

Measuring time spent in unpaid household work: results from the American Time Use Survey

Time-use data show that on average Americans spend more than 20 hours per week working for their own household without pay on tasks that might be done by a paid worker; women spend more time at such unpaid household work

Rachel Krantz-Kent

Individuals often perform services for themselves or their households rather than purchasing those services. For example, they fix leaky faucets rather than hiring plumbers, grocery shop instead of using a grocery delivery service, and prepare meals rather than eating at restaurants. Such unpaid services that are produced for immediate consumption by one's own household, and for which market substitutes exist, are referred to as unpaid household work. Unlike work that is done for pay, about which there are a number of timely statistical measures—persons employed, hours worked, earnings generated, and others—the resources involved in doing unpaid household work are less frequently quantified.

Time-use data can be used to learn more about the resources involved in doing unpaid work because the data contain information about the full range of productive activities individuals do, and not merely those for which they receive pay. The focus of this article is on the time resources involved in doing unpaid household work. Some findings from the 2003–07 American Time Use Survey (ATUS) show how much time individuals spent doing unpaid household work, the types of unpaid household work they did, and

characteristics of persons who most frequently did this work. Data about how much time individuals spend doing unpaid household work provide insight about the labor-time resources involved in these activities. Time-use data also are an important element in determining a monetary value for unpaid household work, although doing so is not within the scope of this article.¹

Data

The ATUS is a federally sponsored survey about how individuals ages 15 and older living in the United States spend their time. The core of the computer-assisted telephone ATUS interview is a time diary in which survey respondents are asked how they spent their time over a 24-hour period, starting at 4 a.m. on the day before the interview and ending at 4 a.m. on the day of the interview. Respondents are asked to report their primary activities for this 24-hour period, and those who report doing more than one activity at a time are asked to specify their main activity.² In addition to the time diary, the ATUS data also include information about each respondent's household composition, demographics, employment status, and other characteristics.

Activities reported in the ATUS time diary

Rachel Krantz-Kent is an economist in the Division of Labor Force Statistics, Bureau of Labor Statistics. E-mail: krantz-kent.rachel@bls.gov

are assigned codes using an extensive coding lexicon and set of rules. The coding lexicon was designed to capture the full range of activities people do, with codes grouped into the 17 major categories shown in exhibit 1. In addition to these major groups, there are hundreds of more detailed activity sub-categories.³ ATUS interviews were conducted nearly every day in 2003–07, and in total over this 5-year period there were more than 70,000 completed interviews. Unless stated otherwise, the results appearing in this article are representative of the civilian noninstitutional population ages 15 and older for 2003–07.⁴

Defining unpaid household work

As a first step in this analysis, it was necessary to define unpaid household work: that is, to identify which activities in the ATUS activity lexicon are unpaid, economically productive, and done for one’s own household. During the ATUS interview, survey respondents are asked to identify which of the activities reported in the time diary were done as a part of their job(s) or for which they will be paid.⁵ Following the coding rules, this information is used to classify all paid activities as work or income-generating activities (such as making crafts that will be sold and lawn mowing done for pay). Because they are activities done for pay, work and income-generating activities were automatically excluded from the definition of unpaid household work.

For unpaid activities, Margaret Reid’s third-person criterion⁶ was used to identify those that are economically productive. A National Academy of Sciences expert panel

study on the design of nonmarket accounts describes Reid’s criterion:

“One approach that has been used to define non-market output (particularly in household production applications) is Margaret Reid’s (1934) third-party criterion: is the output in question something that a person could have hired someone else to produce for him?”⁷

Applying Reid’s third-person criterion, all activities that can be accomplished using readily available market substitutes for a person’s unpaid time are considered economically productive. For example, a market-based alternative to unclogging one’s kitchen drain is to hire a plumber to provide the service. In addition to being unpaid and having a readily available market substitute, the activities classified as unpaid household work are those that are done for one’s own household. For example, time spent painting one’s home is included in the definition of unpaid household work because the activity is not done for pay, someone could have been hired to paint the home, and it is done for one’s own household. Time spent caring for a neighbor’s child may be unpaid and have a market-based alternative, but because the service is done for a neighbor’s household instead of one’s own household, it is not included in the definition of unpaid household work.

Travel, when it is associated with an unpaid household work activity, is included in the definition. The activity meets Reid’s criterion because people can use delivery services or employ others to do the task and thus eliminate the need for travel. For example, one can spend time traveling to and from the grocery store to purchase groceries, or one can hire a delivery service to assemble the groceries and drop them off at one’s door. A broad range of shopping-type activities also are classified as unpaid household work. Activities such as banking or using veterinary services may not intuitively seem to fit Reid’s third-person criteria, but they do because one could hire a personal assistant to handle these activities. Sleeping, eating, watching television, volunteering, and other activities are not included in the definition of unpaid household work because they fail to meet at least one of the three criteria. Of the 434 unique activity categories in the 2003–07 ATUS coding lexicon, 127 were identified as unpaid household work.

Unpaid household work can be grouped into four main activity categories: *Household activities*, which includes a wide array of activities done to maintain one’s household, such as food and drink preparation, laundry, and lawn

Exhibit 1. Major activity categories in the ATUS coding lexicon	
1	Personal care (mostly sleep)
2	Household activities
3	Caring for and helping household children
4	Caring for and helping nonhousehold children
5	Work and work-related activities
6	Education
7	Consumer services
8	Professional and personal care services
9	Household services
10	Government services and civic obligations
11	Eating and drinking
12	Socializing, relaxing, and leisure
13	Sports, exercise, and recreation
14	Religious and spiritual activities
15	Volunteer activities
16	Telephone calls
17	Traveling

care; *Caring for and helping household members; Purchasing goods and services; and Travel related to unpaid household work.* See the appendix for a complete list of activities included in the definition of unpaid household work, as well as for information about how the activities are grouped into categories.

Time spent in unpaid household work

People's skill levels and motivations are factors in how much time and effort they spend doing unpaid household work. For example, someone who enjoys cooking may take a more leisurely approach to the activity or spend more time doing it to produce more elaborate meals than someone who dislikes cooking. On the other hand, a more skilled person may complete home maintenance and repair tasks more quickly, efficiently, and happily than a less skilled person. The ATUS data do not include information about people's effort, skill, or motivation for doing unpaid household work, and so here the focus is on the time involved in the tasks. The analysis accounts for a range of ability levels and motivations by looking at the average times people spend doing unpaid household work.

Individuals aged 15 and older spent an average of 21.5 hours per week doing unpaid household work in 2003–07. (See table 1.) Most of this time (12.4 hours) was spent doing household activities, such as food and drink preparation, cleaning, laundry and sewing, and maintenance and repair. Household activities also were the type of unpaid household work that people were most likely to do on an average day.⁸ About three-fourths of individuals aged 15 and older did household activities on an average day in 2003–07, with one-half of the population engaging in food and drink preparation and one-fourth cleaning. (See table 2.) Those 15 and older spent 2.9 hours per week caring for and helping household children⁹ as a primary activity (this is an average across all individuals, whether or not they lived with children), 3.1 hours per week purchasing goods and services, and 2.7 hours per week engaging in travel related to unpaid household work. Time spent doing unpaid household work varied by the sex, age, employment status, number of household children, and other characteristics of individuals and households.

