

Comparing Estimates of Time Use
in the PSID's Supplement on Disability
and Use of Time and the American Time Use Survey

Jennifer C. Cornman, Consultant

Vicki A. Freedman, & Frank P. Stafford
Survey Research Center, Institute for Social Research
University of Michigan

Originally released: July 28, 2011

Updated: April 4, 2012

Abstract

This report compares estimates of time use from the 2009 PSID's supplement on Disability and Use of Time (DUST) and the 2009 American Time Use Survey (ATUS). For married individuals ages 60 and older, we compare the weighted percent participating in and the weighted average time spent on eight broadly defined activities: self-care activities (including sleeping, eating, grooming); productive activities (work, volunteering, and education); obtaining goods (durable and non-durable); household activities; physical care, looking after others, and school-related activities; non-active leisure; active leisure, arts and entertainment, and travel; and organizational activities (such as religious and spiritual practice and government and civic activities). With a few exceptions, we find more participation among DUST respondents than among ATUS respondents and these patterns hold across age, sex, and disability status. In general, however, there are fewer differences between the two studies in the amount of time spent on particular activity categories.

I. Introduction

Disability and Use of Time (DUST) is a supplement to the 2009 Panel Study of Income Dynamics (PSID), a longitudinal study of a representative sample of US individuals and the families in which they reside. Since 1968, the PSID has collected data on family composition changes, housing and food expenditures, marriage and fertility histories, employment, income, time spent in housework, health, consumption, wealth, and more. DUST, which is supported by a program project grant from the National Institute on Aging (P01-AG029409), has two specific goals: 1) to assess the feasibility of including time diaries for adults on a larger scale in the PSID and 2) to produce a rich and nationally-focused data archive to support innovative research on disability, time use and well-being for older married couples. The purpose of this paper is to benchmark DUST to the 2009 American Time Use Survey (ATUS), the Bureau of Labor Statistics' continuous survey of time use in the United States.

II. Data

DUST Sample - DUST sampled couples in the PSID in which both spouses were at least age 50 as of December 31, 2008 and at least one spouse was age 60 or older at that time. Because the vast majority of married men and women ages 60 and older have spouses that are age 50 and older, the sample essentially represents married people ages 60 and older and their spouses. Between July and November 2009, each spouse in a married couple was interviewed twice over the phone about two randomly selected days, one weekday and one weekend day. In order to implement this same-day diary design, the couple was called and, after being consented, the interviewer attempted to schedule both husband and wife for interviews on the selected day of

the week (e.g. Wednesday), but was flexible in terms of meeting the respondents' needs in terms of the specific date (e.g. June 24, July 1, etc.).

In order to enhance opportunities for studying disability, couples in which one or both spouses had a health limitation were oversampled and strata were further divided by husband's age (<70, 70+). As a result, the sample included 100 couples in which both husband and wife have a limitation, 100 in which neither has a limitation, and the remaining split evenly between couples with only the wife or only the husband having a limitation. Limitation for sampling purposes was defined using variables from the core 2009 PSID interview, i.e. at least one person in the couple responded that a health condition that they have limited their daily activities either "a lot" or "somewhat". Sampling weights that account for the complex design of DUST are provided to users on the public use files.

Of the 543 eligible couples who were sampled, at least one diary was completed with 394 couples (73%). Note that for 33 couples, one spouse was unable to participate in the interview because he or she had what PSID refers to as a permanent condition; that is, because of a permanent memory, hearing or other severe health condition, one spouse was unable to answer for him/herself. In these 33 cases, the study allowed the other spouse to participate so that the full spectrum of care provision would be represented. The sample of individuals in DUST therefore represents individuals able to respond for themselves.

ATUS Sample - The ATUS sample is drawn from the Current Population Survey (CPS), which includes the civilian, non-institutionalized population ages 15 and over who reside in occupied households. The CPS selects approximately 60,000 households from this population every month. About 1/8th of these households leave the study each month after the 8th CPS

interview attempt. Two months after leaving the study, households become eligible for selection into the ATUS sample (ATUS 2010).

The ATUS sample is a three-stage stratified sample. The first stage takes a subsample of the CPS households, correcting for the CPS's oversample of less-populous states so that the ATUS sample is distributed equally across states according to the state's proportion of the total US population. The second stage stratifies households by the race/ethnicity of the householder, the presence and age of children, and the number of adults in adults-only households.

Households with a Hispanic or non-Hispanic black householder and households with children are oversampled. In the final stage, an eligible person in the household, those age 15 or older, is randomly selected to participate in ATUS, with all eligible household members having an equal probability of being selected into the study. Approximately 2,194 individuals are sampled each month (about 26,328 annually). The annual response rate for 2009 was 56.6 percent (ATUS 2010).

The monthly sample is randomly divided into four panels, one for each week of the month. The sample is also randomly split so that half of the respondents are interviewed about a weekday and half are interviewed about a weekend day. Overall, approximately 10 percent of the sample is assigned to each weekday and 25 percent to each weekend day. Selected respondents are sent a letter explaining that they have been selected to participate in ATUS. The letter also notifies the respondents of the exact date on which they will be contacted for the interview. On the designated date, which is based on the randomly assigned day of the week (e.g. Wednesday), interviewers attempt calls in six call blocks throughout the day. Interviewers make one call per block until the selected household is reached and the designated respondent agrees to be

interviewed. Interviewers may only contact/interview respondents on their designated day of the week (ATUS 2010).

III. Analytic samples

DUST includes only married individuals age 60 and older whose spouse is at least age 50 whereas ATUS includes a randomly selected individual age 15 and older. In order to make our analytic samples more comparable, we limit each sample to include only married individuals ages 60 and older. Consequently, the DUST analytic sample for this paper includes respondents who completed 1,324 diaries and the ATUS sample includes 1,434 respondents who each provided one diary. To test whether the inclusion of two diaries per person in DUST influenced our findings, we reran all analyses using only the first diary given by each DUST respondent. Substantive findings were substantially similar to those based on multiple diaries per person, so we present the findings based on the larger diary sample.

IV. Diaries

Both DUST and ATUS used a Computer Assisted Telephone Interview (CATI) to collect time diaries that cover a 24-hour period, starting with 4 am on the previous day and continuing until 4 am on the day of the interview. Respondents in both surveys were asked to report what they were doing and how long it took. In DUST, interviewers recorded all answers as open text and then selected one of nine pre-codes that determined follow-up questions for the given activity. In ATUS, interviewers either chose one of 13 pre-codes for commonly-reported activities or entered open text. In both studies, follow-up questions asked about the involvement of others and where activities took place.

Although the DUST diary application was based on the ATUS diary and has many similarities, differences in the treatment of sequential vs. simultaneous activities could potentially lead to differences in time use estimates across the two studies. In ATUS, when simultaneous activities were reported by respondents, all named activities were listed in order, and the first mentioned was considered the main activity. With the exception of childcare, the interviewer did not ask specifically about simultaneous activities. DUST, on the other hand, incorporated procedures into the CATI to distinguish between simultaneous and sequential activities. If respondents reported that they were doing more than one activity at a given time, interviewers were instructed to have the respondent confirm that both activities were going on at the same time. If the activities were simultaneous, the respondent was asked to report which was the main activity. If the activities were not simultaneous, interviewers treated them as sequential entries in the diary.

V. Measures

Activity Codes

We compare across studies participation and time spent in various activities. In both studies, a coding scheme has been applied to the reported activities. For DUST, all activities were assigned a three-digit code. The first digit specifies the supercategory, the broadest possible category. The second digit represents a more specific category within the supercategory and the third digit is a subcategory of the second level category. For ATUS, activities were assigned a six-digit code: the first two digits indicate the major category (supercategory in DUST); the second two represent the second-tier level of detail or subcategories of the major category; and the last two digits designate a third tier or subcategories of the second-tier categories. We

performed a crosswalk between the two sets of codes, assigning the DUST category (2-digit) and supercategory (1-digit) codes to the ATUS 6-digit codes. See appendix Tables A1 and A2 for a listing of the crosswalk and the Stata code used to perform the crosswalk. Only 8 % of ATUS diaries had at least on activity that could not be assigned a DUST code (most often talking on the phone and traveling that were not elsewhere classified), accounting on average for 3 minutes of the day.

Our analyses of time use focus on the 8 broadly defined activities (supercategories): self-care activities (including sleeping, eating, grooming); productive activities (work, volunteering, and education); obtaining goods (durable and non-durable); household activities; physical care, looking, after others, and school-related activities; non-active leisure; active leisure, arts and entertainment, and travel; and organizational activities (such as religious and spiritual practice and government and civic activities). We also examine a category that captures time spent in unspecified activities or periods of time for which respondents couldn't remember what they were doing.

Other measures

We stratify our results by age (60-69, 70-79, and 80+), sex, and whether the respondent reported a disability. Disability is defined as reporting difficulty with one or more of the following tasks: hearing, seeing, concentrating/remembering, walking and climbing, dressing and bathing, or doing errands alone. For the ATUS sample, these measures were collected as part of the CPS whereas DUST collected these at the time of the first diary collection. Table 1 shows the distribution of these characteristics for both ATUS and DUST. The mean age in both studies is about 69 years. The sex distribution across studies is similar with 46% of diaries being

reported by female respondents. Finally, DUST sample diaries are much more likely than ATUS diaries to come from a respondent with a disability (40.9% compared to 18.4%). We investigated this latter discrepancy by examining estimates from the American Community Survey (ACS). We found that the DUST and ACS estimates were relatively close: 40% for married persons 60 and older in DUST vs. 37% for all persons age 65 and older in the ACS (American FactFinder, Table S1810).

We also compare across studies the average number of entries per diary and three indicators of diary quality from the Multinational Time Use Study (Fisher 2010): the percent of diaries that have more than 90 minutes of missing activity information; percent of diaries with a low number of entries (<7); and the percent of diaries that are missing two or more of four core activities. Because ATUS drops diaries with fewer than 5 entries, we examine here the percent of diaries with only 5 or 6 entries. According to MTUS, the four core activities that should appear in high quality diaries include sleeping, eating or drinking (including all food preparation activities), personal care, and travel or exercise.

