



LIFETIME TOTAL PHYSICAL ACTIVITY QUESTIONNAIRE COMPREHENSIVE USERS' GUIDE

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Interviewer Guidelines

Review of Interviewing Methods

The most important reminder that we can give you is to remain neutral, non-judgemental and friendly throughout the interview. We must ensure that the study participant understands the questions, is able to retrieve the information from memory and can estimate and formulate his/her responses in an honest and unbiased manner. You will provide him/her with memory probes and cues that are appropriate to the question. These are described in the relevant sections of this manual. There are no "correct" answers for these questions. We simply want the participant to provide us with accurate and honest answers to the questions.

During the pre-testing of the questionnaire, we have been using cognitive interviewing methods to help a participant remember events, activities etc. from the past. During the actual data collection, we will be using more structured probes and memory aids in the interviews. It will not be necessary to understand in detail how the participant came up with an answer. We will simply be helping him/her recall the necessary information. The most useful tool for the recall assistance will be the **Life Events Calendar (Appendix 1)**. Have it spread out before you when you are asking the questions so that both you and the study participant can refer to it.

Physical Activity Habits

This section asks about the frequency, duration and intensity of the following activities that the participant has done during his/her lifetime up to the reference date.

- Employment & Volunteer Activities
- Household Activities
- Exercise & Sports Activities

Please refer to the Life Events Calendar when conducting this portion of the interview. The calendar should help the participant remember what he/she has done throughout his/her life. Please ask him/her to report as best as he/she can and ensure that you answer any questions if anything is unclear. Remember to use memory probes and cues (**see supplemental guide**) to help the participant retrieve the information from memory.

Employment and Volunteer Activities

The minimum number of hours for employment or volunteer activity to be included is:

- 128 hours total per year, or
- 2.5 hours per week per year, or
- 8 hours per week for 4 months, if seasonal

Please ask the participant to report all the jobs, paid or volunteer, that he/she has done throughout his/her life up to the reference date. Begin by asking him/her about the first job that he/she did during adolescence and continue up to the reference date. Remind the participant of the minimum number of hours for the job to be included.

For each paid or volunteer job, ask the participant to report the following:

- a) The job title
- b) A description of employment activities up to a maximum of 3 (**see Occupational and Volunteer Activity Codes**)
- c) His/her age when he/she started the job
- d) His/her age when he/she ended the job
- e) The number of months per year of the job
- f) The number of days per week of the job
- g) The number of hours per day of the job
- h) His/her physical intensity level of the job
- i) Whether he/she walked, cycled or went by roller blades, or ran to work
- j) The time per day for walking, cycling, rollerblading or running to work.

Remember to use a separate entry when a new job begins, when the frequency (months per year or days per week) of a job changes, when the duration (hours per day) changes, when the intensity level changes, or when the pattern of walking (or cycling, rollerblading, or running) to work changes.

Use memory probes such as where he/she was residing, with whom he/she was living, and other aspects of his/her personal life to help the participant recall the information.

There are four categories of physical intensity level for employment and volunteer activities (**see LTPAQ Intensity Levels**). Physical intensity level must be coded as a whole number. If the participant insists that his/her intensity level falls between two categories, then record what he/she says, but code it by rounding down to the lower category (1.5 = 1; 2.5 = 2; 3.5 = 3).

Category 1 Jobs that require only sitting with minimal walking.

Category 2 Jobs that require a minimal amount of physical effort such as standing and slow walking. There is no increase in heart rate and there is no perspiration.

Category 3 Jobs that require carrying light loads and continuous walking. These activities would increase the heart rate slightly and may cause some light perspiration.

Category 4 Jobs that require carrying heavy loads, brisk walking, and climbing. These jobs would increase the heart rate substantially and cause heavy sweating.

Household Activities

The minimum number of hours for household activity to be included is:

- 112 hours total per year, or
- 2.15 hours per week per year, or
- 7 hours per week for 4 months, if seasonal

Please ask the participant to report his/her patterns of household and gardening activities since his/her childhood. Remind the participant of the minimum number of hours for the activity to be included. Ask him/her to think about how many hours of the following he/she does in a typical day. Household activities includes the following:

- housework – cooking, cleaning, laundry, ironing, etc.
- yard work – gardening, cutting grass, raking leaves, shovelling snow, washing vehicles
- home repair and maintenance – renovations, do-it-yourself projects
- childcare

Note: Sedentary activities (e.g., sewing, bookkeeping, chauffeuring children) are not included.