Results by gender

Traditionally, many unpaid household work activities have been considered women's work and have most often been done by women. Gender persists as a factor in who did these activities in 2003–07; for example, women spent an

average of 10.8 hours more per week doing unpaid household work than did men. One factor driving this gender difference was women's greater likelihood of doing unpaid household work on an average day (91 percent of women compared to 78 percent of men).

Chart 1 shows the average hours per week men and women spent doing the four main types of unpaid household work. Women spent more time doing each of the activities than did men, although the greatest gender differences were in the times women spent doing household activities and caring for and helping household members. Women spent an average of 6.3 hours more per week doing household activities than did men (15.5 versus 9.2 hours) and 2.4 hours more per week providing care to household members (4.4 versus 2.0 hours). Chart 2 shows the main household activities and the average hours per week men and women spent doing each of them. The influence of traditional gender roles is apparent in that women spent more time doing food and drink preparation, cleaning, and laundry and sewing than did men, while men spent more time doing maintenance and repair and lawn and garden care than did women. The average times men and women spent doing household activities are to some extent driven by the share of men and women who did these activities on an average day. Women were nearly five times as likely as men to do laundry; three times as likely as men to clean; and almost twice as likely as men to prepare food on an average day. By contrast, men were twice as likely as women to do maintenance and repair on an average day. (See table 2.)

Gender also is a factor related to who does paid work. Women were less likely than men to be employed (72 percent of men versus 59 percent of women), and among those who were employed, women were more likely to work part time than were men (31 percent of employed women and 14 percent of employed men were employed part time).^{10,11} Persons who were not employed spent more hours per week doing unpaid household work (26.0 hours) than did those employed part time (22.0 hours) who, in turn, did more unpaid household work than did those employed full time (18.2 hours). On average across all persons age 15 and older, including those who were employed and those who were not employed, men spent 31.4 hours per week doing paid work and women spent 21.0 hours per week doing paid work. (See table 1.) Although there is variation by sex and employment status in the times individuals spent doing unpaid household work, and there are gender differences in time spent doing paid work, at an aggregate level—one that includes both paid work and unpaid household work—there is evidence of a

Table 1. Average hours per week spent doing unpaid household work and paid work by age and sex, 2003–07

Type of work	Age							
	Total, 15 and older	15–24	25–34	35–44	45–54	55–64	65–74	75 and older
Total								
Unpaid household work (total)	21.5	12.4	23.8	25.8	22.0	22.2	24.3	21.6
Household activities	12.4	5.8	10.7	13.1	14.0	15.3	17.4	16.5
Food and drink preparation.....	3.6	1.5	3.5	4.2	3.9	4.1	4.9	5.1
Cleaning.....	2.6	1.6	2.7	2.9	2.7	2.8	3.3	3.3
Laundry and sewing.....	1.5	.6	1.3	1.7	1.8	1.7	2.1	2.0
Household management.....	1.0	.6	.7	.9	1.1	1.2	1.4	1.4
Lawn and garden care	1.4	.4	.8	1.2	1.6	2.3	2.7	2.4
Maintenance and repair	1.5	.9	1.2	1.6	1.9	2.1	2.1	1.3
Caring for and helping household members	3.2	1.9	6.9	6.1	2.1	.9	.7	.6
Caring for and helping household children.....	2.9	1.7	6.7	5.9	1.7	.4	.2	.1
Purchasing goods and services.....	3.1	2.6	3.2	3.2	3.1	3.4	3.6	2.8
Grocery shopping.....	.7	.4	.7	.8	.7	.8	1.0	.9
Travel related to unpaid household work.....	2.7	2.1	3.0	3.4	2.8	2.6	2.6	1.8
Paid work (total)	26.1	19.2	33.8	34.4	34.7	25.8	7.8	2.0
Work and work-related activities.....	24.0	17.7	31.2	31.6	32.1	23.8	7.2	1.8
Travel related to work and work-related activities ..	2.0	1.5	2.6	2.7	2.6	1.9	.5	.1
Total paid work and unpaid household work	47.5	31.6	57.6	60.2	56.7	48.0	32.1	23.6
Men								
Unpaid household work (total)	15.9	8.9	15.8	18.3	17.0	17.8	19.9	18.1
Household activities	9.2	4.6	7.4	9.1	10.6	12.3	13.4	12.8
Food and drink preparation.....	1.9	.8	1.7	2.2	2.1	2.2	2.3	3.0
Cleaning.....	1.2	.9	1.2	1.3	1.2	1.2	1.2	1.4
Laundry and sewing.....	.4	.3	.5	.5	.5	.4	.4	.4
Household management.....	.8	.4	.6	.8	.9	1.1	1.2	1.2
Lawn and garden care	1.9	.5	1.0	1.5	2.2	3.2	3.9	3.6
Maintenance and repair	2.4	1.4	1.8	2.3	2.8	3.2	3.5	2.3
Caring for and helping household members	2.0	.7	3.4	4.1	1.6	.6	.6	.7
Caring for and helping household children.....	1.7	.6	3.3	3.9	1.4	.3	.1	.0
Purchasing goods and services.....	2.4	1.9	2.5	2.4	2.2	2.6	3.3	2.7
Grocery shopping.....	.5	.3	.5	.5	.5	.6	.8	.9
Travel related to unpaid household work.....	2.4	1.8	2.4	2.7	2.5	2.3	2.6	1.9
Paid work (total)	31.4	20.9	41.4	41.7	40.6	30.1	10.3	3.1
Work and work-related activities.....	28.9	19.2	38.0	38.2	37.4	27.7	9.5	2.9
Travel related to work and work-related activities ..	2.6	1.8	3.4	3.5	3.2	2.4	.8	.2
Total paid work and unpaid household work	47.4	29.9	57.2	60.0	57.6	47.9	30.2	21.2
Women								
Unpaid household work (total)	26.7	15.9	31.7	33.1	26.7	26.2	28.1	23.8
Household activities	15.5	7.1	13.9	17.0	17.3	18.1	20.9	18.8
Food and drink preparation.....	5.3	2.2	5.3	6.1	5.6	5.9	7.0	6.4
Cleaning.....	4.0	2.3	4.2	4.4	4.0	4.3	5.0	4.5
Laundry and sewing.....	2.5	.9	2.0	2.8	3.0	2.9	3.6	3.1
Household management.....	1.1	.8	.8	1.1	1.2	1.3	1.6	1.5
Lawn and garden care .....	.9	.2	.5	.8	1.1	1.5	1.7	1.6
Maintenance and repair .....	.8	.4	.5	.8	1.1	1.1	.9	.7
Caring for and helping household members	4.4	3.1	10.3	8.1	2.4	1.1	.8	.5
Caring for and helping household children.....	4.1	3.0	10.1	7.8	2.0	.5	.3	.1
Purchasing goods and services.....	3.7	3.3	3.8	4.1	3.8	4.1	3.9	2.8
Grocery shopping.....	.9	.5	1.0	1.1	1.0	1.0	1.1	1.0
Travel related to unpaid household work.....	3.1	2.4	3.7	4.0	3.1	2.9	2.5	1.7
Paid work (total)	21.0	17.4	26.3	27.3	29.1	21.8	5.7	1.2
Work and work-related activities.....	19.5	16.2	24.4	25.3	27.0	20.3	5.3	1.2
Travel related to work and work-related activities	1.5	1.2	1.9	2.0	2.1	1.5	.4	.1
Total paid work and unpaid household work	47.7	33.4	58.0	60.4	55.8	48.0	33.7	25.1