VI. ANALYSIS

We first tested for differences in indicators of diary quality. Next, focusing on the supercategories, we compared both the weighted percent participating in each activity and the weighted average duration of the activity (in minutes)¹. We used an F-statistic to test for significant differences across studies in the percent participating in an activity and a t-statistic for differences in mean duration; both tests are adjusted for survey design. To illuminate differences that we found, we further examined differences in participation and duration for the more

¹ Duration analyses included the entire sample rather than only those participating in an activity.

detailed activities defined by the 2-digit activity codes (available in the Appendix, Tables B1-B4). In addition, we examined results stratified by age, sex, and disability status.

VII. Results

Table 2 shows the distributions of the quality indicators for the DUST and ATUS samples. There were no significant differences across studies in the percentage of diaries missing more than 90 minutes or with only 5-6 entries, but DUST had fewer diaries with 2 or fewer core activities reported (5.3% vs. 9.0%). DUST also captured on average a greater number of diary entries than ATUS (24.6 vs. 19.2 activities per diary; data not shown).

Table 3 shows that there are significant differences between DUST and ATUS in the percent participating in five out of the eight listed activity groups and in the percent of diaries with data issues (missing/don't know and too personal). DUST respondents have higher participation than ATUS respondents in four of these five activity groups. ATUS, however, shows more participation, but no difference in time spent, in productive activities, largely the result of ATUS respondents reporting more volunteering than DUST respondents (Table B1). ATUS diaries also have more data issues than DUST diaries. There are, however, no differences in participation rates for self-care (which includes sleep), physical care/looking after others, or non-active leisure, of which self-care and non-active leisure show participation by all or nearly all respondents in both studies. With the exception of DUST respondents spending more of their time in active leisure than ATUS respondents, there are no differences across studies in the amount of time spent doing various activities.

The stratified results in Tables 4-6 show that the patterns found in Table 3 are generally replicated across age, sex, and disability status: with the exception of self-care, productive and

organizational activities, and data issues, DUST shows more participation than ATUS. The stratified results also indicate that many of the differences in participation emerge from differences in the youngest age group (ages 60-69). There is much less variation across studies at older ages (Table 2). Unlike age, there do not appear to be systemic differences in participation by sex: for some activities there are differences between DUST males and ATUS males and for other activities there are differences across studies for females. Stratifying results by disability status provides little insight into the differences found in Table 3.

VIII. CONCLUSIONS

This report compares estimates of time use from the 2009 PSID's supplement on Disability and Use of Time (DUST) and the 2009 American Time Use Survey (ATUS) for married individuals ages 60 and older. With a few exceptions, we find more participation among DUST respondents than among ATUS respondents and these patterns hold across age, sex, and disability status. DUST diaries may show more participation than ATUS diaries, in part, because DUST procedures allow for the accounting of sequential vs. simultaneous activities. In general, however, there are few differences between the two studies in the amount of time spent on particular activity categories.

References

American FactFinder, Table S1810. (http://factfinder.census.gov/servlet/STTable?_bm=y&-qr_name=ACS_2009_1YR_G00_S1810&-geo_id=01000US&-ds_name=ACS_2009_1YR_G00_-lang=en&-format=&-CONTEXT=st . Accessed January 22, 2011.

American Time Use Survey (ATUS). 2010. American Time Use Survey User's Guide: Understanding ATUS 2003-2009. <http://www.bls.gov/tus/atususersguide.pdf> . Access January 22, 2011.

Fisher, K. 2010. MTUS Coding Procedures: World 5.5 (Release 3) and World 5.8 & World 6.0 (Release 1) . 2010. <http://www.timeuse.org/files/cckpub/MTUS-Coding-Procedures-20100420.pdf> . Accessed January 22, 2011.

Table 1: Sample characteristics: DUST vs. 2009 ATUS.

	Weighted Percent		
	DUST	ATUS	
Age			
60-69	59.0	57.2	
70-79	27.6	32.6	
80+	13.4	10.1	
(mean age)	(69.1)	(69.1)	
Sex			
Male	53.8	53.8	
Female	46.2	46.2	
Disability			
Does not have a disability	59.1	81.6	**
Has a disability	40.9	18.4	
<hr/>			
(n)	1,324	1,434	

** F-test for difference between DUST and ATUS is significant at $p < 0.01$

Table 2: Quality indicators: 2009 DUST vs. 2009 ATUS (unweighted)

Indicator	DUST	ATUS	
	Percent of Diaries	Percent of Diaries	
Missing >90 minutes of activity information	5.3	6.8	
5 – 6 diary entries ¹	0.7	1.1	
Number of core activities in diary ²			
1	0.5	0.1	**
2	4.8	8.9	
3	22.1	28.5	
4	72.7	62.5	
n	1,324	1,434	

Chi-square significant at $p < 0.01$

¹ATUS drops diaries with fewer than 5 entries. DUST had only two diaries with fewer than 5 activities, both of which are included in the DUST sample.

² According to MTUS (Fisher 2010), there are four core activities that time diaries should include: sleeping, eating or drinking (including all food preparation activities), personal care, and travel or exercise. Diaries that contain 3 or more of these core activities are considered to be of higher quality.

Table 3: Percentage Participating and Duration in Minutes: 2009 DUST vs. 2009 ATUS.

	Weighted Percent Participating			Weighted Average Duration in Minutes		
	DUST	ATUS		DUST	ATUS	
One digit codes						
1. Self-care activities (includes sleep)	100.0	100.0		650.0	663.8	
2. Productive activities (work, volunteer, education)	25.4	32.9	**	103.1	121.5	
3. Obtaining goods	46.9	40.1	*	45.5	39.2	
4. Household activities	89.5	85.9	*	154.3	163.0	
5. Physical care, looking after others & school-related activities	19.4	16.0		17.6	12.9	
6. Non-active leisure	99.2	98.4		392.5	374.0	
7. Active leisure, arts & entertainment, & travel	32.5	25.5	**	38.9	28.0	**
8. Organizational activities	18.7	14.9	*	22.1	16.9	
9. Data issues	13.0	19.9	**	15.6	17.6	
9999. ATUS Activities that were not given a DUST code	--	8.2		--	3.0	
Total minutes				1439.7	1440.0	
(n)	1,324	1,434		1,324	1,434	

Minutes=unconditional minutes (weighted, among entire sample) *p<0.05 **p<0.01

Table 4: Percentage Participating and Duration in Minutes by Age (60-69, 70-79, 80+): 2009 DUST vs. 2009 ATUS.

	Weighted Percent Participating						Weighted Duration in Minutes					
	Age 60-69		Age 70-79		Age 80+		Age 60-69		Age 70-79		Age 80+	
	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS
One digit codes												
1. Self-care activities (includes sleep)	99.9	100.0	100.0	100.0	100.0	100.0	636.8	645.3	658.1	678.9	691.9	720.4
2. Productive activities (work, volunteer, education)	34.1	43.2 *	14.3	21.4 *	9.5	12.0	148.8	175.2	46.2	56.5	19.1	27.9
3. Obtaining goods	49.6	40.6 *	42.1	41.7	45.0	32.2 *	48.8	42.9	42.4	36.0	37.0	28.7
4. Household activities	90.3	85.2	89.2	87.0	86.1	86.6	157.7	159.2	158.5	175.7	130.6	143.7
5. Physical care, looking after	24.6	17.6 **	10.5	14.3	14.7	12.6	24.7	16.7	7.2	8.6	7.9	5.6
6. Non-active leisure	99.1	97.8 *	99.3	99.3	99.8	98.7	352.9	338.7	439.8	408.1	470.0	463.7
7. Active leisure, arts &	33.6	24.7 **	32.1	26.8	28.5	25.5	39.7	27.7 *	42.6	31.6	28.0	18.0
8. Organizational activities	15.2	13.3	24.0	18.2 *	22.9	13.6	20.4	13.9	27.3	22.2	19.2	16.4
9. Data issues	9.7	18.3 **	14.6	22.5	24.5	20.7	9.9	16.6 *	17.7	20.1	36.1	15.3
9999. ATUS Activities that were not given a DUST code	--	7.6	--	11.0	--	2.3	--	3.9	--	2.3	--	0.4
Total minutes							1439.7	1439.9	1439.8	1439.9	1439.8	1440.0
(n)	720	843	406	448	198	143	720	843	406	448	198	143

Minutes=unconditional minutes (weighted, among entire sample) *p<0.05 **p<0.01

Table 5: Percentage Participating and Duration in Minutes by Sex: 2009 DUST vs. 2009 ATUS.

	Weighted Percent Participating				Weighted Duration in Minutes				
	Males		Females		Males		Female		
	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS	
One digit codes									
1. Self-care activities (includes sleep)	100.0	100.0	100.0	100.0	632.8	651.9 *	670.1	677.8	
2. Productive activities (work, volunteer, education)	36.6	38.1	17.0	26.8 *	137.6	151.4	62.9	86.7	
3. Obtaining goods	45.9	38.3 *	48.0	42.2	44.0	34.9 *	47.3	44.2	
4. Household activities	84.0	78.7	95.8	94.3	132.4	124.8	179.8	207.5 **	
5. Physical care, looking after others & school-related activities	15.5	14.1	24.0	18.3	11.7	11.0	24.5	15.2 *	
6. Non-active leisure	98.9	98.4	99.7	98.4	391.8	399.0	393.5	344.8 **	
7. Active leisure, arts & entertainment, & travel	32.7	27.3	32.4	23.3 **	47.0	32.1 **	29.6	23.2	
8. Organizational activities	16.9	11.2 *	20.7	18.8	21.9	16.0	22.5	17.7	
9. Data issues	13.2	18.4 *	12.8	21.7 **	20.7	15.8	9.7	19.8 **	
9999. ATUS Activities that were not given a DUST code	--	5.9	--	10.8	--	2.9	--	3.2	
Total minutes	--	--	--	--	1439.9	1439.8	1439.9	1440.0	
(n)	709	729	615	705	709	729	615	705	

Minutes=unconditional minutes (weighted, among entire sample) *p<0.05 **p<0.01

Table 6: Percentage Participating and Duration in Minutes by Disability: 2009 DUST vs. 2009 ATUS.

