Essential notes for using the 2003-2012 data

The user should note two key differences between the ATUS and the earlier heritage data sets. First, the earlier surveys have diaries that start and end at midnight. The ATUS diaries begin at 4:00 and end at 4:00 on the following morning. This difference does not matter for the analysis of what happens before and after a particular activity or the total time spent in an activity. Nevertheless, the user must exercise caution in modelling the day with this difference. We have added the variable CLOCKST, which lists the time of day that each activity started in addition to variables marking the start and end time of the activity in minutes from the beginning of the diary.

Second, the ATUS only collected one diary from one person in each household. In contrast with the most of the older surveys, the household identifier is set to 0 as effectively there is no household identifier. In earlier releases of the AHTUS, we used the variable "hrhhid" as the household identifier to enable users to match the AHTUS data to the CPS survey waves which precede the ATUS interviews. Over the years, the BLS has recycled some hrhhid values, which means that other original ATUS variables also are needed to make this match. Rather than matching directly to the CPS, we recommend that AHTUS users make use of the ATUS-X extract system to merge in variables from the CPS. https://www.atusdata.org/index.shtml

The ATUS and CPS questionnaire include separate questions about race, one ethnicity question does not include an option for being Hispanic. A separate question asks whether people consider themselves to be Latino or Hispanic. Consequently, one harmonised ethnicity variable has a more limited range of reported responses. Partly as a result of requests from the construction of this dataset, the BLS now releases housing tenure with the main ATUS files. Originally this variable was only available from matching back to the original CPS files.

The ATUS did not collect secondary activity per say. The survey team recorded participants' verbatim responses, which in some cases includes joint activities, but these cases are recoded to the main activity only. These verbatim responses have not been preserved for future analysis. Nevertheless, diarists who lived with or performed care for a child aged <13 were separately asked during which activities in the diary was a child aged <13 in their care (though the in your care is not recorded alongside some activities, including sleep, in the ATUS data). We have coded this in your care time as secondary child care in the secondary activity variable. Prior to 2006, if there is no secondary child care but the main activity is working with food or setting the table/clearing dishes and the diarist did not report eating anywhere in the diary, then we recorded secondary eating. Otherwise, if the diarists shifts location by the next episode and does not have recorded secondary child care time, then we record secondary travel. For all other episodes, the secondary activity variable is set to 0 for this survey.

From 2006-2008, the ATUS included supplementary questions about secondary eating and drinking. Participants were asked whether they also ate or drank during episodes where the main activity was not eating or drinking. People are asked to report secondary eating, and to separately reported secondary drinking of anything other than water. People were asked to indicate if they browsed during the whole of the episode or whether their secondary eating or drinking only took place during part of the episode. If only a part, they are asked how long they engaged in

secondary eating or drinking. In contrast with the ATUS eating supplement, the AHTUS combines secondary eating and drinking into a single category of secondary activity.

It is not possible to tell if secondary eating lasting less than the full episode happened in a single instance or over multiple instances, or where during the episode the secondary browsing took place. We sought to maximise consistency with the approach adopted by the ATUSX (http://www.atusdata.org/atus_variables/documentation/68) and the Economic Research Service (http://www.ers.usda.gov/Data/ATUS/Documentation.htm) for handling the secondary eating and drinking, though we had to make some minor deviations, as the ATHUS has only a single secondary activity column and the ATUSX and ERS allow two separate simultaneous marker columns. We adopted the following strategy. If the diarist reported only secondary child care, we code secondary child care for the whole episode. Likewise, if the diarist reported secondary eating and or drinking that lasted the whole episode, we record secondary activity of eating or drinking for the whole episode. Where people record secondary eating and drinking that lasts the whole of the episode and secondary child care, we split the episode in half, and record half the time in secondary eating and drinking, and half in child care - these cases are marked in the conversion file as well as in the MTUS documentation of this survey (www.timeuse.org/mtus) so that interested users can identify these cases if required. Where secondary eating and drinking lasts less that the total episode, and the person also has unrecorded travel, we split the episode into two episodes, and record the first element as including the secondary eating or drinking, and the second section as including the unreported travel. As unreported travel is a code generated by CTUR, if the diarist has unreported travel and reports both secondary eating and drinking as well as secondary child care, we dropped the unreported travel as a secondary activity and only used the two secondary activities the diarist did report. These cases are documented in the conversion programme and the MTUS readme for this survey. Where people only report secondary eating or drinking that lasts less than the episode, we split the episode into three sections. The first section is either half of the time with no secondary eating or drinking, the middle episode is the reported secondary eating or drinking time with the main activity, and the last second is the remaining half of the time of the main activity without the secondary activity.

In 2011, the ATUS collected a supplement of secondary time looking after older adults in need of care. Users should note that this secondary care covers only looking after elderly adults, in contrast to most time use surveys, which code secondary elder care with secondary care of younger adults in need of care on the basis of disability. In this year of the ATUS, there are 247 episodes in a limited number of diaries where the diarists reported both doing secondary elder care and also that a child was in their care during the activity. We have coded these cases as secondary adult care only in the main file. We also make available a supplementary file described in the final section of this documentation which flags these cases.

Additionally, users should note that this survey collected a higher level of reported main activity child care time than the previous surveys. The causes of this reporting is under investigation. In part, political and global events may have increased parent's concern for physically monitoring their children. The effect may also be influenced by some aspect of the data collection. The cause is under investigation by a number of researchers.

The AHTUS follows the example of the main ATUS. As we have harmonised activity categories, we pool the years of the ATUS into a single survey, creating a very large sample. The BLS supplies a weight following the same procedure for all waves, and we used this cross-time weight with the pooled dataset. Nonetheless, in spite of the reduction in size of the sample, the individual years of the ATUS drew a larger sample than the previous USA time-use surveys. The size of the ATUS mean that this survey will allow analysis of the difference in the behaviour of more detailed demographic groups than is possible with the older surveys. Users should keep the difference in the size of the samples in mind during analysis.