NOTE: The subcategories shown in the table are not an exhaustive list of all subcategories. Data are for persons in the civilian,

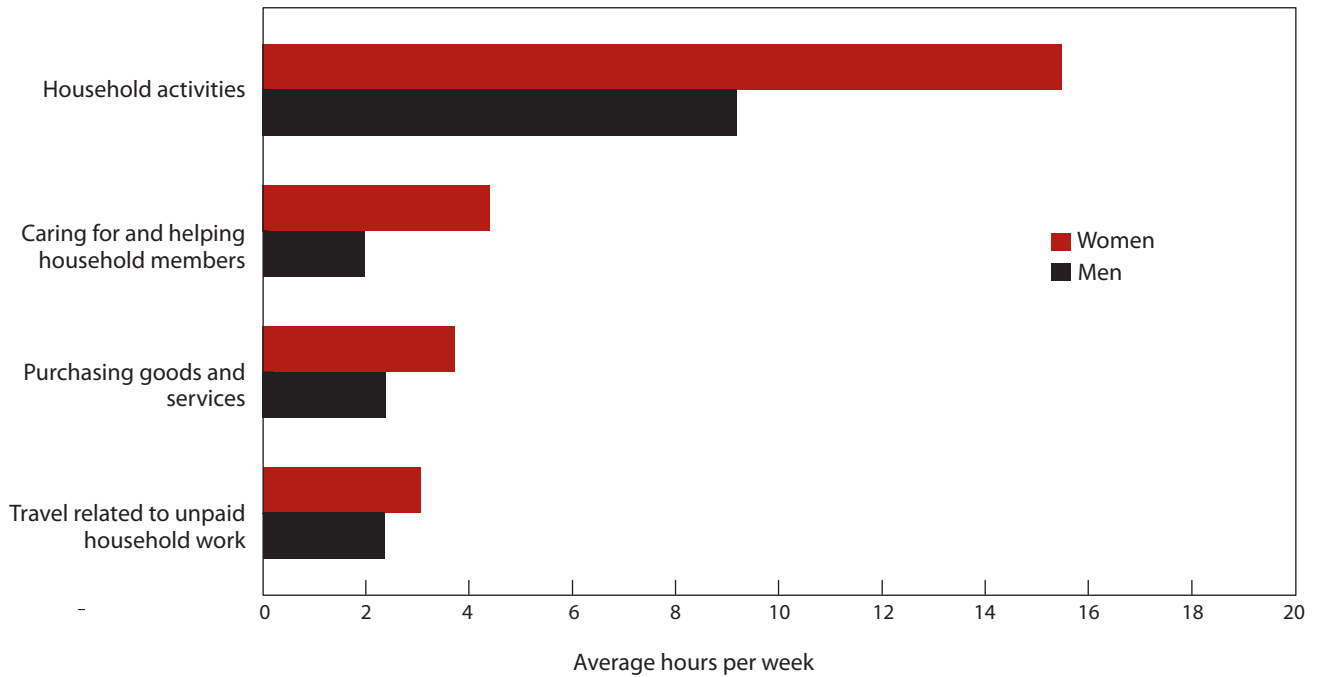
noninstitutional population ages 15 and older.

Table 2. Percent of persons doing unpaid household work and paid work on an average day by age and sex, 2003–07

Type of work	Age							
	Total, 15 and older	15–24	25–34	35–44	45–54	55–64	65–74	75 and older
Total								
Unpaid household work (total)	85	71	86	89	87	87	89	88
Household activities	74	53	71	78	79	81	83	84
Food and drink preparation.....	51	28	51	57	56	58	61	62
Cleaning.....	25	16	24	26	25	26	32	35
Laundry and sewing.....	18	8	16	21	21	20	20	19
Household management.....	17	15	15	19	19	19	20	18
Lawn and garden care.....	10	3	6	9	12	16	19	18
Maintenance and repair.....	10	6	8	11	12	13	14	10
Caring for and helping household members	26	17	44	48	24	10	8	6
Caring for and helping household children.....	22	13	42	45	18	4	2	1
Purchasing goods and services.....	43	39	45	46	44	45	45	36
Grocery shopping.....	14	7	14	15	16	16	18	17
Travel related to unpaid household work.....	51	46	57	59	51	49	49	38
Paid work (total)	46	39	58	59	60	46	16	5
Work and work-related activities.....	46	39	58	59	60	46	16	5
Travel related to work and work-related activities ..	39	35	50	50	50	37	12	3
Total paid work and unpaid household work	93	83	96	98	97	95	92	89
Men								
Unpaid household work (total)	78	63	79	83	81	81	84	82
Household activities	64	45	60	66	71	72	75	75
Food and drink preparation.....	36	20	35	40	41	41	42	45
Cleaning.....	12	10	12	13	13	12	14	16
Laundry and sewing.....	6	4	7	7	7	6	5	5
Household management.....	14	11	13	15	16	17	17	16
Lawn and garden care.....	12	4	7	10	14	19	22	21
Maintenance and repair.....	14	9	11	14	17	19	21	16
Caring for and helping household members	21	10	30	39	21	10	8	7
Caring for and helping household children.....	16	6	27	37	16	4	1	0
Purchasing goods and services.....	39	35	40	40	39	39	45	37
Grocery shopping.....	11	5	10	10	10	13	16	17
Travel related to unpaid household work.....	46	41	48	51	46	45	50	41
Paid work (total)	53	42	68	67	66	51	20	8
Work and work-related activities.....	53	41	67	67	66	51	20	8
Travel related to work and work-related activities	45	37	58	57	56	40	16	5
Total paid work and unpaid household work	91	78	94	96	96	93	89	84
Women								
Unpaid household work (total)	91	79	93	95	93	94	94	91
Household activities	83	62	83	89	88	89	91	89
Food and drink preparation.....	65	35	67	73	70	73	77	73
Cleaning.....	36	23	36	39	35	38	47	47
Laundry and sewing.....	28	11	25	35	35	33	33	27
Household management.....	20	18	17	22	22	21	23	19
Lawn and garden care.....	9	2	5	7	10	13	16	16
Maintenance and repair.....	7	4	5	7	8	8	8	6
Caring for and helping household members	31	24	59	56	27	11	8	5
Caring for and helping household children.....	27	20	57	54	20	5	2	1
Purchasing goods and services.....	47	43	50	52	50	49	45	35
Grocery shopping.....	18	9	18	21	20	20	20	17
Travel related to unpaid household work.....	56	51	66	66	56	53	49	37
Paid work (total)	40	36	49	51	53	42	13	3
Work and work-related activities.....	40	36	49	51	53	42	13	3
Travel related to work and work-related activities	34	33	42	43	44	34	10	2
Total paid work and unpaid household work	95	88	98	99	98	97	95	92