	Weighted Percent Participating					Weighted Duration in Minutes						
	No Disability		Any Disability			No Disability		Any Disability				
	DUST	ATUS	DUST	ATUS		DUST	ATUS	DUST	ATUS			
One digit codes												
1. Self-care activities (includes sleep)	100.0	100.0	100.0	100.0	--	633.9	651.3	*	673.3	719.7	**	
2. Productive activities (work, volunteer, education)	31.5	36.8	16.6	15.3		135.1	139.2		56.9	42.9		
3. Obtaining goods	48.2	42.4	44.9	29.8	**	47.6	41.7		42.4	27.9	**	
4. Household activities	90.6	87.0	87.8	80.9	*	161.8	168.4		143.5	139.0		
5. Physical care, looking after others & school-related activities	20.4	16.5	18.1	13.8		18.5	13.8		16.3	9.2		
6. Non-active leisure	99.4	98.3	98.9	98.8		367.1	356.4		429.2	452.3		
7. Active leisure, arts & entertainment, & travel	37.0	27.6	**	26.1	16.1	**	43.9	31.1	**	31.8	14.0	**
8. Organizational activities	17.4	14.9		20.5	14.8		20.7	16.3		24.2	19.5	
9. Data issues	11.3	20.1	**	15.6	19.0		11.1	18.7	*	22.1	13.1	*
9999. ATUS Activities that were not given a DUST code	--	8.1		--	8.8		--	3.1		--	2.5	
Total minutes	--	--		--	--		1439.7	1439.9		1439.7	1440.0	
(n)	659	1,180		665	254		659	1,180		665	254	

Minutes=unconditional minutes (weighted, among entire sample) *p<0.05 **p<0.01

APPENDIX A: CROSSWALK BETWEEN ATUS AND DUST

Table A1 - Crosswalk between ATUS and DUST activity codes

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
010101	Sleeping	11	SLEEPING
010102	Sleeplessness	11	
010199	Sleeping, n.e.c.*	11	
010201	Washing, dressing and grooming oneself	12	WASHING DRESSING AND GROOMING
010299	Grooming, n.e.c.*	12	
080501	Using personal care services	12	
080502	Waiting associated w/personal care services	12	
080599	Using personal care services, n.e.c.*	12	
180101	Travel related to personal care	12	
180199	Travel related to personal care, n.e.c.*	12	
180805	Travel related to using personal care services	12	
110101	Eating and drinking	13	EATING AND DRINKING
110199	Eating and drinking, n.e.c.*	13	
110201	Waiting associated w/eating & drinking	13	
110299	Waiting associated with eating & drinking, n.e.c.*	13	
119999	Eating and drinking, n.e.c.*	13	
181101	Travel related to eating and drinking	13	
181199	Travel related to eating and drinking, n.e.c.*	13	
010301	Health-related self care	14	HEALTH-RELATED SELF-CARE & MEDICATION
010399	Self care, n.e.c.*	14	
080402	Using in-home health and care services	14	
080401	Using health and care services outside the home	15	USE OF MEDICAL, HEALTH, & LONG TERM CARE SERVICES
080403	Waiting associated with medical services	15	
080499	Using medical services, n.e.c.*	15	
180804	Travel related to using medical services	15	
010501	Personal emergencies	16	PERSONAL EMERGENCIES
010599	Personal care emergencies, n.e.c.*	16	
019999	Personal Care, n.e.c.*	16	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
020899	Appliances and tools, n.e.c.*	16	
050101	Work, main job	21	WORK AND WORK- RELATED ACTIVITIES
050102	Work, other job(s)	21	
050103	Security procedures related to work	21	
050104	Waiting associated with working	21	
050199	Working, n.e.c.*	21	
050201	Socializing, relaxing, and leisure as part of job	21	
050202	Eating and drinking as part of job	21	
050203	Sports and exercise as part of job	21	
050204	Security procedures as part of job	21	
050205	Waiting associated with work-related activities	21	
050299	Work-related activities, n.e.c.*	21	
180501	Travel related to working	21	
180502	Travel related to work-related activities	21	
050301	Income-generating hobbies, crafts, and food	22	
050302	Income-generating performances	22	
050303	Income-generating services	22	
050304	Income-generating rental property activities	22	
050305	Waiting associated with other income- generating activities	22	
050399	Other income-generating activities, n.e.c.*	22	
180503	Travel related to income-generating activities	22	LOOKING FOR WORK
050401	Job search activities	23	
050403	Job interviewing	23	
050404	Waiting associated with job search or interview	23	
050405	Security procedures rel. to job search/interviewing	23	
050499	Job search and Interviewing, n.e.c.*	23	
059999	Work and work-related activities, n.e.c.*	23	
180504	Travel related to job search & interviewing	23	VOLUNTEERING
150101	Computer use	24	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
150102	Organizing and preparing	24	
150103	Reading	24	
150104	Telephone calls (except hotline counseling)	24	
150105	Writing	24	
150106	Fundraising	24	
150199	Administrative & support activities, n.e.c.*	24	
150201	Food preparation, presentation, clean-up	24	
150202	Collecting & delivering clothing & other goods	24	
150203	Providing care	24	
150204	Teaching, leading, counseling, mentoring	24	
150299	Social service & care activities, n.e.c.*	24	
150301	Building houses, wildlife sites, & other structures	24	
150302	Indoor & outdoor maintenance, repair, & clean-up	24	
150399	Indoor & outdoor maintenance, building & clean-up activities, n.e.c.*	24	
150401	Performing	24	
150402	Serving at volunteer events & cultural activities	24	
150499	Participating in performance & cultural activities, n.e.c.*	24	
150501	Attending meetings, conferences, & training	24	
150599	Attending meetings, conferences, & training, n.e.c.*	24	
150601	Public health activities	24	
150602	Public safety activities	24	
150699	Public health & safety activities, n.e.c.*	24	
150701	Waiting associated with volunteer activities	24	
150799	Waiting associated with volunteer activities, n.e.c.*	24	
150801	Security procedures related to volunteer activities	24	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
150899	Security procedures related to volunteer activities, n.e.c.*	24	
159999	Volunteer activities, n.e.c.*	24	
181501	Travel related to volunteering	24	
181599	Travel related to volunteer activities, n.e.c.*	24	
100102	Using social services	25	USING UNEMPLOYMENT AND OTHER SOCIAL SERVICES
060101	Taking class for degree, certification, or licensure	26	EDUCATIONAL ACTIVITIES
060102	Taking class for personal interest	26	
060103	Waiting associated with taking classes	26	
060104	Security procedures rel. to taking classes	26	
060199	Taking class, n.e.c.*	26	
060201	Extracurricular club activities	26	
060202	Extracurricular music & performance activities	26	
060203	Extracurricular student government activities	26	
060204	Waiting associated with extracurricular activities	26	
060299	Education-related extracurricular activities, n.e.c.*	26	
060301	Research/homework for class for degree, certification, or licensure	26	
060302	Research/homework for class for pers. interest	26	
060303	Waiting associated with research/homework	26	
060399	Research/homework n.e.c.*	26	
060401	Administrative activities: class for degree, certification, or licensure	26	
060402	Administrative activities: class for personal interest	26	
060403	Waiting associated w/admin. activities (education)	26	
060499	Administrative for education, n.e.c.*	26	
069999	Education, n.e.c.*	26	
160103	Telephone calls to/from education services providers	26	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
180601	Travel related to taking class	26	
	Travel related to extracurricular activities		
180602	(ex. Sports)	26	
180603	Travel related to research/homework	26	
	Travel related to		
180604	registration/administrative activities	26	
180699	Travel related to education, n.e.c.*	26	
			OBTAINING GROCERIES AND FOOD
070101	Grocery shopping	31	
070103	Purchasing food (not groceries)	31	
180701	Travel related to grocery shopping	31	
	Travel related to purchasing food (not		
180703	groceries)	31	
			OBTAINING OTHER GOODS (NONDURABLE AND DURABLE)
070102	Purchasing gas	32/33	
070104	Shopping, except groceries, food and gas	32/33	
070105	Waiting associated with shopping	32/33	
070199	Shopping, n.e.c.*	32/33	
070201	Comparison shopping	32/33	
070299	Researching purchases, n.e.c.*	32/33	
	Security procedures rel. to consumer		
070301	purchases	32/33	
	Security procedures rel. to consumer		
070399	purchases, n.e.c.*	32/33	
079999	Consumer purchases, n.e.c.*	32/33	
160104	Telephone calls to/from salespeople	32/33	
180702	Travel related to purchasing gas	32/33	
	Travel related to shopping, ex groceries,		
180704	food, and gas	32/33	
	Travel related to consumer purchases,		
180799	n.e.c.*	32/33	
	Activities rel. to purchasing/selling real		
080601	estate	34	REAL ESTATE RELATED ACTIVITIES
	Waiting associated w/purchasing/selling		
080602	real estate	34	
080699	Using real estate services, n.e.c.*	34	
180806	Travel related to using real estate services	34	
			FOOD & DRINK PREPARATION
020201	Food and drink preparation	41	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
020202	Food presentation	41	
020203	Kitchen and food clean-up	41	
020299	Food & drink prep, presentation, & clean-up, n.e.c.*	41	
090102	Using meal preparation services	41	
180202	Travel related to food & drink prep., clean-up, & presentation	41	
020102	Laundry	42	LAUNDRY AND CLOTHING REPAIR
020103	Sewing, repairing, & maintaining textiles	42	
090103	Using clothing repair and cleaning services	42	
020101	Interior cleaning	43	HOUSEHOLD CARE
020104	Storing interior hh items, inc. food	43	
020199	Housework, n.e.c.*	43	
020301	Interior arrangement, decoration, & repairs	43	
020302	Building and repairing furniture	43	
020303	Heating and cooling	43	
020399	Interior maintenance, repair, & decoration, n.e.c.*	43	
020401	Exterior cleaning	43	
020402	Exterior repair, improvements, & decoration	43	
020499	Exterior maintenance, repair & decoration, n.e.c.*	43	
020501	Lawn, garden, and houseplant care	43	
020502	Ponds, pools, and hot tubs	43	
020599	Lawn and garden, n.e.c.*	43	
020905	Home security	43	
020999	Household management, n.e.c.*	43	
029999	Household activities, n.e.c.*	43	
040501	Housework, cooking, & shopping assistance for nonhh adults	43	
040502	House & lawn maintenance & repair assistance for nonhh adults	43	
090101	Using interior cleaning services	43	
090104	Waiting associated with using household services	43	
090199	Using household services, n.e.c.*	43	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
090201	Using home maint/repair/décor/construction svcs	43	
090202	Waiting associated w/ home main/repair/décor/constr	43	
090299	Using home maint/repair/décor/constr services, n.e.c.*	43	
090401	Using lawn and garden services	43	
090402	Waiting associated with using lawn & garden services	43	
090499	Using lawn and garden services, n.e.c.*	43	
099999	Using household services, n.e.c.*	43	
160106	Telephone calls to/from household services providers	43	
180201	Travel related to housework	43	
180203	Travel related to interior maintenance, repair, & decoration	43	
180204	Travel related to exterior maintenance, repair, & decoration	43	
180205	Travel related to lawn, garden, and houseplant care	43	
180901	Travel related to using household services	43	
180902	Travel related to using home main./repair/décor./construction svcs	43	
180904	Travel related to using lawn and garden services	43	
020601	Care for animals and pets (not veterinary care)	44	ANIMAL AND PET CARE
020602	Walking / exercising / playing with animals	44	
020699	Pet and animal care, n.e.c.*	44	
080701	Using veterinary services	44	
080702	Waiting associated with veterinary services	44	
080799	Using veterinary services, n.e.c.*	44	
090301	Using pet services	44	
090302	Waiting associated with pet services	44	
090399	Using pet services, n.e.c.*	44	
180206	Travel related to care for animals and pets (not vet care)	44	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
180807	Travel related to using veterinary services	44	
180903	Travel related to using pet services (not vet)	44	
040503	Animal & pet care assistance for nonhh adults	44	
020701	Vehicle repair and maintenance (by self)	45	VEHICLE CARE
020799	Vehicles, n.e.c.*	45	
040504	Vehicle & appliance maintenance/repair assistance for nonhh adults	45	
090501	Using vehicle maintenance or repair services	45	
090502	Waiting associated with vehicle main. or repair svcs	45	
090599	Using vehicle maint. & repair svcs, n.e.c.*	45	
180207	Travel related to vehicle care & maintenance (by self)	45	
180905	Travel related to using vehicle maintenance & repair services	45	
020801	Appliance, tool, and toy set-up, repair, & maintenance (by self)	46	APPLIANCE, COMPUTER, TOOL AND TOY CARE
180208	Travel related to appliance, tool, and toy set-up, repair, & maintenance (by self)	46	
020901	Financial management	47	FINANCIAL MANAGEMENT & HOUSEHOLD PLANNING
020902	Household & personal organization and planning	47	
030501	Helping hh adults	47	
030502	Organization & planning for hh adults	47	
030504	Waiting associated with helping hh adults	47	
030599	Helping household adults, n.e.c.*	47	
040505	Financial management assistance for nonhh adults	47	
040506	Household management & paperwork assistance for nonhh adults	47	
040508	Waiting associated with helping nonhh adults	47	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
040599	Helping nonhh adults, n.e.c.*	47	
080201	Banking	47	
080202	Using other financial services	47	
080203	Waiting associated w/banking/financial services	47	
080299	Using financial services and banking, n.e.c.*	47	
080301	Using legal services	47	
080302	Waiting associated with legal services	47	
080399	Using legal services, n.e.c.*	47	
180209	Travel related to household management	47	
180305	Travel related to helping hh adults	47	
180405	Travel related to helping nonhh adults	47	
180802	Travel related to using financial services and banking	47	
180803	Travel related to using legal services	47	
030101	Physical care for hh children	51	PHYSICAL CARE & ASSISTANCE TO OTHERS
030102	Reading to/with hh children	51	
030103	Playing with hh children, not sports	51	
030108	Organization & planning for hh children	51	
030109	Looking after hh children (as a primary activity)	51	
030111	Waiting for/with hh children	51	
030112	Picking up/dropping off hh children	51	
030199	Caring for & helping hh children, n.e.c.*	51	
030401	Physical care for hh adults	51	
030402	Looking after hh adult (as a primary activity)	51	
030499	Caring for household adults, n.e.c.*	51	
030503	Picking up/dropping off hh adult	51	
040101	Physical care for nonhh children	51	
040102	Reading to/with nonhh children	51	
040103	Playing with nonhh children, not sports	51	
040108	Organization & planning for nonhh children	51	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
040109	Looking after nonhh children (as primary activity)	51	
040111	Waiting for/with nonhh children	51	
040112	Dropping off/picking up nonhh children	51	
040199	Caring for and helping nonhh children, n.e.c.*	51	
040401	Physical care for nonhh adults	51	
040402	Looking after nonhh adult (as a primary activity)	51	
040499	Caring for nonhh adults, n.e.c.*	51	
040507	Picking up/dropping off nonhh adult	51	
080101	Using paid childcare services	51	
080102	Waiting associated w/purchasing childcare svcs	51	
080199	Using paid childcare services, n.e.c.*	51	
160107	Telephone calls to/from paid child or adult care providers	51	
180301	Travel related to caring for & helping hh children	51	
180304	Travel related to caring for hh adults	51	
180401	Travel related to caring for and helping nonhh children	51	
180404	Travel related to caring for nonhh adults	51	
180801	Travel related to using childcare services	51	
039999	Caring for & helping hh members, n.e.c.*	51	
049999	Caring for & helping nonhh members, n.e.c.*	51	
030301	Providing medical care to hh children	52	MEDICAL CARE FOR OTHERS
030302	Obtaining medical care for hh children	52	
030303	Waiting associated with hh children's health	52	
030399	Activities related to hh child's health, n.e.c.*	52	
030403	Providing medical care to hh adult	52	
030404	Obtaining medical and care services for hh adult	52	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
030405	Waiting associated with caring for household adults	52	
040301	Providing medical care to nonhh children	52	
040302	Obtaining medical care for nonhh children	52	
040303	Waiting associated with nonhh children's health	52	
040399	Activities related to nonhh child's health, n.e.c.*	52	
040403	Providing medical care to nonhh adult	52	
040404	Obtaining medical and care services for nonhh adult	52	
040405	Waiting associated with caring for nonhh adults	52	
180303	Travel related to hh children's health	52	
180403	Travel related to nonhh children's health	52	
030201	Homework (hh children)	53	SCHOOL-RELATED ASSISTANCE TO OTHERS
030202	Meetings and school conferences (hh children)	53	
030203	Home schooling of hh children	53	
030204	Waiting associated with hh children's education	53	
030299	Activities related to hh child's education, n.e.c.*	53	
040201	Homework (nonhh children)	53	
040202	Meetings and school conferences (nonhh children)	53	
040203	Home schooling of nonhh children	53	
040204	Waiting associated with nonhh children's education	53	
040299	Activities related to nonhh child's educ., n.e.c.*	53	
180302	Travel related to hh children's education	53	
180402	Travel related to nonhh children's education	53	
020903	HH & personal mail & messages (except e-mail)	61	SOCIALIZING AND PERSONAL COMMUNICATION

