreased size by 5.13 percent.  
 Compressed is 37 pages; un-compressed would require 39 pages.  
 NOTE: DATA statement used (Total process time):  
 real time 0.56 seconds  
 cpu time 0.06 seconds

```

57         proc print data=j1612 (obs=20);
58             title 'Print Sample of Newly Reported Round 1 and Round 2 Records';
59             var dupersid panel rn jobsn subtype stillat sickpay;
60         run;

NOTE: There were 20 observations read from the data set WORK.J1612.
NOTE: The PROCEDURE PRINT printed page 2.
NOTE: PROCEDURE PRINT used (Total process time):
      real time          0.00 seconds
      cpu time          0.00 seconds

61
62         proc freq data=j1612;
63             tables sickpay/list missing;
64             title 'Sickpay Value of FY2016 Round 1 and Round 2 Newly Reported CMJs';
65         run;

NOTE: There were 8486 observations read from the data set WORK.J1612.
NOTE: The PROCEDURE FREQ printed page 3.
NOTE: PROCEDURE FREQ used (Total process time):
      real time          0.06 seconds
      cpu time          0.00 seconds

66
67
68         *** Prepare FY16 and FY17 data for merge
69
70         proc sort data=j17r3;
71             by dupersid jobsn;
72         run;

NOTE: There were 5983 observations read from the data set WORK.J17R3.
NOTE: SAS sort was used.
NOTE: The data set WORK.J17R3 has 5983 observations and 79 variables.
NOTE: Compressing data set WORK.J17R3 decreased size by 3.57 percent.
      Compressed is 27 pages; un-compressed would require 28 pages.
NOTE: PROCEDURE SORT used (Total process time):
      real time          0.01 seconds
      cpu time          0.01 seconds

73
74         proc sort data=j1612;
75             by dupersid jobsn;
76         run;

NOTE: There were 8486 observations read from the data set WORK.J1612.
NOTE: SAS sort was used.
NOTE: The data set WORK.J1612 has 8486 observations and 77 variables.
NOTE: Compressing data set WORK.J1612 decreased size by 5.13 percent.
      Compressed is 37 pages; un-compressed would require 39 pages.
NOTE: PROCEDURE SORT used (Total process time):
      real time          0.01 seconds
      cpu time          0.01 seconds

77
78
79         *** Create a dataset (J17R3F) that includes all variables
80             *** for the continuation Round 3 Current Main JOBS and create
81             *** the new variable SICKPAYX by copying SICKPAY from the
82             *** corresponding Round 1 or Round 2 newly reported job record.
83
84         data j17r3f;
85             merge j17r3 (in=a) j1612 (in=b  keep = dupersid jobsn sickpay
86                           rename=(sickpay=SICKPAYX));
87             by dupersid jobsn;
88             if a and b;
89         run;

NOTE: There were 5983 observations read from the data set WORK.J17R3.
NOTE: There were 8486 observations read from the data set WORK.J1612.
NOTE: The data set WORK.J17R3F has 5983 observations and 80 variables.
NOTE: Compressing data set WORK.J17R3F decreased size by 6.90 percent.
      Compressed is 27 pages; un-compressed would require 29 pages.
NOTE: DATA statement used (Total process time):
      real time          0.01 seconds
      cpu time          0.01 seconds

```

```
90      proc freq data=j17r3f;
91          tables sickpay*sickpayx/list missing;
92          title1 'Diagnostic Post-Merge - Sickpay * Sickpayx';
93          title2 'Round 3 Continuation Current Main Jobs Only';
94      run;
```

NOTE: There were 5983 observations read from the data set WORK.J17R3F.

NOTE: The PROCEDURE FREQ printed page 4.

NOTE: PROCEDURE FREQ used (Total process time):

real time	0.01 seconds
cpu time	0.00 seconds

96

*Print Sample of Continuation Round 3 Records*

Obs	DUPERSID	PANEL	RN	JOBSN	SUBTYPE	STILLAT	SICKPAY
1	10001101	21	3	1	1	1	-1
2	10001102	21	3	1	1	1	-1
3	10004101	21	3	1	1	1	-1
4	10005101	21	3	1	1	1	-1
5	10005102	21	3	1	1	1	-1
6	10008102	21	3	1	1	1	-1
7	10009101	21	3	1	1	1	-1
8	10010101	21	3	1	1	1	-1
9	10010102	21	3	1	1	1	-1
10	10014101	21	3	2	1	1	-1
11	10016101	21	3	1	1	1	-1
12	10016102	21	3	3	1	1	-1
13	10019103	21	3	1	1	1	-1
14	10022101	21	3	3	1	1	-1
15	10022102	21	3	1	1	1	-1
16	10023101	21	3	1	1	1	-1
17	10025102	21	3	1	1	1	-1
18	10028101	21	3	3	1	1	-1
19	10031101	21	3	1	1	1	-1
20	10031102	21	3	1	1	1	-1

*Print Sample of Newly Reported Round 1 and Round 2 Records*

Obs	DUPERSID	PANEL	RN	JOBSN	SUBTYPE	STILLAT	SICKPAY
1	10001101	21	1	1	1	-1	1
2	10001102	21	1	1	1	-1	-1
3	10004101	21	1	1	1	-1	1
4	10005101	21	1	1	1	-1	2
5	10005102	21	1	1	1	-1	1
6	10006102	21	1	1	1	-1	1
7	10008102	21	2	1	1	-1	2
8	10008103	21	1	3	1	-1	2
9	10009101	21	1	1	1	-1	1
10	10010101	21	1	1	1	-1	-1
11	10010102	21	1	1	1	-1	1
12	10014101	21	1	2	1	-1	-1
13	10016101	21	1	1	1	-1	2
14	10016102	21	2	3	1	-1	2
15	10016201	21	1	1	1	-1	2
16	10016201	21	2	2	1	-1	2
17	10017101	21	1	1	1	-1	-1
18	10017102	21	2	1	1	-1	-8
19	10019103	21	2	1	1	-1	-8
20	10021101	21	1	1	1	-1	2

*Sickpay Value of FY2016 Round 1 and Round 2 Newly Reported CMJs*

**DOES PERSON HAVE PAID SICK LEAVE**

<b>SICKPAY</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Frequency</b>	<b>Cumulative Percent</b>
-9	16	0.19	16	0.19
-8	316	3.72	332	3.91
-7	19	0.22	351	4.14
-1	856	10.09	1207	14.22
1	4121	48.56	5328	62.79
2	3158	37.21	8486	100.00

***Diagnostic Post-Merge - Sickpay \* Sickpayx***  
***Round 3 Continuation Current Main Jobs Only***

SICKPAY	SICKPAYX	Frequency	Percent	Cumulative Frequency	Cumulative Percent
-1	-9	11	0.18	11	0.18
-1	-8	194	3.24	205	3.43
-1	-7	10	0.17	215	3.59
-1	-1	684	11.43	899	15.03
-1	1	3189	53.30	4088	68.33
-1	2	1895	31.67	5983	100.00