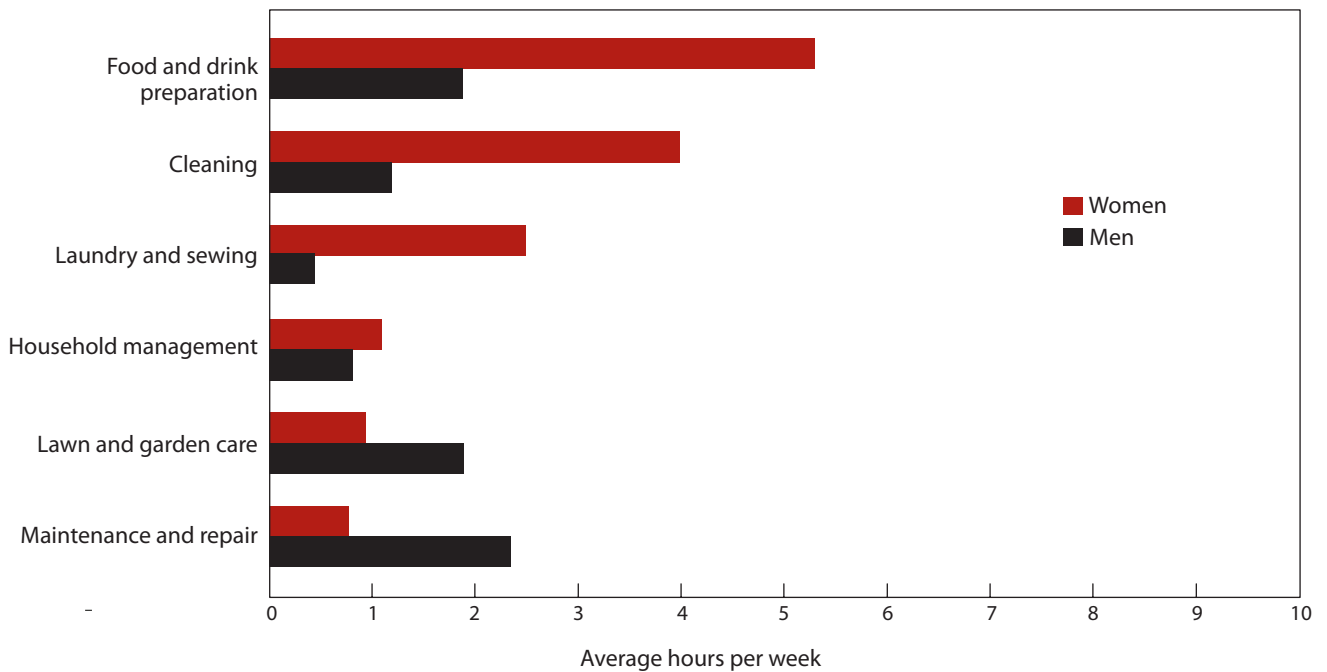
NOTE: The subcategories shown in the table are not an exhaustive list of all subcategories. Data are for persons in the civilian, noninstitutional population ages 15 and older.

Chart 1. Average hours per week spent doing unpaid household work by sex and type of work done, 2003–07



NOTE: Data refer to the civilian noninstitutional population ages 15 and older.

Chart 2. Average hours per week spent doing household activities by sex and type of work done, 2003–07



NOTE: The subcategories shown in the chart are not an exhaustive list of all unpaid household work subcategories. Data refer to the civilian noninstitutional population ages 15 and older.

more equitable time distribution between the sexes. While women spent more time doing unpaid household work than did men, men spent more time doing paid work than did women. Taking paid and unpaid work activities together, men and women each spent about the same number of hours per week working; men spent 47.4 hours per week and women spent 47.7 hours per week doing such activities.¹² (See chart 3.)

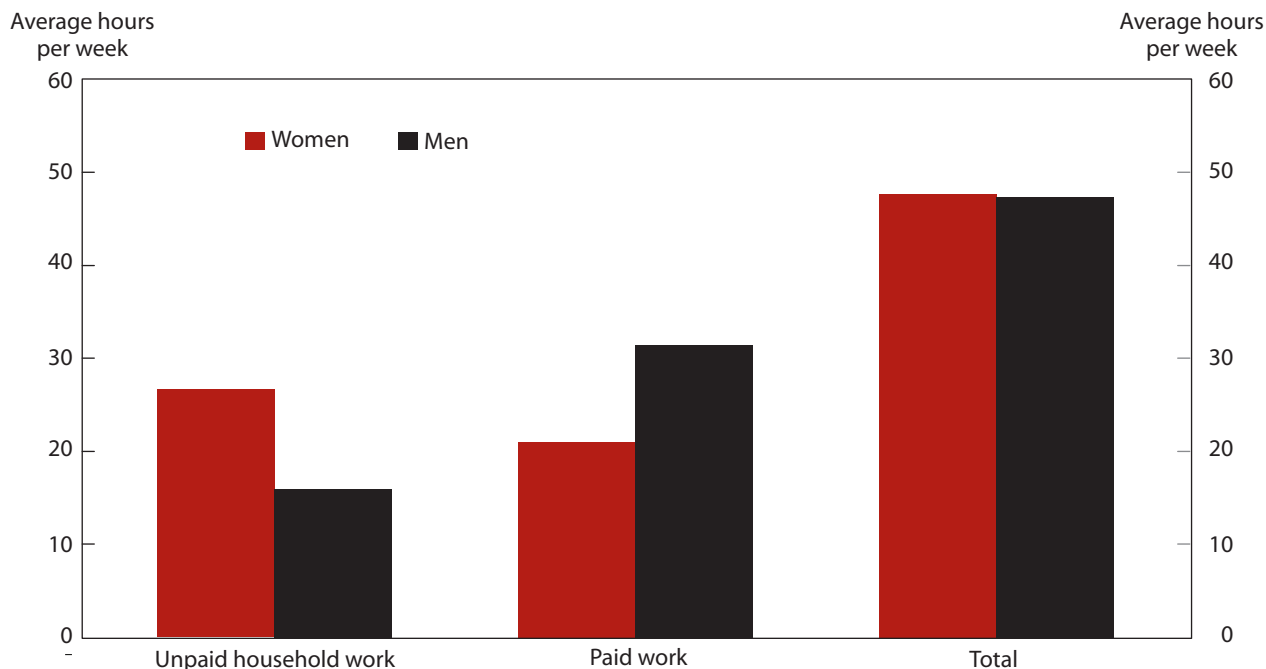
Results by age

Age also is a factor in the time individuals spent doing unpaid household work and paid work. (See table 1.) The total amount of time that individuals spent doing unpaid household work and paid work peaked at about 60 hours per week for both men and women aged 35 to 44. The average hours per week that individuals spent doing unpaid household work also peaked for this age group, at 25.8 hours. Those aged 35 to 44 spent more hours per week in several unpaid household work activities than the overall average, but the largest difference is in the time they spent providing childcare. Individuals in this age group spent

5.9 hours per week caring for and helping household children as a primary activity, second only to those aged 25 to 34. This corresponds to a greater likelihood of being parents; those aged 35 to 44 were more likely to be parents, and more likely to be parents of two or more children than were people in the other age groups.¹³ Individuals aged 35 to 44 spent 34.4 hours per week doing paid work; this average is among the highest for all age groups. The time 35- to 44-year-olds spent doing paid work reflects that they have one of the highest rates of employment among the various age groups—82 percent were employed.