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
020904	HH & personal e-mail and messages	61	
030106	Talking with/listening to hh children	61	
040106	Talking with/listening to nonhh children	61	
120101	Socializing and communicating with others	61	
120199	Socializing and communicating, n.e.c.*	61	
120201	Attending or hosting parties/receptions/ceremonies	61	
120202	Attending meetings for personal interest (not volunteering)	61	
120299	Attending/hosting social events, n.e.c.*	61	
120501	Waiting assoc. w/socializing & communicating	61	
120502	Waiting assoc. w/attending/hosting social events	61	
120599	Waiting associated with socializing, n.e.c.*	61	
160101	Telephone calls to/from family members	61	
160102	Telephone calls to/from friends, neighbors, or acquaintances	61	
181201	Travel related to socializing and communicating	61	
181202	Travel related to attending or hosting social events	61	
181601	Travel related to phone calls	61	
181699	Travel rel. to phone calls, n.e.c.*	61	
120303	Television and movies (not religious)	62	TV & MOVIE VIEWING
120304	Television (religious)	62	
120307	Playing games	63	GAMES & PUZZLES
030104	Arts and crafts with hh children	64	OTHER NON-ACTIVE LEISURE
040104	Arts and crafts with nonhh children	64	
120305	Listening to the radio	64	
120306	Listening to/playing music (not radio)	64	
120308	Computer use for leisure (exc. Games)	64	
120309	Arts and crafts as a hobby	64	
120310	Collecting as a hobby	64	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
120311	Hobbies, except arts & crafts and collecting	64	
120312	Reading for personal interest	64	
120313	Writing for personal interest	64	
120503	Waiting associated with relaxing/leisure	64	
181203	Travel related to relaxing and leisure	64	
120302	Tobacco and drug use	65	SMOKING AND DRINKING ALCOHOL
120301	Relaxing, thinking	66	NO ACTIVITY: RELAXING, EMOTIONS
120399	Relaxing and leisure, n.e.c.*	66	
030105	Playing sports with hh children	71	SPORTS AND PHYSICAL ACTIVITY
040105	Playing sports with nonhh children	71	
130101	Doing aerobics	71	
130102	Playing baseball	71	
130103	Playing basketball	71	
130104	Biking	71	
130105	Playing billiards	71	
130106	Boating	71	
130107	Bowling	71	
130108	Climbing, spelunking, caving	71	
130109	Dancing	71	
130110	Participating in equestrian sports	71	
130111	Fencing	71	
130112	Fishing	71	
130113	Playing football	71	
130114	Golfing	71	
130115	Doing gymnastics	71	
130116	Hiking	71	
130117	Playing hockey	71	
130118	Hunting	71	
130119	Participating in martial arts	71	
130120	Playing racquet sports	71	
130121	Participating in rodeo competitions	71	
130122	Rollerblading	71	
130123	Playing rugby	71	
130124	Running	71	
130125	Skiing, ice skating, snowboarding	71	
130126	Playing soccer	71	
130127	Softball	71	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
130128	Using cardiovascular equipment	71	
130129	Vehicle touring/racing	71	
130130	Playing volleyball	71	
130131	Walking	71	
130132	Participating in water sports	71	
130133	Weightlifting/strength training	71	
130134	Working out, unspecified	71	
130135	Wrestling	71	
130136	Doing yoga	71	
130199	Playing sports n.e.c.*	71	
130201	Watching aerobics	71	
130202	Watching baseball	71	
130203	Watching basketball	71	
130204	Watching biking	71	
130205	Watching billiards	71	
130206	Watching boating	71	
130207	Watching bowling	71	
130208	Watching climbing, spelunking, caving	71	
130209	Watching dancing	71	
130210	Watching equestrian sports	71	
130211	Watching fencing	71	
130212	Watching fishing	71	
130213	Watching football	71	
130214	Watching golfing	71	
130215	Watching gymnastics	71	
130216	Watching hockey	71	
130217	Watching martial arts	71	
130218	Watching racquet sports	71	
130219	Watching rodeo competitions	71	
130220	Watching rollerblading	71	
130221	Watching rugby	71	
130222	Watching running	71	
130223	Watching skiing, ice skating, snowboarding	71	
130224	Watching soccer	71	
130225	Watching softball	71	
130226	Watching vehicle touring/racing	71	
130227	Watching volleyball	71	
130228	Watching walking	71	
130229	Watching water sports	71	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
130230	Watching weightlifting/strength training	71	
130231	Watching people working out, unspecified	71	
130232	Watching wrestling	71	
130299	Attending sporting events, n.e.c.*	71	
130301	Waiting related to playing sports or exercising	71	
130302	Waiting related to attending sporting events	71	
130399	Waiting associated with sports, exercise, & recreation, n.e.c.*	71	
130401	Security related to playing sports or exercising	71	
130402	Security related to attending sporting events	71	
130499	Security related to sports, exercise, & recreation, n.e.c.*	71	
139999	Sports, exercise, & recreation, n.e.c.*	71	
181301	Travel related to participating in sports/exercise/recreation	71	
181302	Travel related to attending sporting/recreational events	71	
181399	Travel related to sports, exercise, & recreation, n.e.c.*	71	
030110	Attending hh children's events	72	ARTS & ENTERTAINMENT
040110	Attending nonhh children's events	72	
120401	Attending performing arts	72	
120402	Attending museums	72	
120403	Attending movies/film	72	
120404	Attending gambling establishments	72	
120405	Security procedures rel. to arts & entertainment	72	
120499	Arts and entertainment, n.e.c.*	72	
120504	Waiting associated with arts & entertainment	72	
181204	Travel related to arts and entertainment	72	
181205	Travel as a form of entertainment	73	TRAVEL AS LEISURE
140101	Attending religious services	81	RELIGIOUS & SPIRITUAL PRACTICE