For seasonal activities, such as gardening, he/she can report those separately from all other household activities that are done all year. Then ask him/her to estimate how many of those hours are spent in the 3 categories of physical intensity level. For example, if the participant estimates he/she spends 3 hours/day in various household activities, he/she may say that most of it (2 hours) was of light intensity (category 2) and that the remainder (1 hour) was of moderate intensity (category 3).

For each pattern of household activity, ask the participant to report the following:

- a) His/her age when she started the pattern of household activity
- b) His/her age when she ended the pattern of household activity
- c) The number of months per year that he/she does these household activities
- d) The number of days per week that he/she does these activities
- e) The number of hours per day spent in the 3 categories of physical intensity level.

Remember that we are interested in assessing patterns of activity over the participant's lifetime. Use memory probes and cues to help the participant recall the information (**see supplemental guide**). Most

people will be able to report their usual patterns quite easily so long as we do not ask them for very specific details about any individual activity.

There are 3 categories of physical intensity level for household activities (**see LTPAQ Intensity Levels**)

- | | |
|-------------------|--|
| Category 2 | Activities that require minimal physical effort such as those activities that are done standing or with slow walking. |
| Category 3 | Activities that are not exhausting, that increase the heart rate slightly and may cause some light perspiration. |
| Category 4 | Activities that increase the heart rate and cause heavy sweating. These activities include those that require lifting, moving heavy objects, rubbing vigorously for fairly long periods. |

Reminder: Sedentary activities (e.g., sewing, bookkeeping, chauffeuring children) are not included.

Exercise and Sporting Activities

The minimum number of hours for an exercise and sport activity to be included is:

- 32 hours total per year, or
- 40 minutes per week per year, or
- 2 hours per week for 4 months, if seasonal

Please ask the participant to report all the exercise and sports activities that he/she has done since his/her childhood. Remind the participant of the minimum number of hours for the activity to be included (**see LTPAQ Activity Minimums**).

For each exercise or sport activity, ask the participant to report the following:

- a) His/her age when he/she started the exercise or sport
- b) His/her age when he/she ended the exercise or sport
- c) His/her usual pattern (frequency)
- d) His/her usual duration (hours per day)
- e) His/her intensity level

Remember that we are interested in reporting uniform patterns of activity. Hence, if someone reports multiple episodes of the same activity over the years, record each episode separately. It is very important to be able to calculate the amount of physical activity by age category. If there is a change in the frequency (months or days) or duration (hours) of the activity without actually discontinuing the activity for a certain length of time, you must start a new line because of the change in pattern.

Frequency of an activity can be reported as daily, weekly, monthly or yearly. Time per activity must be recorded in hours, up to two decimal places. Remember that it is the total time spent actually doing the activity that we want.

There are 3 categories of physical intensity level for exercise and sports activities (**see LTPAQ Intensity Levels**). Physical intensity level must be coded as a whole number. If the participant insists that his/her intensity level falls between two categories, then record what he/she says, but code it by rounding down to the lower category (2.5 = 2; 3.5 = 3).

- | | |
|-------------------|--|
| Category 2 | Activities that require minimal physical effort. |
| Category 3 | Activities that are not exhausting, that increase the heart rate slightly and may cause some light perspiration. |
| Category 4 | Activities that increase the heart rate and cause heavy sweating. |

Supplemental Guide

Overview

Some participants will be able to answer the LTPAQ with ease.

The Life Events Calendar (LEC) helps to make for a shorter LTPAQ, due to less time spent on probing.

Even if the participant was well prepared, sometimes a lengthy LTPAQ is the result.

Some participants will not be able to answer the LTPAQ with ease. This supplement includes probes for such interviews. Specific column headings in the LTPAQ are addressed, and typical questions and probes are described.