The peak in time spent doing unpaid household work occurred at different ages for men and women. Women aged 35 to 44 spent an average of 33.1 hours per week doing unpaid household work, more than women in the other age groups. They spent 17.0 hours per week doing household activities and 8.1 hours providing care to household members. For men, those aged 65 to 74 spent more time doing unpaid household work than did men in the other age groups; this peak (at 19.9 hours per week) coincides with ages when men traditionally move out of the labor force and into retirement. The data support this

Chart 3. Average hours per week spent doing unpaid household and paid work by sex, 2003–07



NOTE: Data refer to persons who were employed (on days they did and did not work) as well as persons who were not employed; all persons represented in the chart are members of the civilian noninstitutional population ages 15 and older.

movement out of the labor force: 68 percent of men aged 55 to 64 were employed compared to 29 percent of men aged 65 to 74.¹⁴ Much of the time that men aged 65 to 74 spent doing unpaid household work involved doing lawn and garden care (3.9 hours per week), maintenance and repair (3.5 hours per week), and purchasing goods and services (3.3 hours per week). (See table 1.)

Much like men in the same age group, women aged 65 to 74 were less likely to be employed and spent more time doing unpaid household work than did women aged 55 to 64. The estimates for persons aged 50 and older coincide with what one would expect to observe when individuals depart the labor force—even though these data represent a cross-section of the population and do not track individuals' time use longitudinally. (See chart 4.)¹⁵ Theory suggests that after individuals depart the labor force they will spend more time doing unpaid household work because both their incomes and the opportunity cost of their time are lower than when they were employed.¹⁶ People who have exited the labor force would thus substitute household production for some purchased goods and services. For example, they may spend more time preparing and eating meals at home and eat at restaurants less often, or they may clean their own homes rather than hiring a cleaning service.

For people aged 50 and older, the average hours per week individuals spent doing unpaid household work edged up as age increased, until leveling off around age 66. By contrast, the hours people aged 50 and older spent doing paid work shrank as age increased, coinciding with a decline in the share of the population that was employed and a decrease in work hours for those who were employed. Two of the major activity categories that make up unpaid household work are household activities, and caring for and helping household members. Growth in time spent doing household activities drove the increase in unpaid household work time for individuals older than 50; this contrasts with the earlier peak in time spent doing unpaid household work, in which caring for and helping household members was an important component. (See chart 5.)¹⁷ People aged 65 to 74 spent more time doing a variety of household activities than did those aged 55 to 64, including more time spent in food and drink preparation, cleaning, lawn and garden care, and laundry and sewing. Individuals at the top end of the age range, those aged 75 and older, spent less time doing unpaid household work than did individuals aged 65 to 74 and less time overall doing unpaid household work and paid work than did people in the younger age groups; declining health may be one reason for this decrease.¹⁸ (See table 1.)

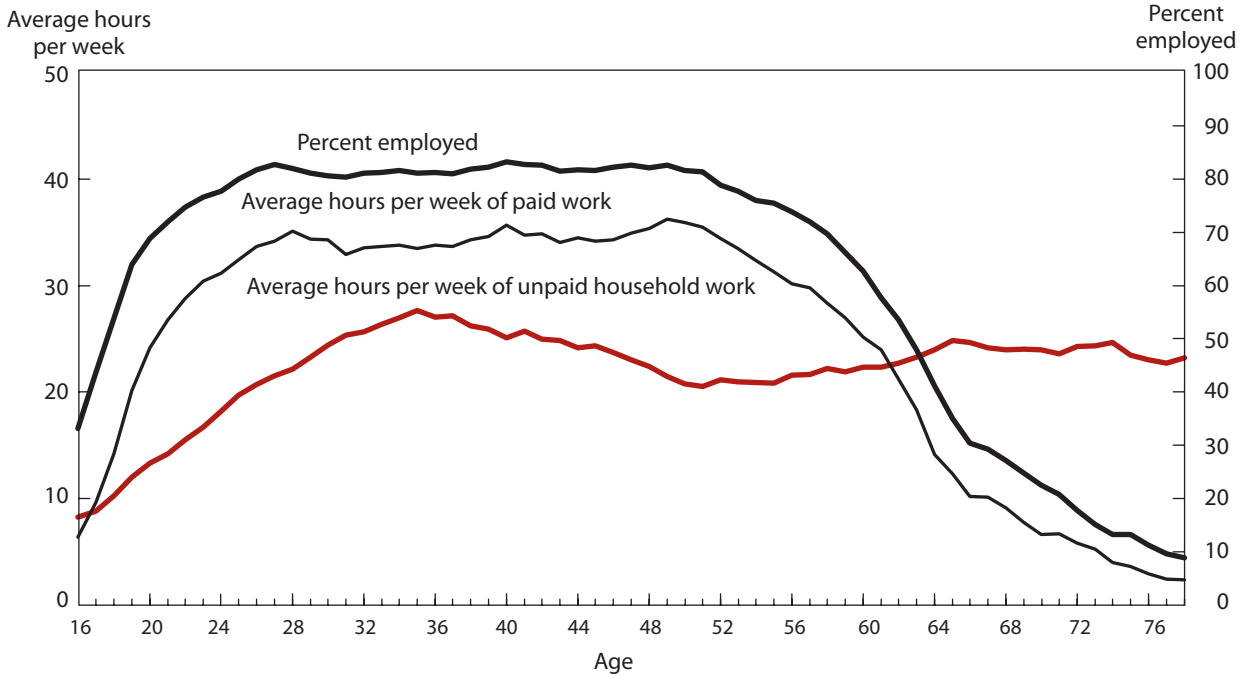
Results for parents living with their children

For individuals aged 25 to 44, a major component of the total time they spent doing unpaid household work was spent caring for and helping household children. About 60 percent of individuals in this age group were parents living with their children.¹⁹ A closer look at the time parents spent doing unpaid household work and paid work for those living with one, two, three, and four or more of their own children finds some systematic variation. The time parents spent doing several unpaid household work activities increased with the presence of additional children—time spent in food and drink preparation, cleaning, laundry and sewing, caring for and helping household children, and travel related to unpaid household work all increased with the number of children. In total, parents living with 4 or more of their own children spent nearly 11 additional hours per week doing unpaid household work than did parents living with 1 child. (See table 3.)

