

```
478618A4742263497246981
3-
-76 8w 111228921487
426265 38521 11924288
34791427293842 19924
1208421 10742921096 0288
8914872 23229174676 485
316292 11232922924
718724 6523728476 12
864781 132857216983 1
32714 4234161431638 4
941982 91814383461971 1
628148 182713273944 1
192
884
983 1423942882287
729134142388176491724 2
887428182788879918431
89872461942895147925F 6
```

IPUMS TIME USE

ATUS Exercise: Estimates of Time Spent in Physical Activity in ATUS

Learning goals

- [fill in]

Summary

With time use data, physical activity can be defined in several ways. We will create different measures of physical activity and see how sensitive the measurement is to the patterns we observe in the data. Your objective in this exercise is to create time use variables from the ATUS activity-level data, to consider different ways to measure physical activity in the ATUS, and to explore associations between BMI, health, and physical activity.



Part 1: Create Extract

The **first step** in the process is to create a dataset that contains only the respondents who participated in the Eating and Health Module of the ATUS (*hint*: use the module selection on the samples page to identify the years in which the module was fielded). Make sure to include in your extract the BMI and general health status variables along with the appropriate weight to use when analyzing Eating and Health Module data (EHWT). Because we're going to create time use variables from the activity-level data, make sure your extract is hierarchical and you choose the necessary variables to construct time use variables based on mode of transportation, activity, and metvalues associated with activities.

The time use variables you should create are:

- Time spent in exercise (ACTIVITY=1302XX)
- Time spent walking or biking as a mode of transportation (WHERE=232 or 235)
- Time spent in exercise or walking/biking as a mode of transportation
- Time spent in moderate activities (METVALUE>=3 & METVALUE<6)
- Time spent in vigorous activities (METVALUE>=6 & METVALUE<999)
- Time spent in moderate or vigorous activities

Part 2: Create Person-level File

The **second step** is to create a person-level file. First, recode the BMI and general health status variables. BMI should be coded into four categories (normal [19-24], overweight [25-29], obese [30-39], extreme obesity [40+]) and don't forget to set the missing data to missing. For general health status, set the missing data to missing. Second, merge the time use variables from the activity-level file with the person-level data.

Part 3: Generate Means

The **third step** is to generate mean minutes of each type of physical activity by BMI and general health status and populate Table 14. Don't forget to use EHWT rather than WT06 since you're using variables collected as part of the Eating and Health Module.



Answers

Part 3 Answers: Generate Means

Exercise 14. Minutes Per Day Spent in Physical Activity by BMI and General Health Status, 2006-2008.

	Exercise	Walking/ Biking	Exercise, Walking, Biking	Moderate Activities	Vigorous Activities	Moderate or Vigorous Activities
BMI						
Normal	22.0	4.3	26.1	91.7	7.1	98.7
Overweight	18.4	3.5	21.7	104.4	4.4	108.8
Obese	13.5	2.6	16.0	97.6	2.7	100.3
Extreme Obesity	9.7	3.2	12.9	83.8	2.7	86.5
General Health Status						
Excellent	27.2	4.3	31.2	95.6	9.3	104.9
Very Good	19.9	3.6	23.2	98.0	5.4	103.4
Good	14.2	3.5	17.6	101.2	3.4	104.5
Fair	10.8	4.0	14.7	93.3	2.7	96.0
Poor	6.4	2.2	8.6	53.2	0.4	53.6