- *Life Events Calendar (LEC) “homework” done*
- *able to form answers quickly, concisely*
- *able to estimate parameters (age, frequency, duration, intensity) with confidence*
- *remind participants to complete the calendar (during phone calls to set up and confirm interviews)*
- *not a pre-requisite for being interviewed*
- *suggest, at minimum, that they list all jobs and sports*
- *as a last resort say, “we can work through it when I’m there”*
- *can’t stay focussed – digress often; longwinded stories; lonely*
- *has too much information to share – LEC is overflowing with information*
- *didn’t get to prepare for all the parameters; household*
- *can’t remember so much detail (every parameter we ask)*
- *unprepared for interview (LEC not done for various reasons – literacy issues; lost or misplaced it; no time to complete it; or too overwhelming)*
- *unable to form answers quickly, concisely*
- *unable to estimate parameters with confidence*

Occupational & Volunteer Activities

“We include any job that you did for at least 128 hours all year. If it wasn’t that much in total, then I won’t include it. That works out to 2.5 hours/week, which would be about 10-12 hours/month.”

Job Title

“What was the very first job you had?”

“We do count ____ as occupations. Did you do any of those?”

babysitting
deliver newspapers
part-time jobs
post-secondary studies

UNIVERSITY DEGREE “So, was that 4 years of full-time studies for 8 months of the year?”

“And does full-time mean 5 days/wk for about 8 hours/day?”

FARMING “As a child, if it was paid, then I can count it as a job. If it was for your own farm and you weren’t paid, then I will save it for household activities, as part of your chores. Once you began doing farm work ‘full-time’, then I’d count it as a job – your livelihood.”

- *helps to limit which jobs will be included*
- *e.g., 1 month of FT work meets minimum (40 hours/week x 4 weeks/month x 1 month=160 hours)*
- *note: 1 month = 4 weeks; therefore, 1 year = 48 weeks*
- *I always start with this item*
- *emphasis on 1st*
- *probe for these if participant starts off with what seems to be the first full-time job*
- *be sure to probe for post-secondary education for jobs that required formal training (e.g., nurse, accountant, etc.)*
- *begin with part-time jobs done as adolescents.*
- *university is usually 8 months of the year*
- *some technical programs are year round, so always confirm*
- *probe for jobs worked while in school and over summers*
- *record what the participant states*
- *‘hours per day’ includes classes, labs and time spent studying*
- *participants who grew up on farms will generally have more household activities to record as children compared to city dwellers*
- *year-round, full-time farming, regardless of age, is counted as a job*

MULTIPLE JOBS, SAME FIELD (e.g., teacher) “So, you taught for 30 years in total, consecutively?”

Occupational Activities

“What did you mostly do on the job, physically-speaking? Did you mainly sit, stand, walk, etc.? I can code up to 3 main activities.

What would you say you did for 5-6 hours out of your 8 hour day?”

Intensity

“And how heavy would you say that was for you?”

Last Probe

“Have you done any volunteer jobs in your life? It would have to be for at least 10-12 hours/month, every month, year round to meet the minimum.”

- *we can record this information all on one line, as long as all parameters (occupational activities; months/yr; days/wk; hrs/day; intensity level; walk/bike pattern) are the same, and no years were skipped*
- *keep it limited to the main 3 activities that make up the bulk of the participant’s work day*
- *very different activities can be recorded on 2 lines to capture the dichotomy of the job’s activities (e.g., fire fighter – sit, fight fires)*
- *keep the participant focussed on rating the majority of the day, not just one or two spurts of heavy activity*
- *summarize and reflect, especially when things seem to be incongruent (e.g., truck driver, PIL 4)*
- *explain we are talking about physiology – sweating and increased heart rate – and whether the physical activities of the job cause it*
- *do not include non-physical aspects of the job claimed to cause sweating or increase heart rate (the degree to which a job is ‘stressful,’ ‘mentally challenging/exhausting,’ ‘exciting,’ ‘frustrating,’ ‘anxiety-causing,’ etc.)*
- *record what the participant states; if it seems incongruent, make a note in the comments section*
- *Always ask this question to end the occupational activities section*
- *probe for volunteer jobs within the church or a community group*

Household Activities

“Household activities includes 3 things: Housework (cooking, cleaning, laundry, ironing, vacuuming....); Yardwork (grass, snow, vehicle maintenance); and Repairs and Maintenance on your house. It basically includes anything to do with your home and property. Also included are hobbies and working in the shop.”

Age Started

TO MEN: “Did you have any household chores as a child? What about as an adult?”

- *A different approach may be needed for men versus women*
- *some men have had NO household activity – ever!*

TO WOMEN and men who said yes: “When did you begin doing household chores for just over 2 hours each week? That would be about 20 minutes a day. How old would you be?”