The time mothers spent doing unpaid household work increased by an average of almost 6 hours per week with the presence of one additional child; the difference was greatest between mothers of one child and those with two children, and shrank slightly with the presence of each additional child. Nearly one-half of this gain was in the time mothers spent providing childcare. Corresponding with an increase in the number of children was a drop in mothers' labor force²⁰ participation and the average time they spent doing paid work. Seventy-eight percent of mothers with one child were in the labor force, compared to 56 percent of mothers of four or more children. (See table 4.) The share of mothers who were employed full time steadily declined with the presence of each additional child, while the percent of mothers who were employed part time remained about the same. The time mothers spent doing paid work decreased from an average of 26.2 hours per week for mothers of one child to 15.0 hours for those with four or more children.

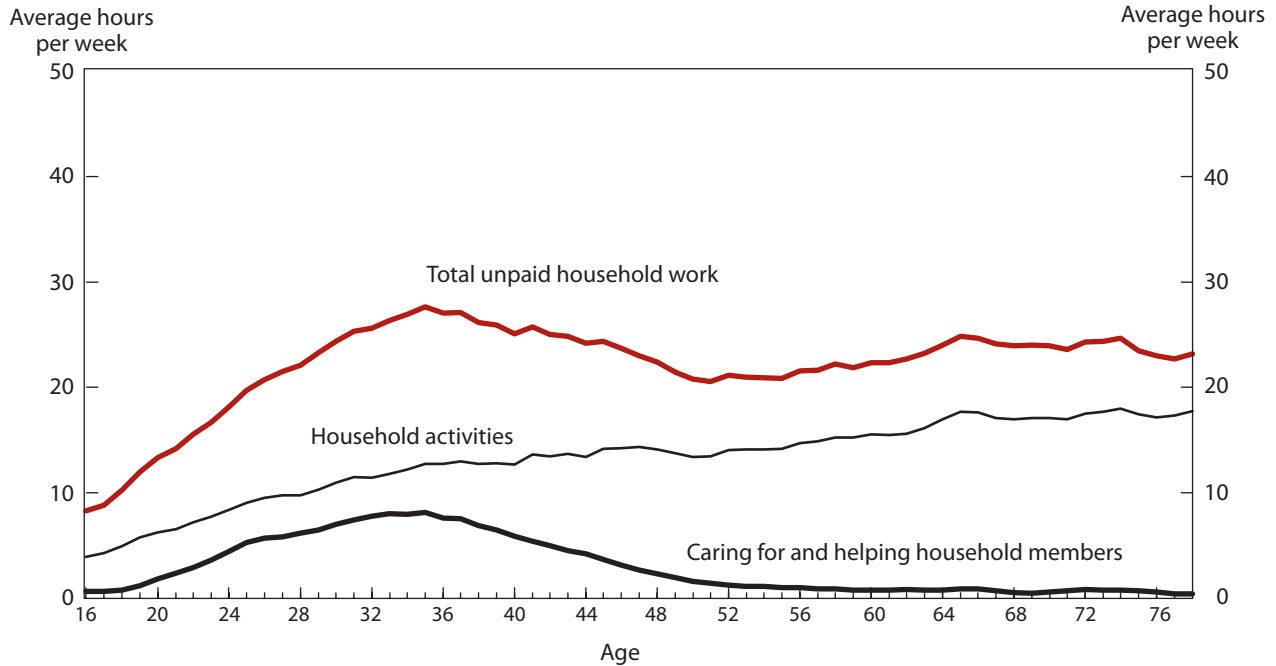
The presence of additional children was less of a factor in the time fathers spent doing unpaid household work and paid work than it was in the time mothers spent doing these activities. Fathers of two children spent 2.5 hours more per week doing unpaid household work than did fathers of one child, but fathers of three and four or more children spent about the same amount of time doing these activities as did those with two children present (about 22 hours per week). Fathers were more likely to be in the labor force and employed full time than were mothers, and on average they spent almost twice as much time doing paid work as did mothers (42.5 hours per week versus 22.9 hours per week).

Chart 4. Average hours per week spent doing unpaid household and paid work and percent employed by age, 2003–07



NOTE: Data are averages for a 3-year age range, centered on the age shown; this was done to smooth the lines. The averages are for the civilian noninstitutional population; this includes persons who were employed full time, employed part time, and persons who were not employed.

Chart 5. Average hours per week spent doing unpaid household work and two of the major activities included in household work by age, 2003–07



NOTE: Data are averages for a 3-year age range, centered on the age shown; this was done to smooth the lines. The averages are for the civilian noninstitutional population; this includes persons who were employed full time, employed part time, and persons who were not employed.

Table 3. Average weekly hours parents spent doing unpaid household work by number of own household children, 2003–07

Type of work	Number of own household children				
	Total, 1 or more children	1 child	2 children	3 children	4 or more children
Total					
Unpaid household work	30.4	26.8	31.3	34.8	37.5
Household activities	13.8	12.6	14.0	15.5	16.8
Food and drink preparation	4.8	4.1	4.8	5.7	6.6
Cleaning.....	3.2	2.8	3.3	3.9	4.3
Laundry and sewing.....	1.8	1.7	1.7	2.0	2.5
Household management .....	.8	.9	.9	.8	.8
Lawn and garden care	1.1	1.1	1.2	1.1	1.0
Maintenance and repair.....	1.5	1.4	1.6	1.4	1.2
Caring for and helping household members	9.3	7.3	10.1	11.6	13.0
Caring for and helping household children	9.1	7.1	9.8	11.4	12.9
Purchasing goods and services.....	3.4	3.4	3.5	3.5	3.3
Grocery shopping .....	.9	.9	.9	.9	.9
Travel related to unpaid household work	3.8	3.5	3.8	4.2	4.3
Paid work	31.7	32.6	32.4	29.1	27.4
Work and work-related activities.....	29.2	30.1	29.8	26.7	25.2
Travel related to work and work-related activities	2.5	2.5	2.6	2.3	2.2
Total paid work and unpaid household work	62.0	59.4	63.7	63.9	64.8
Fathers					
Unpaid household work	20.9	19.3	21.8	22.0	22.1
Household activities	9.2	9.0	9.4	9.5	9.0
Food and drink preparation	2.2	2.1	2.3	2.5	2.6
Cleaning.....	1.3	1.1	1.3	1.4	1.4
Laundry and sewing.....	.5	.5	.4	.4	.5
Household management .....	.7	.7	.8	.6	.6
Lawn and garden care	1.6	1.6	1.7	1.7	1.3
Maintenance and repair.....	2.4	2.4	2.5	2.4	2.2
Caring for and helping household members	6.0	4.7	6.7	7.3	7.7
Caring for and helping household children	5.9	4.5	6.5	7.1	7.5
Purchasing goods and services.....	2.5	2.6	2.6	2.3	2.2
Grocery shopping .....	.5	.6	.5	.6	.4
Travel related to unpaid household work	3.1	3.1	3.1	3.0	3.3
Paid work	42.5	40.8	43.8	43.8	42.3
Work and work-related activities.....	38.9	37.4	39.9	40.0	38.7
Travel related to work and work-related activities	3.6	3.4	3.8	3.8	3.6
Total paid work and unpaid household work	63.4	60.1	65.5	65.8	64.4
Mothers					
Unpaid household work	38.1	32.6	39.5	45.1	50.2
Household activities	17.6	15.4	17.9	20.4	23.3
Food and drink preparation	6.8	5.6	7.0	8.3	9.9
Cleaning.....	4.8	4.1	4.9	5.9	6.7
Laundry and sewing.....	2.9	2.6	2.9	3.3	4.2
Household management .....	.9	1.0	.9	1.0	.9
Lawn and garden care .....	.7	.7	.7	.6	.8
Maintenance and repair.....	.7	.7	.8	.7	.3
Caring for and helping household members	12.0	9.2	12.9	15.1	17.4
Caring for and helping household children	11.8	9.1	12.7	14.9	17.3
Purchasing goods and services.....	4.2	4.0	4.2	4.4	4.2
Grocery shopping	1.1	1.1	1.2	1.2	1.4
Travel related to unpaid household work	4.4	3.8	4.5	5.2	5.2
Paid work	22.9	26.2	22.7	17.2	15.0
Work and work-related activities.....	21.3	24.4	21.2	16.0	13.9
Travel related to work and work-related activities	1.6	1.8	1.5	1.2	1.1
Total paid work and unpaid household work	61.0	58.8	62.2	62.3	65.1