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
140102	Participation in religious practices	81	
140103	Waiting associated w/religious & spiritual activities	81	
140104	Security procedures rel. to religious & spiritual activities	81	
140105	Religious education activities	81	
149999	Religious and spiritual activities, n.e.c.*	81	
181401	Travel related to religious/spiritual practices	81	
181499	Travel rel. to religious/spiritual activities, n.e.c.*	81	
100101	Using police and fire services	83	GOVERNMENT & CIVIC ACTIVITIES
100103	Obtaining licenses & paying fines, fees, taxes	83	
100199	Using government services, n.e.c.*	83	
100201	Civic obligations & participation	83	
100299	Civic obligations & participation, n.e.c.*	83	
100304	Waiting associated with using government services	83	
100305	Waiting associated with civic obligations & participation	83	
100399	Waiting assoc. w/govt svcs or civic obligations, n.e.c.*	83	
100401	Security procedures rel. to govt svcs/civic obligations	83	
100499	Security procedures rel. to govt svcs/civic obligations, n.e.c.*	83	
109999	Government services, n.e.c.*	83	
160108	Telephone calls to/from government officials	83	
181001	Travel related to using government services	83	
181002	Travel related to civic obligations & participation	83	
181099	Travel rel. to govt svcs & civic obligations, n.e.c.*	83	
010401	Personal/Private activities	91	DATA ISSUES
010499	Personal activities, n.e.c.*	91	
500101	Insufficient detail in verbatim	91	
500103	Missing travel or destination	91	

2008 ATUS	Description of ATUS code	DUST 2-digit code	Description of DUST code
500105	Respondent refused to provide information/"none of your business"	91	
500106	Gap/can't remember	91	
509999	Data codes, n.e.c.*	99	
080801	Security procedures rel. to professional/personal svcs.	-	ATUS ACTIVITIES NOT IN DUST
080899	Security procedures rel. to professional/personal svcs n.e.c.*	-	
089999	Professional and personal services, n.e.c.*	-	
129999	Socializing, relaxing, and leisure, n.e.c.*	-	
160105	Telephone calls to/from professional or personal care svcs providers	-	
160199	Telephone calls (to or from), n.e.c.*	-	
160201	Waiting associated with telephone calls	-	
160299	Waiting associated with telephone calls, n.e.c.*	-	
169999	Telephone calls, n.e.c.*	-	
180299	Travel related to household activities, n.e.c.*	-	
180399	Travel rel. to caring for & helping hh members, n.e.c.*	-	
180499	Travel rel. to caring for & helping nonhh members, n.e.c.*	-	
180599	Travel related to work, n.e.c.*	-	
180899	Travel rel. to using prof. & personal care services, n.e.c.*	-	
180999	Travel related to using household services, n.e.c.*	-	
181299	Travel rel. to socializing, relaxing, & leisure, n.e.c.*	-	
181801	Security procedures related to traveling	-	
181899	Security procedures related to traveling, n.e.c.*	-	
189999	Traveling, n.e.c.*	-	
500107	Unable to code activity at 1st tier	-	
501004	Recorded simultaneous activities incorrectly	-	

Table A2: Stata code to combine ATUS* activities to match DUST activities

```
egen mcode11=rowtotal(t010101 t010102);
egen mcode12=rowtotal(t010201 t010299 t080501 t080502 t180101 t180805);
egen mcode13=rowtotal(t110101 t110201 t181101);
egen mcode14=rowtotal(t010301 t010399 t080402);
egen mcode15=rowtotal(t080401 t080403 t080499 t180804);
egen mcode16=rowtotal(t010501 t020899);
egen mcode1 =rowtotal(mcode11 mcode12 mcode13 mcode14 mcode15 mcode16);

egen mcode21=rowtotal(t050101 t050102 t050103 t050104 t050199
    t050201 t050202 t050203 t050205
    t050299 t180501 t180502);
egen mcode22=rowtotal(t050301 t050302 t050303 t050304 t050399 t180503);
egen mcode23=rowtotal(t050401 t050403 t050404 t050499 t059999 t180504);
egen mcode24=rowtotal(t150101 t150102 t150103 t150104 t150105 t150106 t150199
    t150201 t150202 t150203 t150204 t150299 t150301 t150302
    t150399 t150401 t150402 t150499 t150501 t150599 t150601
    t150602 t150699 t150701 t150801 t159999
    t181501 t181599);
egen mcode25=rowtotal(t100102);
egen mcode26=rowtotal(t060101 t060102 t060103 t060104 t060199 t060201 t060202
    t060203 t060204 t060299 t060301 t060302 t060399
    t060401 t060403 t060499 t069999 t160103 t180601
    t180602 t180603 t180604 t180699);
egen mcode2 =rowtotal(mcode21 mcode22 mcode23 mcode24 mcode25 mcode26);

egen mcode31=rowtotal(t070101 t070103 t180701 t180703);
egen mcode3233=rowtotal(t070102 t070104 t070105 t070199 t070201
    t160104 t180702 t180704 t180799);
egen mcode34=rowtotal(t080601 t080699 t180806);
egen mcode3 =rowtotal(mcode31 mcode3233 mcode34);

egen mcode41=rowtotal(t020201 t020202 t020203 t090102 t180202);

egen mcode42=rowtotal(t020102 t020103 t090103);

egen mcode43=rowtotal(t020101 t020104 t020199 t020301 t020302 t020303 t020399
    t020401 t020402 t020499 t020501 t020502 t020905
    t020999 t029999 t040501 t040502 t090101 t090104 t090199
    t090201 t090202 t090401 t099999
    t160106 t180201 t180203 t180204 t180205 t180901 t180902 );
egen mcode44=rowtotal(t020699 t080701 t080702 t090301 t090399
    t180206 t180807 t180903 t020601 t020602 t040503);

egen mcode45=rowtotal(t020701 t020799 t040504 t090501 t090502 t090599
```

```

t180207 t180905);
egen mcode46=rowtotal(t020801 t180208);
egen mcode47=rowtotal(t020901 t020902 t030501 t030502 t030504 t030599 t040505
t040506 t040508 t040599 t080201 t080202 t080203
t080301 t080302 t180209 t180305 t180405 t180802
t180803);
egen mcode4 =rowtotal(mcode41 mcode42 mcode43 mcode44 mcode45 mcode46 mcode47);

egen mcode51=rowtotal(t030101 t030102 t030103 t030108 t030109 t030111 t030112
t030199 t030401 t030402 t030499 t030503 t040101 t040102
t040103 t040108 t040109 t040111 t040112 t040199 t040401
t040402 t040499 t040507 t080101 t080102 t160107
t180301 t180304 t180401 t180404 t180801 t039999 t049999);
egen mcode52=rowtotal(t030301 t030302 t030303 t030399 t030403 t030404 t030405 t040301
t040302 t040303 t040399 t040403 t040404 t040405 t180303
t180403);
egen mcode53=rowtotal(t030201 t030202 t030203 t030204 t030299 t040201 t040202
t040203 t040299 t180302 t180402);
egen mcode5 =rowtotal(mcode51 mcode52 mcode53);

egen mcode61=rowtotal(t020903 t020904 t030106 t040106 t120101 t120199 t120201
t120299 t120501 t120502 t160101 t160102
t181201 t181202 t181601);
egen mcode62=rowtotal(t120303 t120304);
egen mcode63=rowtotal(t120307);
egen mcode64=rowtotal(t030104 t040104 t120305 t120306 t120308 t120309 t120310
t120311 t120312 t120313 t120503 t181203);
egen mcode65=rowtotal(t120302);
egen mcode66=rowtotal(t120301 t120399);
egen mcode6 =rowtotal(mcode61 mcode62 mcode63 mcode64 mcode65 mcode66);

egen mcode71=rowtotal(t030105 t040105 t130101 t130102 t130103 t130104 t130105
t130106 t130107 t130108 t130109 t130110 t130112
t130113 t130114 t130116 t130117 t130118 t130119
t130120 t130122 t130124 t130125 t130126
t130127 t130128 t130129 t130130 t130131 t130132 t130133 t130134
t130135 t130136 t130199
t130202 t130203 t130207
t130210 t130212 t130213 t130214
t130216 t130217 t130218 t130219 t130222
t130224 t130225 t130226 t130227
t130232 t130299 t130301 t130302
t139999 t181301 t181302);
egen mcode72=rowtotal(t030110 t040110 t120401 t120402 t120403 t120404 t120405
t120499 t120504 t181204);
egen mcode73=rowtotal(t181205);

```

```
egen mcode7 =rowtotal(mcode71 mcode72 mcode73);

egen mcode81=rowtotal(t140101 t140102 t140103 t140105 t149999 t181401
t181499);
egen mcode82=rowtotal(t120202);
egen mcode83=rowtotal(t100101 t100103 t100199 t100201 t100304
t100399 t100401 t109999 t160108 t181001 t181002
t181099);
egen mcode8 =rowtotal(mcode81 mcode83);

egen mcode91=rowtotal(t010401 t010499 t500101 t500103 t500104 t500105 t500106);
egen mcode9 =rowtotal(mcode91);

egen mcode9999=rowtotal(t089999 t129999 t160105 t160199 t160201
t169999 t180399 t180499 t180599 t180899
t180999 t181801 t181899 t189999 t500107);
label var mcode9999 "ATUS CODES NOT CROSSWALKED TO DUST";
```

*uses the ATUS summary file.