- *state the minimums to determine age started*
- *most people can recall back to elementary school*
- *some recall back as young as 4 years old (farm chores)*
- *if none, ask about first place after leaving home*

Frequency

“And what would you say your pattern was? Was it a daily activity, a once-a-week activity, or a combo?”

- *use 2 lines for a “combo” pattern (unless minimum not met)*
- *if min. not met, average out the weekly hours and add it to the daily duration*

Duration

“How much time per day would you say you spent in household activities, daily (and/or weekly)?”

- *probe by providing ranges*

“Was it at least 20 minutes/day – our minimum? Or more like ‘X’ hours/day, between meals and clean-up, and all that had to be done each day?”

- *give a common sense range according to employment status (e.g., 0.33 to 4 hours/day for a FT worker vs. 0.33 to 12 hours/day for a FT homemaker)*
- *reflect and probe for a “typical day”; continue with back-&-forth conversation until a satisfactory number is reached*

Age Ended

“And when did this pattern change? How long did this pattern go on?”

TO MEN: “Did you move to a bigger/smaller house, which might change your pattern of household activities? If so, how old were you when you moved, and what did your pattern become?”

TO MOTHERS: “When did you get married/have your first child? Did that change your pattern of time spent doing household activities?”

full house

last child enters school

empty nest

widowed/divorced

Intensity

“How heavy was this for you? I can split the total into ‘light,’ ‘moderate’ & ‘heavy.’ Was it a blend, or all in one category?”

Last Probe

“Has the pattern basically stayed the same up to the present?”

- *probe (using LEC) for events that may result in changes in the pattern of household activity*
- *for men, type of residence is a factor (e.g., yardwork in condo vs. house)*
- *cut grass/shovel snow can be combined if they don't meet the minimum individually*
- *for women, ‘life stage’ is a factor*
- *clarify that ‘housework’ & ‘childcare’ are included*
- *clarify that chauffeuring children to events is not included (because it is a seated activity)*
- *probe for each category*
- *near the end, probe if it is the same pattern as in the reference year*
- *reflect back to the participant to confirm that this is the most recent pattern*

Exercise & Sports Activities

“We only include activities that you have done at least 10 times in your life. The minimum for exercise & sports is 32 hrs/year, or 40 minutes/week.”

Basic Activities

“Did you walk/bike to school as a child?”

“Did you have gym class at school?”

“Did you play on any teams as a child, e.g., baseball, softball, soccer, volleyball, basketball, hockey, etc.?”

“Did you play at school – before and after school, during recess and lunch? Or were you more sedentary, perhaps choosing to read or study instead?”

Last Probe

“Are there any other activities that you have done in your life? Bowl, curl, hunt, fish, walk, dance, bike?”

Intensity

“How heavy was this activity for you? Did it increase your heart rate or make you sweat?”

- *combine activities if each doesn't meet the minimum, but together they do*
- *start back as a child...*
- *Always start with this question*
- *includes walking to the bus*
- *probe for walking home for lunch and back again*
- *probe for frequency – was it once a week or 5 days/wk?*
- *determine season; what portion of the 10-month school year was the particular sport*
- *probe for an estimated duration; ask for total time spent during breaks and before & after school per day*
- *provide a possible range, e.g., 0.5 vs. 3 hours/day*
- *show the participants the list of all the activities*
- *use common sense probes for season lengths (e.g., biking in Vancouver vs. Edmonton)*
- *people appreciate questions that require a “yes/no” reply now and then, as opposed to a continuous stream of open ended questions (sounds less repetitive)*
- *emphasis on “you”*
- *only include the physical exertion aspect, and not things like sweating from being in the sun (e.g., golfing); or a swimmer may say, “I don't sweat in the pool” – in both cases, focus on heart rate*
- *“no” = 2; “a bit” = 3; “a lot” = 4*