Note: Data refer to parents ages 15 and older who were living in the same household as their biological, step-, or adopted children under age 18. The subcategories shown in the table are not an exhaustive list of all unpaid household work subcategories.

Table 4. Percent of mothers and fathers in the labor force¹ and the percent employed by number of own household children, 2003–07

Status	Number of own household children			
	1 child	2 children	3 children	4 or more children
Labor force¹				
Fathers	93	96	96	95
Mothers	78	73	63	56
Employed				
Fathers	89	93	93	91
Mothers	73	67	57	50
Employed full time				
Fathers	84	90	89	87
Mothers	53	46	34	29
Employed part time				
Fathers	5	3	4	5
Mothers	19	22	23	22

¹ The labor force refers to all persons who are employed or looking for work.

Note: Data refer to parents ages 15 and older who were living in the same household as their biological, step-, or adopted children under age 18. These estimates do not correspond to published ratios from the Current Population Survey (CPS) for several reasons. First, the reference population for the ATUS is age 15 years and older, whereas it is age 16 years and older for the CPS. Second, ATUS data are collected continuously, the employment reference period being the 7 days prior to the interview. By contrast, CPS data refer to employment during the week containing the 12th of the month. Finally, the CPS accepts answers from household members about other household members whereas such proxy responses are not allowed in the ATUS.

employment status, and the number of own household children in the time individuals spent doing unpaid household work. Traditional gender roles prevailed in 2003–07—women spent more hours per week doing unpaid household work than did men; however, men spent more time doing paid work than did women. Overall, the total time that men and women aged 15 and older spent doing either paid work or unpaid household work was about the same.

The time individuals spent doing unpaid household work, and the type of household work they did, varied by age. Time spent in many unpaid household work activities increased with age for those 50 to 66 years old (see chart 4), and coincided with a decline in the share of the population who were employed. The peak in unpaid household work time, however, occurred for those in their mid-thirties, and largely was driven by the time they spent caring

Conclusion

Time-use data are instrumental in quantifying the economic contributions of unpaid household labor. In this article, results from the 2003–07 ATUS were tabulated to show the time individuals spent doing unpaid household work and thus quantify the labor time resources involved in household production. The data show differences by gender, age,

for and helping household children. Taking a look specifically at parents of one, two, three, or four or more children showed that when more children were present in a household, mothers were less likely to be employed, spent less time doing paid work, and spent more time doing unpaid household work; the time fathers spent in these activities and their labor force participation were less responsive to the number of children living in their household. □

Notes

¹ Determining a value for unpaid household work is a complex undertaking, one that requires a method for valuing that time as well as information about the time involved in these activities. For more information about this subject, see: Katharine G. Abraham and Christopher Mackie, eds., *Beyond the Market: Designing Nonmarket Accounts for the United States* (Washington, D.C., The National Academies Press, 2005).

² Information is collected about times when survey respondents had a child “in their care” while doing their primary activities, but this information is not used in this analysis.

³ This analysis uses the 2003–07 pooled data set and corresponding activity coding lexicon, both are available at: www.bls.gov/tus/datafiles_my.htm.

⁴ More information about the American Time Use Survey is on the Bureau of Labor Statistics Web site at: www.bls.gov/tus/.

⁵ For survey respondents who are employed, the interviewer asks “Were there any activities that were done as a part of your job?” Respondents with

more than one job also are asked, “Were there any activities that were done as a part of your other job?” All survey respondents are asked a variant of the following question, “Were there any other activities that you were paid for or will be paid for?” For this final question, the interviewer instructs employed respondents not to include paid breaks at work or paid time off.

⁶ Margaret G. Reid, *Economics of Household Production* (New York, John Wiley and Sons, Inc., 1934).

⁷ See page 171 of Katharine G. Abraham and Christopher Mackie, *Framework for Nonmarket Accounting*, a chapter in Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, eds., *A New Architecture for the U.S. National Accounts* (University of Chicago Press, May 2006); on the Internet at www.nber.org/books/jorg06-1 (visited Jan. 12, 2009).

⁸ An “average day” is an average across all 7 days of the week.

⁹ The term “children,” as used in the ATUS and in this article, refers to individuals under age 18. “Household children” refers to all children living in the

household, whether or not they were related to the individual who was interviewed about his use of time.

¹⁰ These estimates do not correspond to published ratios from the Current Population Survey (CPS) for several reasons. First, the reference population for the ATUS is age 15 years and older, whereas it is 16 years and older for the CPS. Second, ATUS data are collected continuously, the employment reference period being the 7 days prior to the interview. By contrast, CPS data refer to employment during the week containing the 12th of the month. Finally, the CPS accepts answers from household members about other household members whereas such proxy responses are not allowed in the ATUS.

¹¹ Persons employed part time usually work less than 35 hours per week; persons employed full time usually work 35 or more hours per week.

¹² The difference between these estimates is not statistically significant at a 90 percent confidence level.

¹³ These statements refer specifically to parents who were living in the same household as their biological, step-, or adopted children under age 18.

¹⁴ The labor force consists of all persons who are employed and unemployed.

There was little difference in the percent of men aged 55 to 64 and 65 to 74 who were unemployed.

¹⁵ Note also that chart 4 shows averages for a 3-year age range, centered on the age shown. This was done to smooth the lines.

¹⁶ Gary S. Becker. "A Theory of the Allocation of Time." *The Economic Journal*, 1965, vol. 75, No. 299, pp. 493–517.

¹⁷ Note also that chart 5 shows averages for a 3-year age range, centered on the age shown. This was done to smooth the lines.