APPENDIX B: PERCENT PARTICIPATING AND DURATION: 2-DIGIT CODES

Table B1: Percentage Participating and Duration in Minutes, Two-Digit Activity Codes: 2009 DUST vs. 2009 ATUS.

	Weighted Percent Participating			Weighted Average Duration in Minutes	
	DUST	ATUS		DUST	ATUS
1 1. SLEEPING	99.9	99.9		506.3	517.1 *
1 2. WASHING DRESSING AND GROOMING	88.2	74.8	**	45.0	40.1 *
1 3. EATING AND DRINKING	95.7	98.7	**	91.0	90.3
1 4. HEALTH-RELATED SELF-CARE & MEDICATION	16.3	12.5		2.5	10.3 **
1 5. USE OF MEDICAL, HEALTH, & LONG TERM CARE SERVICES	5.6	5.3		5.3	6.1
1 6. PERSONAL EMERGENCIES	0.1	0.0		0.0	0.0
TOTAL FOR SUPERCATEGORY 1	100.0	100.0		650.1	663.9
2 1. WORK AND WORK-RELATED ACTIVITIES	18.9	22.4		86.5	102.3
2 2. OTHER INCOME GENERATING ACTIVITIES	3.0	0.7	**	8.8	1.4 *
2 3. LOOKING FOR WORK	1.0	0.5		0.7	0.3
2 4. VOLUNTEERING	3.2	11.1	**	5.9	16.6 **
2 5. USING UNEMPLOYMENT AND OTHER SOCIAL SERVICES	0.2	0.3		0.3	0.2
2 6. EDUCATIONAL ACTIVITIES	1.0	0.5		0.9	0.7
TOTAL FOR SUPERCATEGORY 2	25.4	32.9	**	103.1	121.5
3 1. OBTAINING GROCERIES AND FOOD	26.2	21.3	**	14.1	13.4
3 2./3 3. OBTAINING OTHER GOODS (NONDURABLE AND DURABLE)	30.6	26.9		30.1	25.5
3 4. REAL ESTATE RELATED ACTIVITIES	1.7	0.4	*	1.2	0.2
TOTAL FOR SUPERCATEGORY 3	46.9	40.1	*	45.4	39.2
4 1. FOOD & DRINK PREPARATION	68.9	61.9	**	46.2	43.5
4 2. LAUNDRY AND CLOTHING REPAIR	20.3	18.4		12.6	15.3
4 3. HOUSEHOLD CARE	58.0	52.0	*	59.7	72.6 *
4 4. ANIMAL AND PET CARE	20.6	17.2		9.3	7.3
4 5. VEHICLE CARE	7.4	4.2	**	6.8	4.0
4 6. APPLIANCE, COMPUTER, TOOL AND TOY CARE	5.3	2.7	**	2.8	2.4
4 7. FINANCIAL MGMT & HOUSEHOLD PLANNING	30.4	29.6		17.0	17.9
TOTAL FOR SUPERCATEGORY 4	89.5	85.9	*	154.4	163.0
5 1. PHYSICAL CARE & ASSISTANCE TO OTHERS	16.3	15.1		13.8	11.2
5 2. MEDICAL CARE FOR OTHERS	4.8	2.6	*	3.2	1.5
5 3. SCHOOL-RELATED ASSISTANCE TO OTHERS	1.6	0.5	*	0.7	0.2
TOTAL MINUTES FOR SUPERCATEGORY 5	19.4	16.0		17.7	12.9

	Weighted Percent Participating			Weighted Average Duration in Minutes		
	DUST	ATUS		DUST	ATUS	
6 1. SOCIALIZING AND PERSONAL COMMUNICATION	70.6	55.4	**	73.8	58.7	**
6 2. TV & MOVIE VIEWING	89.2	88.7		211.9	216.1	
6 3. GAMES & PUZZLES	14.7	13.5		16.7	13.1	
6 4. OTHER NON-ACTIVE LEISURE	62.2	54.4	**	77.0	62.0	*
6 5. SMOKING AND DRINKING ALCOHOL	1.9	0.8	*	0.9	0.2	**
6 6. NO ACTIVITY: RELAXING, EMOTIONS	16.9	24.1	**	12.2	23.8	**
TOTAL FOR SUPERCATEGORY 6	99.2	98.4		392.5	374.0	
7 1. SPORTS AND PHYSICAL ACTIVITY	27.4	21.7	**	27.2	20.7	*
7 2. ARTS & ENTERTAINMENT	4.0	3.7		6.2	6.4	
7 3. TRAVEL AS LEISURE	4.1	1.2	**	5.6	0.9	**
TOTAL FOR SUPERCATEGORY 7	32.5	25.5	**	39.0	28.0	**
8 1. RELIGIOUS & SPIRITUAL PRACTICE	14.2	14.2		17.1	16.2	
8.2. OTHER ORGANIZATIONS	1.4	0.3	*	2.4	0.5	*
8 3. GOVERNMENT & CIVIC ACTIVITIES	3.8	0.4	**	2.7	0.2	**
TOTAL FOR SUPERCATEGORY 8	18.7	14.9	*	22.2	16.9	
9 1. DATA ISSUES	13.0	19.9	**	15.6	17.6	
9999. ATUS Activities that were not given a DUST code	--	8.2		--	3.0	
(n)	1,324	1,434		1,324	1,434	

% =percentage participating; Minutes=unconditional minutes (weighted, among entire sample) *p<0.05 p<0.01

Table B2: Percentage Participating and Duration in Minutes by Age (60-69, 70-79, 80+), Two-Digit Activity Codes: 2009 DUST vs. 2009 ATUS.

	Weighted Percent Participating						Weighted Average Duration in Minutes					
	Age 60-69		Age 70-79		Age 80+		Age 60-69		Age 70-79		Age 80+	
	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS
1 1. SLEEPING	100.0	99.8	99.7	100.0	100.0	100.0 -	498.7	505.8	508.2	526.3	536.1	551.5
1 2. WASHING DRESSING AND GROOMING	89.7	76.1 **	87.5	72.4 **	82.9	75.8	45.6	40.3	46.2	40.4	39.5	37.7
1 3. EATING AND DRINKING	95.7	98.3 **	94.5	99.0 **	98.0	99.4	87.4	84.0	93.2	97.2	101.8	103.0
1 4. HEALTH-RELATED SELF-CARE & MEDICATION	12.4	9.1	20.3	15.4	25.0	22.1	1.5	9.2 *	4.1	9.0	3.8	21.1
1 5. USE OF MEDICAL, HEALTH, & LONG TERM CARE SERVICES	4.2	5.5	5.0	5.2	13.3	4.9	3.6	6.0	6.3	6.0	10.6	7.0
1 6. PERSONAL EMERGENCIES	0.0	0.0 --	0.4	0.0	0.0	0.0 --	0.0	0.0 --	0.0	0.0	0.0	0.0 --
TOTAL FOR SUPERCATEGORY 1	99.9	100.0	100.0	100.0	100.0	100.0	636.8	645.3	658.0	678.9	691.8	720.4
2 1. WORK AND WORK-RELATED ACTIVITIES	26.7	31.7	9.1	11.1	5.2	5.7	127.4	154.5	34.4	37.1	13.7	17.5
2 2. OTHER INCOME GENERATING ACTIVITIES	3.8	1.1 *	1.6	0.2 **	2.2	0.3	12.8	2.2	4.0	0.2	1.5	0.6
2 3. LOOKING FOR WORK	1.6	0.8	0.0	0.0 --	0.0	0.0 --	1.1	0.6	0.0	0.0 --	0.0	0.0 --
2 4. VOLUNTEERING	3.2	11.4 **	3.9	11.6 **	2.2	8.2 *	5.7	16.4 **	7.2	19.0 *	3.9	9.8
2 5. USING UNEMPLOYMENT AND OTHER SOCIAL SERVICES	1.5	0.6	0.0	0.0 --	0.0	0.0 --	0.5	0.4	0.0	0.0 --	0.0	0.0 --
2 6. EDUCATIONAL ACTIVITIES	1.1	0.6	0.3	0.4	0.0	0.0 --	1.3	1.0	0.6	0.2	0.0	0.0 --
TOTAL FOR SUPERCATEGORY 2	34.1	43.2 *	14.3	21.4 *	9.5	12.0	148.8	175.2	46.2	56.5	19.1	27.9
3 1. OBTAINING GROCERIES AND FOOD	26.2	21.4	26.8	21.8	25.2	19.2	13.3	13.4	15.7	13.1	14.5	14.6
3 2/33 OBTAINING OTHER GOODS (NONDURABLE/DURABLE)	33.1	27.8	26.1	28.4	29.1	16.4 *	34.2	29.3	25.8	22.8	21.0	13.5
3 4. REAL ESTATE RELATED ACTIVITIES	1.7	0.3 *	0.9	0.6	3.4	0.7	1.3	0.2	0.9	0.1	1.5	0.5
TOTAL FOR SUPERCATEGORY 3	49.6	40.6 *	42.1	41.7	45.0	32.2 *	48.8	42.9	42.4	35.9	37.0	28.7
4 1. FOOD & DRINK PREPARATION	66.5	60.9	73.1	65.4 *	71.2	55.9 *	43.7	38.8	50.9	54.6	47.8	33.7
4 2. LAUNDRY AND CLOTHING REPAIR	22.8	18.6	17.6	19.5	14.9	14.6	14.3	16.2	10.2	15.0	10.3	11.0
4 3. HOUSEHOLD CARE	57.6	48.8 *	58.5	58.2	59.2	49.6	58.9	72.0	64.9	73.2	52.1	74.0
4 4. ANIMAL AND PET CARE	23.9	18.0 *	19.9	16.8	8.1	13.7	9.5	7.9	12.2	7.0	2.5	4.9
4 5. VEHICLE CARE	9.6	5.0 *	4.4	3.0	4.1	3.4	9.1	4.9	4.1	3.0	1.9	1.7
4 6. APPLIANCE, COMPUTER, TOOL AND TOY CARE	5.4	1.8 **	6.3	3.8	2.9	4.0	3.5	2.2	2.3	2.4	1.1	3.4
4 7. FINANCIAL MANAGEMENT & HOUSEHOLD PLANNING	32.8	28.5	26.8	32.9	28.0	25.6	18.8	17.0	13.9	20.4 *	15.0	15.1
TOTAL FOR SUPERCATEGORY 4	90.3	85.2	89.2	87.0	86.1	86.6	157.8	159.2	158.5	175.7	130.6	143.7
5 1. PHYSICAL CARE & ASSISTANCE TO OTHERS	21.2	17.0	7.9	13.0 *	11.9	10.8	20.0	14.9	5.5	7.3	3.5	3.3
5 2. MEDICAL CARE FOR OTHERS	4.5	1.7 **	4.3	3.9	7.5	3.6	3.5	1.5	1.7	1.1	4.4	2.3
5 3. SCHOOL-RELATED ASSISTANCE TO OTHERS	2.6	0.6 **	0.1	0.6	0.0	0.0 --	1.1	0.3	0.0	0.2	0.0	0.0 --
TOTAL FOR SUPERCATEGORY 5	24.6	17.6 **	10.5	14.3	14.7	12.6	24.6	16.7	7.2	8.6	7.9	5.6