LTPAQ Intensity Levels

LIFETIME TOTAL PHYSICAL ACTIVITY QUESTIONNAIRE INTENSITY LEVELS

Participant

Category	Description
Occupation	
1	Jobs that require only sitting with minimal walking.
2	Jobs that require a minimal amount of physical effort such as standing and slow walking. There is no increase in heart rate and there is no perspiration.
3	Jobs that require carrying light loads and continuous walking. These activities would increase the heart rate slightly and may cause some light perspiration.
4	Jobs that require carrying heavy loads, brisk walking, and climbing. These jobs would increase the heart rate substantially and cause heavy sweating.
Household	
2	Activities that require minimal physical effort such as those activities that are done standing or with slow walking.
3	Activities that are not exhausting, that increase the heart rate slightly and may cause some light perspiration.
4	Activities that increase the heart rate and cause heavy sweating. These activities include those that require lifting, moving heavy objects, rubbing vigorously for fairly long periods, activities that cause sweating or faster heartbeat.
Exercise/ Sports	
2	Activities that require minimal physical effort.
3	Activities that are not exhausting, that increase the heart rate slightly and may cause some light perspiration.
4	Activities that increase the heart rate and cause heavy sweating.

**LIFETIME TOTAL PHYSICAL ACTIVITY QUESTIONNAIRE
ACTIVITY MINIMUMS**

OCCUPATION

128 hours *total* per year

OR

2.5 hours per **week** per year.

If seasonal: 8 hours per week for 4 months.

HOUSEHOLD

112 hours *total* per year

OR

2.15 hours per **week** per year.

If seasonal: 7 hours per week for 4 months.

EXERCISE

32 hours *total* per year

OR

40 minutes per **week** per year.

If seasonal: 2 hours per week for 4 months.

Coding Guidelines

Global Codes:

1=yes
2=no
97=refused
99=don't know
88=missing
66=never

Occupational and Volunteer Activities

Please include only those activities done at least 8 hours per week for 4 months of the year.

Example: 8 hours/week for a least four months $8 \times 4 = 32$ >> $32 \times 4 = 128$ hours minimum

Therefore as long as the person has done 128 hours of occupational activity in one year, then their activity may be counted.

OR

It means that a person has to do an activity at least 148 minutes (or 2.5 hours) per week for 52 weeks.

Therefore if someone tells you they did 1 hour and a half of work a week for each year, that is not enough activity to record.

Job Title	Description of Occupational Activity	Age Started	Age Ended	No. of Mos/Yr.	No. of Days/Wk.	Time/Day Hrs. Mins.		Intensity of Activity (1,2,3,4)
Use job title coding sheet	Use occupational activity coding sheet (compendium) * code up to three (3) activities	— —	— —	1.00 to 12.00	0.25 to 7.00	0.25 to 24.00	—	1..4 Use physical intensity level guide sheet

Did you ever walk, bike, rollerblade, or run to this job?	Which ones did you normally do? (Check all that apply.)	No. of Mos/ Yr.	No. of Days/Wk.	Time/Day Hrs. Mins.	
¹ <input type="radio"/> yes ² <input type="radio"/> no ⁹⁷ <input type="radio"/> Ref ⁹⁹ <input type="radio"/> DK	¹ <input type="radio"/> walk ² <input type="radio"/> bike ³ <input type="radio"/> rollerblade ⁴ <input type="radio"/> run ⁵ <input type="radio"/> other _____ ⁹⁷ <input type="radio"/> Ref ⁹⁹ <input type="radio"/> DK

Note that you must code the job title (occupation list) as well as the description of the occupational activity (compendium of occupational activity).

Note, in the Occupation List:

volunteer = **98**

student = **100**

military: basic training = **69**; occupations unique to armed forces = **64**; officers = **06**, otherwise match occupations in the armed forces to occupation in a major group.

Household Activities

Please include only those activities done at least 7 hours per week four months of the year.

Example: 7 hours/week for a least four months: $7 \times 4 = 28$ >> $28 \times 4 = 112$ hours minimum

Therefore as long as the person has done 112 hours of household activity in one year, their activity may be counted.

OR

It means that a person has to do an activity at least 2.15 hours per week for 52 weeks. ($2.15 \times 52 = 112$ hours per year)

Therefore if someone tells you they did 1 hour and a half of house work a week for each year, that is not enough activity to record.

Age Started	Age Ended	Number of Months/Yr.	Number of Days/Wk.	Time per day		Hours per day spent in activities that were in category:		
				Hrs.	Mins	2	3	4
— —	— —	0.00..12.00	0.25..7.00	0.00..24.00	— —	0.00..24.00	0.00..24.00	0.00..24.00

Exercise and Sporting Activities

Please report the activities that the participant has done **at least 2 hours per week** for at least 4 months of the year. Please record only those activities which the participant has done at least **10 times in their lifetime**.