¹⁸ Results from the 2006 and 2007 ATUS Eating and Health modules show that persons aged 75 and older were more likely to describe their general health as "fair" or "poor" and less likely to describe it as "excellent" or "very good" than were persons aged 65 to 74 or younger.

¹⁹ These data refer specifically to parents who were living in the same household as their biological, step-, or adopted children under age 18.

²⁰ The labor force is comprised of all persons who are employed, looking for work, or on temporary layoff from a job.

APPENDIX: 2003–07 ATUS activity categories classified as unpaid household work			
Name of unpaid household work category	6-digit activity code¹	6-digit activity code name	
Household activities	Cleaning	020101	Interior cleaning
	Laundry and sewing	020102	Laundry
		020103	Sewing, repairing, and maintaining textiles
	Other housework	020104	Storing interior household items, inc. food
		020199	Housework, n.e.c. ²
	Food and drink preparation	020201	Food and drink preparation
		020202	Food presentation
		020203	Kitchen and food clean-up
		020299	Food and drink prep, presentation, and clean-up, n.e.c. ²
	Maintenance and repair	020301	Interior arrangement, decoration, and repairs
020302		Building and repairing furniture	
020303		Heating and cooling	
020399		Interior maintenance, repair, and decoration, n.e.c. ²	
020401		Exterior cleaning	
020402		Exterior repair, improvements, and decoration	
020499		Exterior maintenance, repair and decoration, n.e.c. ²	
020701		Vehicle repair and maintenance (by self)	
020799		Vehicles, n.e.c. ²	
020801	Appliance, tool, and toy set-up, repair, and maintenance (by self)		
020899	Appliances and tools, n.e.c. ²		
Lawn and garden care	020501	Lawn, garden, and houseplant care	
	020502	Ponds, pools, and hot tubs	
	020599	Lawn and garden, n.e.c. ²	
Pet care	020601	Care for animals and pets (not veterinary care)	
	020699	Pet and animal care, n.e.c. ²	
Household management	020901	Financial management	
	020902	Household and personal organization and planning	
	020905	Home security	
	020999	Household management, n.e.c. ²	
Household activities, n.e.c. ²	029999	Household activities, n.e.c. ²	
Caring for and helping household members	Caring for and helping household children	030101	Physical care for household children
		030102	Reading to/with household children
		030103	Playing with household children, not sports
		030104	Arts and crafts with household children
		030105	Playing sports with household children
		030186	Talking with/listening to household children
		030108	Organization and planning for household children
		030109	Looking after household children (as a primary activity)
		030110	Attending household children's events
		030111	Waiting for/with household children
		030112	Picking up/dropping off household children
		030199	Caring for and helping household children, n.e.c. ²
		030201	Homework (household children)
		030202	Meetings and school conferences (household children)
		030203	Home schooling of household children
		030204	Waiting associated with household children's education
	030299	Activities related to household child's education, n.e.c. ²	
	030301	Providing medical care to household children	
	030302	Obtaining medical care for household children	
	030303	Waiting associated with household children's health	
	030399	Activities related to household child's health, n.e.c. ²	
	Caring for and helping household adults	030401	Physical care for household adults
		030402	Looking after household adult (as a primary activity)
		030403	Providing medical care to household adult
		030404	Obtaining medical and care services for household adult
		030405	Waiting associated with caring for household adults
		030499	Caring for household adults, n.e.c. ²
030501		Helping household adults	
030502		Organization and planning for household adults	
030503		Picking up/dropping off household adult	
030504	Waiting associated with helping household adults		
030599	Helping household adults, n.e.c. ²		
Caring for and helping household members, n.e.c. ²	039999	Caring for and helping household members, n.e.c. ²	

APPENDIX: Continued—2003–07 ATUS activity categories classified as unpaid household work

Name of unpaid household work category	6-digit activity code ¹	6-digit activity code name
Purchasing goods and services	070101	Grocery shopping
	070102	Purchasing gas
	070103	Purchasing food (not groceries)
	070104	Shopping, except groceries, food and gas
	070105	Waiting associated with shopping
	070199	Shopping, n.e.c. ²
	070201	Comparison shopping
	070299	Researching purchases, n.e.c. ²
	070301	Security procedures related to consumer purchases
	070399	Security procedures related to consumer purchases, n.e.c. ²
	079999	Consumer purchases, n.e.c. ²
	080101	Using paid childcare services
	080102	Waiting associated with purchasing childcare services
	080199	Using paid childcare services, n.e.c. ²
	080201	Banking
	080202	Using other financial services
	080203	Waiting associated with banking/financial services
	080299	Using financial services and banking, n.e.c. ²
	080601	Activities related to purchasing/selling real estate
	080602	Waiting associated with purchasing/selling real estate
	080699	Using real estate services, n.e.c. ²
	080701	Using veterinary services
	080702	Waiting associated with veterinary services
	080799	Using veterinary services, n.e.c. ²
	090101	Using interior cleaning services
	090102	Using meal preparation services
	090103	Using clothing repair and cleaning services
	090104	Waiting associated with using household services
	090199	Using household services, n.e.c. ²
	090201	Using home maint/repair/décor/construction services
	090202	Waiting associated with home main/repair/décor/construction
	090299	Using home maint/repair/décor/construction services, n.e.c. ²
	090301	Using pet services
	090302	Waiting associated with pet services
	090399	Using pet services, n.e.c. ²
	090401	Using lawn and garden services
	090402	Waiting associated with using lawn and garden services
	090499	Using lawn and garden services, n.e.c. ²
	090501	Using vehicle maintenance or repair services
	090502	Waiting associated with vehicle maint. or repair services
090599	Using vehicle maint. and repair services, n.e.c. ²	
099999	Using household services, n.e.c. ²	
100103	Obtaining licenses and paying fines, fees, taxes	
100302	Waiting associated with obtaining licenses	
160104	Telephone calls to/from salespeople	
160106	Telephone calls to/from household services providers	
160107	Telephone calls to/from paid child or adult care providers	
160108	Telephone calls to/from government officials	
Travel related to unpaid household work	180280	Travel related to household activities
	180381	Travel related to caring for and helping household children
	180382	Travel related to caring for and helping household adults
	180399	Travel related to caring for and helping household members, n.e.c. ²
	180701	Travel related to grocery shopping
	180782	Travel related to shopping (except grocery shopping)
	180801	Travel related to using childcare services
	180802	Travel related to using financial services and banking
	180806	Travel related to using real estate services
	180807	Travel related to using veterinary services
	180901	Travel related to using household services
	180902	Travel related to using home main./repair/décor./construction services
	180903	Travel related to using pet services (not veterinary)
	180904	Travel related to using lawn and garden services
	180905	Travel related to using vehicle maintenance and repair services
180999	Travel related to using household services, n.e.c. ²	

¹ These 6-digit activity codes correspond to the ATUS 2003–07 pooled lexicon (www.bls.gov/tus/lexiconnoex0307.pdf).

² N.E.C. refers to “not elsewhere classified.”