(Table B2 continued)

	Weighted Percent Participating						Weighted Average Duration in Minutes					
	Age 60-69		Age 70-79		Age 80+		Age 60-69		Age 70-79		Age 80+	
	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS
6 1. SOCIALIZING AND PERSONAL COMMUNICATION	69.5	54.4 **	71.0	57.3 **	74.3	55.0 **	74.5	58.3 *	74.0	60.9	70.4	54.6
6 2. TV & MOVIE VIEWING	88.6	87.0	89.7	91.0	90.6	91.3	194.4	200.8	229.0	232.0	253.8	251.6
6 3. GAMES & PUZZLES	11.9	11.7	17.3	15.3	22.0	17.7	12.5	10.6	20.1	15.9	28.2	18.5
6 4. OTHER NON-ACTIVE LEISURE	55.8	50.4	69.0	59.1 *	77.0	61.6 *	61.8	51.6	98.4	70.7 **	99.9	93.0
6 5. SMOKING AND DRINKING ALCOHOL	1.3	1.1	3.0	0.3 **	2.4	0.7	0.7	0.2	1.5	0.1 **	1.0	0.1
6 6. NO ACTIVITY: RELAXING, EMOTIONS	15.8	20.7	16.4	27.3 *	23.1	32.8	9.1	17.2 **	16.8	28.6 *	16.7	45.8 **
TOTAL FOR SUPERCATEGORY 6	99.1	97.8 *	99.3	99.3	99.8	98.7	353.0	338.7	439.8	408.1	470.0	463.7
7 1. SPORTS AND PHYSICAL ACTIVITY	29.1	20.4 **	26.7	23.5	21.5	23.1	28.1	19.7 *	29.1	24.2	18.9	15.0
7 2. ARTS & ENTERTAINMENT	4.2	4.3	2.8	3.6	5.2	0.8 *	6.9	7.3	4.1	6.3	7.5	1.5 *
7 3. TRAVEL AS LEISURE	3.5	1.1 **	5.3	1.0 **	3.4	2.3	4.7	0.6	9.4	1.2	1.6	1.5
TOTAL FOR SUPERCATEGORY 7	33.6	24.7 **	32.1	26.8	28.5	25.5	39.7	27.7 *	42.6	31.6	28.0	18.0
8 1. RELIGIOUS & SPIRITUAL PRACTICE	12.4	12.8	17.4	16.8	15.2	13.6	17.2	13.6	18.5	20.7	13.6	16.4
8 2 OTHER ORGANIZATIONS	1.4	0.2	1.3	0.7	1.7	0.0	2.1	0.1 *	3.2	1.5	2.1	0.0
8 3. GOVERNMENT & CIVIC ACTIVITIES	2.2	0.3 **	5.8	0.6 **	7.8	0.0 *	1.2	0.3 *	5.6	0.0 **	3.5	0.0 *
TOTAL FOR SUPERCATEGORY 8	15.2	13.3	24.0	18.2 *	22.9	13.6	20.5	14.0	27.3	22.2	19.2	16.4
9. DATA ISSUES	9.7	18.3 **	14.6	22.5	24.5	20.7	9.9	16.6 *	17.7	20.1	36.1	15.3
9999. ATUS ACTIVITIES NOT GIVEN DUST CODE	--	7.6	--	11.0	--	2.3	--	3.9	--	2.3	--	0.4
(n)	720	843	406	448	198	143	720	843	406	448	198	143

Minutes=unconditional minutes (weighted, among entire sample) *p<0.05 **p<0.01

Table B3: Percentage Participating and Duration in Minutes by Sex, Two-Digit Activity Codes: 2009 DUST vs. 2009 ATUS.

	Weighted Percent Participating						Weighted Average Duration in Minutes					
	Males			Females			Males			Females		
	DUST	ATUS		DUST	ATUS		DUST	ATUS		DUST	ATUS	
1 1. SLEEPING	99.8	99.8		100.0	100.0		493.4	515.1	**	521.3	519.4	
1 2. WASHING DRESSING AND GROOMING	85.0	68.7	**	91.9	82.1	**	37.8	32.0	**	53.3	49.4	
1 3. EATING AND DRINKING	95.2	98.7	**	96.2	98.7	**	92.9	93.0		88.6	87.1	
1 4. HEALTH-RELATED SELF-CARE & MEDICATION	13.0	11.4		20.1	13.8	*	2.7	8.0		2.3	13.0	**
1 5. USE OF MEDICAL, HEALTH, & LONG TERM CARE SERVICES	5.0	3.1		6.3	8.0		6.0	3.7		4.5	8.8	*
1 6. PERSONAL EMERGENCIES	0.1	0.0		0.2	0.0		0.0	0.0		0.0	0.0	
TOTAL FOR SUPERCATEGORY 1	100.0	100.0		100.0	100.0		632.8	651.9	*	670.0	677.7	
2 1. WORK AND WORK-RELATED ACTIVITIES	25.2	28.0		11.7	15.9		114.7	131.5		53.6	68.2	
2 2. OTHER INCOME GENERATING ACTIVITIES	4.6	1.0	**	1.1	0.4		14.9	1.1	*	1.8	1.8	
2 3. LOOKING FOR WORK	1.6	0.7		0.3	0.2		1.2	0.5		0.0	0.1	
2 4. VOLUNTEERING	3.1	11.0	**	3.4	11.3	**	5.8	17.4	**	6.0	15.7	**
2 5. USING UNEMPLOYMENT AND OTHER SOCIAL SERVICES	0.5	0.6		0.0	0.0	--	0.6	0.4		0.0	0.0	--
2 6. EDUCATIONAL ACTIVITIES	0.7	0.5		1.3	0.5		0.5	0.4		1.5	0.9	
TOTAL FOR SUPERCATEGORY 2	32.6	38.1		17.0	26.8	*	137.7	151.4		62.9	86.7	
3 1. OBTAINING GROCERIES AND FOOD	25.7	17.9	**	26.8	25.4		12.6	10.3		15.9	17.0	
32/33. OBTAINING OTHER GOODS (NONDURABLE AND DURABLE)	29.5	25.9		31.9	28.0		30.1	24.3		30.2	27.0	
3 4. REAL ESTATE RELATED ACTIVITIES	1.6	0.3	**	1.8	0.6		1.2	0.2		1.2	0.2	
TOTAL FOR SUPERCATEGORY 3	45.9	38.3	*	48.0	42.2		43.9	34.9	*	47.3	44.2	
4 1. FOOD & DRINK PREPARATION	55.5	44.0	**	84.6	82.7		25.8	19.5	*	70.0	71.4	
4 2. LAUNDRY AND CLOTHING REPAIR	4.5	5.2		38.7	34.0		1.6	2.7		25.4	29.9	
4 3. HOUSEHOLD CARE	48.7	44.0		68.9	61.2		63.9	69.7		54.7	76.1	**
4 4. ANIMAL AND PET CARE	20.3	17.2		20.9	17.1		9.4	7.3		9.2	7.4	
4 5. VEHICLE CARE	11.2	5.7	**	3.0	2.3		10.9	4.5	**	1.9	3.5	

(Table B3 continued)

	Weighted Percent Participating				Weighted Average Duration in Minutes				
	Males		Females		Males		Females		
	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS	
4 6. APPLIANCE, COMPUTER, TOOL/TOY CARE	7.3	3.8 *	3.0	1.5	4.0	3.8	1.4	0.8	
4 7. FINANCIAL MGMT & HOUSEHOLD PLANNING	28.2	27.3	32.9	32.4	16.9	17.5	17.1	18.4	
TOTAL FOR SUPERCATEGORY 4	84.0	78.7	95.8	94.3	132.5	124.8	179.7	207.5	**
5 1. PHYSICAL CARE & ASSISTANCE TO OTHERS	12.8	13.4	20.3	17.0	7.7	9.4	20.9	13.4	
5 2. MEDICAL CARE FOR OTHERS	3.9	1.9	6.0	3.4	3.7	1.4	2.5	1.5	
5 3. SCHOOL-RELATED ASSISTANCE TO OTHERS	0.7	0.5	2.6	0.5 **	0.4	0.2	1.0	0.3	
TOTAL FOR SUPERCATEGORY 5	15.5	14.1	24.0	18.3	11.8	11.0	24.4	15.2	*
6 1. SOCIALIZING/ PERSONAL COMMUNICATION	64.8	50.2 **	77.2	61.5 **	61.6	50.5	88.0	68.3	**
6 2. TV & MOVIE VIEWING	90.3	89.6	88.0	87.7	231.5	250.6	189.1	175.8	
6 3. GAMES & PUZZLES	12.3	10.8	17.6	16.7	13.6	10.2	20.3	16.5	
6 4. OTHER NON-ACTIVE LEISURE	57.7	54.2	67.5	54.5 **	71.6	63.3	83.2	60.5	**
6 5. SMOKING AND DRINKING ALCOHOL	2.1	1.0	1.7	0.6	1.2	0.2 **	0.7	0.2	
6 6. NO ACTIVITY: RELAXING, EMOTIONS	15.5	21.4 *	18.6	27.1 **	12.4	24.1 **	12.1	23.5	**
TOTAL FOR SUPERCATEGORY 6	98.9	98.4	99.7	98.4	391.9	399.0	393.4	344.8	**
7 1. SPORTS AND PHYSICAL ACTIVITY	26.6	23.9	28.3	19.1 **	32.1	25.1	21.4	15.6	*
7 2. ARTS & ENTERTAINMENT	4.2	3.6	3.7	3.8	6.6	6.5	5.7	6.2	
7 3. TRAVEL AS LEISURE	5.5	0.8 **	2.6	1.6	8.2	0.5 **	2.5	1.4	
TOTAL FOR SUPERCATEGORY 7	32.7	27.3	32.4	23.3 **	46.9	32.1 **	29.6	23.2	
8 1. RELIGIOUS & SPIRITUAL PRACTICE	12.4	10.7	16.2	18.7	16.6	15.7	17.6	16.8	
8.2 OTHER ORGANIZATIONS	1.4	0.3	1.4	0.4	2.5	0.2 *	2.2	0.9	
8 3. GOVERNMENT & CIVIC ACTIVITIES	3.9	0.6 **	3.6	0.1 **	2.7	0.3 **	2.7	0.0	**
TOTAL FOR SUPERCATEGORY 8	16.9	11.2 *	20.7	18.4	21.8	16.2	22.5	17.7	
9. DATA ISSUES	13.2	18.4 *	12.8	21.7 **	20.7	15.8	9.7	19.8	**
9999. ATUS ACTIVITIES NOT GIVEN DUST CODE	--	5.9	--	10.8	--	2.9	--	3.2	
(n)	709	729	615	705	709	729	615	705	

Minutes=unconditional minutes (weighted, among entire sample) *p<0.05 **p<0.01

Table B4: Percentage Participating and Duration in Minutes by Disability, Two-Digit Activity Codes: 2009 DUST vs. 2009 ATUS.

	Weighted Percent Participating						Weighted Average Duration in Minutes					
	No Disability			Any Disability			No Disability			Any Disability		
	DUST	ATUS		DUST	ATUS		DUST	ATUS		DUST	ATUS	
1 1. SLEEPING	100.0	99.9		99.8	100.0		492.9	506.3	*	525.7	565.0	**
1 2. WASHING DRESSING AND GROOMING	91.1	76.5	**	84.0	67.4	**	46.5	41.1	*	42.8	35.4	
1 3. EATING AND DRINKING	95.9	98.5	**	95.3	99.3	**	88.6	89.9		94.4	91.9	
1 4. HEALTH-RELATED SELF-CARE & MEDICATION	12.2	10.1		22.1	23.1		2.1	8.5	**	3.0	18.5	*
1 5. USE OF MEDICAL, HEALTH, & LONG TERM CARE SERVICES	4.7	5.0		7.0	6.6		3.8	5.5		7.4	8.9	
1 6. PERSONAL EMERGENCIES	0.1	0.0		0.1	0.0		0.0	0.0		0.0	0.0	
TOTAL FOR SUPERCATEFORY 1	100.0	100.0		100.0	100.0		633.9	651.2	*	673.3	719.7	**
2 1. WORK AND WORK-RELATED ACTIVITIES	23.7	25.6		12.1	8.1		116.2	117.3		43.5	35.8	
2 2. OTHER INCOME GENERATING ACTIVITIES	3.7	0.9	**	1.8	0.2	*	10.6	1.7		6.3	0.0	*
2 3. LOOKING FOR WORK	1.6	0.4	*	0.1	0.7		1.0	0.2		0.2	0.7	
2 4. VOLUNTEERING	2.8	12.1	**	3.9	7.0		5.7	18.9	**	6.1	6.3	
2 5. USING UNEMPLOYMENT AND OTHER SOCIAL SERVICES	0.4	0.4	*	0.0	0.0	--	0.5	0.3		0.0	0.0	--
2 6. EDUCATIONAL ACTIVITIES	1.3	0.6		0.5	0.0		1.0	0.8		0.8	0.0	
TOTAL FOR SUPERCATEFORY 2	31.5	36.8		16.6	15.3		135.0	139.2		56.9	42.9	
3 1. OBTAINING GROCERIES AND FOOD	27.7	23.0	*	24.1	13.9	**	14.8	14.1		13.1	10.4	
32/33. OBTAINING OTHER GOODS (NONDURABLE AND DURABLE)	31.1	28.6		29.9	19.1	*	31.0	27.3		28.8	17.6	*
3 4. REAL ESTATE RELATED ACTIVITIES	2.1	0.5	*	1.1	0.0		1.7	0.3		0.5	0.0	
TOTAL FOR SUPERCATEFORY 3	48.2	42.4		44.9	29.8	**	47.5	41.7		42.4	27.9	**
4 1. FOOD & DRINK PREPARATION	70.3	62.4	**	66.9	59.7		47.9	44.1		43.8	40.9	
4 2. LAUNDRY AND CLOTHING REPAIR	20.8	18.2		19.5	19.6		13.5	15.8		11.3	13.0	
4 3. HOUSEHOLD CARE	61.0	52.8	*	53.8	48.2		63.4	73.7		54.3	68.0	
4 4. ANIMAL AND PET CARE	22.4	17.4		18.1	16.0		9.4	7.7		9.1	5.8	
4 5. VEHICLE CARE	7.1	4.7		7.9	2.0	*	7.1	4.7		6.3	0.9	**
4 6. APPLIANCE, COMPUTER, TOOL/TOY CARE	5.2	2.8	*	5.5	2.1		3.1	2.6		2.5	1.5	

(Table B4 continued)

	Weighted Percent Participating				Weighted Average Duration in Minutes							
	No Disability		Any Disability		No Disability		Any Disability					
	DUST	ATUS	DUST	ATUS	DUST	ATUS	DUST	ATUS				
4 7. FINANCIAL MGMT & HOUSEHOLD PLANNING	32.0	31.4	28.1	21.8	17.5	19.9	16.2	8.9	*			
TOTAL FOR SUPERCATEFORY 4	90.6	87.0	87.8	80.9	*	161.9	168.4	143.5	139.0			
5 1. PHYSICAL CARE & ASSISTANCE TO OTHERS	17.8	15.5	14.2	13.2	14.5	12.1	12.7	7.3				
5 2. MEDICAL CARE FOR OTHERS	4.3	2.5	5.5	3.1	3.2	1.4	3.1	1.9				
5 3. SCHOOL-RELATED ASSISTANCE TO OTHERS	1.8	0.6	1.3	0.0	0.8	0.3	0.5	0.0	*			
TOTAL FOR SUPERCATEFORY 5	20.5	16.5	18.1	13.8	18.5	13.8	16.3	9.2				
6 1. SOCIALIZING AND PERSONAL COMMUNICATION	70.9	56.0	**	70.1	52.8	**	74.2	59.5	*	73.2	55.4	*
6 2. TV & MOVIE VIEWING	88.7	88.3		89.9	90.7		193.2	202.4		238.9	276.8	
6 3. GAMES & PUZZLES	12.2	13.2		18.5	14.9		14.7	12.0		19.6	18.0	
6 4. OTHER NON-ACTIVE LEISURE	63.8	54.6	*	60.0	53.3		75.3	60.8		79.4	67.5	
6 5. SMOKING AND DRINKING ALCOHOL	2.1	0.9		1.6	0.3	*	0.9	0.2	*	1.0	0.1	**
6 6. NO ACTIVITY: RELAXING, EMOTIONS	13.8	23.9	**	21.4	24.9		8.9	21.4	**	17.1	34.4	**
TOTAL FOR SUPERCATEFORY 6	99.4	98.3		98.9	98.8		367.2	356.4		429.2	452.3	
7 1. SPORTS AND PHYSICAL ACTIVITY	31.7	23.8	**	21.2	12.1	**	31.6	23.2	*	20.7	9.5	**
7 2. ARTS & ENTERTAINMENT	4.6	4.0		3.2	2.5		6.4	7.0		5.9	3.6	
7 3. TRAVEL AS LEISURE	4.0	1.0	**	4.3	1.8		5.9	0.9	*	5.1	1.0	*
TOTAL FOR SUPERCATEFORY 7	37.0	27.6	**	26.1	16.1	**	43.9	31.1	**	31.7	14.0	**
8 1. RELIGIOUS & SPIRITUAL PRACTICE	13.7	14.2		14.9	14.0		16.6	15.5		17.7	19.2	
8 2. OTHER ORGANIZATIONS	1.7	0.3	**	1.0	0.8		2.6	0.6		2.1	0.3	
8 3. GOVERNMENT & CIVIC ACTIVITIES	2.5	0.5	**	5.7	0.0	**	1.5	0.2	**	4.4	0.0	**
TOTAL FOR SUPERCATEFORY 8	17.4	14.9		20.5	14.8		20.7	16.3		24.2	19.5	
9. DATA ISSUES	11.3	20.1	**	15.6	19.0		11.1	18.7	*	22.1	13.1	*
9999. ATUS Activities that were not given a DUST code	--	8.1		--	8.8		--	3.1		--	2.5	
(n)	659	1,180		665	254		659	1,180		665	254	

Minutes=unconditional minutes (weighted, among entire sample) *p<0.05 **p<0.01