Example of minimum exercise and sports activities done at least 10 times in a person's lifetime:

2 hours/week for at least 4 months = $2 \times 4 = 8$ >> 8×4 months = 32 hours minimum

Therefore, as long as the person has done 32 hours of a particular exercise or sports activity in one year, then that activity may be counted.

OR

It means that a person has to do an activity at least 37 minutes per week for 52 weeks.

$(37 \times 52 = 1924$ minutes in one year >>> $1924/60 = \underline{32.06}$ hours of activity in one year)

If someone tells you they did 15 minutes a week for each year, that is not enough activity to record.

Description of Exercise/Sports Activity	Code	Age Started	Age Ended	Frequency of Activity				Time per Activity Hrs. Mins.		Intensity of Activity (2,3,4)
				Day	Week	Month	Year			
_____	_____ Use recreational activity coding sheet	____	____	_____	_____	_____	_____	0.00 to 60.00	0.00 to 60.00	Use physical intensity level guide sheet

Note: do not record sedentary activities such as sewing, reading, bridge playing, piano playing.

Occupational and Volunteer Codes

Lifetime Total Physical Activity Questionnaire – Occupational and Volunteer Code Sheet

1	2	3
<i>BUSINESS, FINANCE AND ADMINISTRATION OCCUPATIONS</i>	<i>NATURAL AND APPLIED SCIENCES AND RELATED OCCUPATIONS</i>	<i>HEALTH OCCUPATIONS</i>
Major Group 00 [Code 01] <i>Senior Management Occupations</i> 001 Legislators & Senior Management	Major Group 00 [Code 02] <i>Senior Management Occupations</i> 001 Legislators & Senior Management	Major Group 00 [Code 03] <i>Senior Management Occupations</i> 001 Legislators & Senior Management
011 Administrative Service Managers 012 Managers in Financial and Business Services 013 Managers in Communication (Except Broadcasting)	021 Managers in Engineering, Architecture, Science and Information Systems	031 Managers in Health, Education, Social and Community Services 041 Managers in Public Administration
Major Group 11 <i>Professional Occupations in Business and Finance</i> 111 Auditors, Accountants and Investment Professionals 112 Human Resources and Business Service Professionals	Major Group 21 <i>Professional Occupations in Natural and Applied Sciences</i> 211 Physical Science Professionals 212 Life Science Professionals 213 Civil, Mechanical, Electrical and Chemical Engineers 214 Other Engineers 215 Architects, Urban Planners & Land Surveyors 216 Mathematicians, Systems Analysts & Computer Programmers	Major Group 31 <i>Professional Occupations in Health</i> 311 Physicians, Dentists & Veterinarians 312 Optometrists, Chiropractors & Other Health Diagnosing & Treating Professionals 313 Pharmacists, Dietitians & Nutritionists 314 Therapy & Assessment Professionals 315 Nurse Supervisors & Registered Nurses
Major Group 12 <i>Skilled Administrative & Business Occupations</i> 121 Clerical Supervisors 122 Administrative & Regulatory Occupations 123 Finance & Insurance Administrative Occupations 124 Secretaries, Records & Transcriptionists	Major Group 22 <i>Technical Occupations Related to Natural & Applied Sciences</i> 221 Technical Occupations in Physical Sciences 222 Technical Occupations in Life Sciences 223 Technical Occupations in Civil, Mechanical & Industrial Engineering 224 Technical Occupations in Electronics & Electrical Engineering 225 Technical Occupations in Architecture, Drafting, Surveying & Mapping 226 Other Technical Inspectors & Regulatory Officers 227 Transportation Offices & Controllers	Major Group 32 <i>Technical & Skilled Occupations in Health</i> 321 Medical Technologists & Technicians (except Dental Health) 322 Technical Occupations in Dental Health Care 323 Other Technical Occupations in Health Care (Except Dental)

Some extra categories not otherwise covered:

98=volunteer

100=student

101=bomb watcher; fire watching

69=basic training; military

59=marching/band

64=Baby sitting

64=occupations in the armed forces

06=commissioned officers in the armed forces

1	2	3
Major Group 14 <i>Clerical Occupation</i> 141 Clerical Occupation, General Office Skills 142 Office Equipment Operators 143 Finance and Insurance Clerks 144 Administrative Support Clerks 145 Library, Correspondence & Related Information Clerks 146 Mail and Message Distribution Occupations 147 Recording, Scheduling & Distribution Occupations Painting geographical maps		Major Group 34 <i>Assisting Occupations in Support of Health Services</i> 341 Assisting Occupations in Support of Health Services

4	5	6
<i>OCCUPATIONS IN SOCIAL SCIENCE, EDUCATION, GOVERNMENT SERVICE AND RELIGION</i>	<i>OCCUPATIONS IN ART, CULTURE, RECREATION AND SPORT</i>	<i>SALES AND SERVICE OCCUPATION</i>
Major Group 00 [Code 04] <i>Senior Management Occupations</i> 001 Legislators & Senior Management	Major Group 00 [Code 05] <i>Senior Management Occupations</i> 001 Legislators & Senior Management	Major Group 00 [Code 06] <i>Senior Management Occupations</i> 001 Legislators & Senior Management
041 Managers in Public Administration	051 Managers in Art, Culture, Recreation and Sport	061 Sales, Marketing & Advertising Managers 062 Managers in Retail Trade 063 Managers in Food Service & Accommodation 064 Managers in Protective Service 065 Managers in Other Services
Major Group 41 <i>Professional Occupations in Social Sciences, Education, Government Services & Religion</i> 411 Judges, Lawyers & Quebec Notaries 412 University Professors & Assistants 413 College & Other Vocational Instructors 414 Secondary & Elementary School Teachers Counselors 415 Psychologists, Social Workers, Counselors, Clergy & Probation Officers 416 Policy & Program Officers, Researchers & Consultants	Major Group 51 <i>Professional Occupation in Art & Culture</i> 511 Librarians, Archivists, Conservators & Curators 512 Writing, Translating & Public Relations Professionals 513 Creative & Performing Artists	
Major Group 42 <i>Paraprofessional Occupations in Law, Social Services, Education & Religion</i> 421 Paralegals, Social Services Workers & Occupations in Education & Religion, n.e.c. Minister	Major Group 52 <i>Technical & Skilled Occupation in Art, Culture, Recreation & Sport</i> 521 Technical Occupations in Libraries, Archives, Museums, & Galleries 522 Photographers, Graphic Arts Technicians & Technical Occupations in Motion Pictures, Broadcasting & the Performing Arts 523 Announcers & Other Performers 524 Creative Designers & Craftpersons 525 Athletes, Coaches, Referees & Related Occupations	Major Group 62 <i>Skilled Sales & Service Occupations</i> 621 Sales and Service Supervisors 622 Technical Sales Specialists, Wholesale Trade 623 Insurance & Real Estate Sales Occupations & Buyers 624 Chefs and Cooks 625 Butchers and Bakers 626 Police Officers and Firefighters 627 Technical Occupations in Personal Service
		Major Group 64 <i>Intermediate Sales & Service Occupations</i> 641 Sales Representatives, Wholesale Trade 642 Retail Salespersons & Sales Clerks 643 Occupations in Travel & Accommodation 644 Tour & Recreation 645 Occupations in Food & Beverage Service 646 Other Occupations in Protective Service 647 Childcare & Home Support Workers 648 Other Occupations in Personal Service

4	5	6
		Major Group 66 Elemental Sales & Service Occupations 661 Cashiers 662 Other Sales & Related Occupations 663 Elemental Medical & Hospital Assistants 664 Food Counter Attendants & Kitchen Helpers 665 Security Guards & Related Occupations 666 Cleaners 667 Other Attendants in Travel, Accommodations & Recreation 668 Other Elemental Service Occupations

7	8	9
TRADES, TRANSPORTATION AND EQUIPMENT OPERATORS AND RELATED OCCUPATIONS	OCCUPATIONS UNIQUE TO PRIMARY INDUSTRY	
Major Group 00 [Code 07] <i>Senior Management Occupations</i>	Major Group 00 [Code 08] <i>Senior Management Occupations</i>	Major Group 00 [Code 09] <i>Senior Management Occupations</i>
001 Legislators & Senior Management	001 Legislators & Senior Management	001 Legislators & Senior Management
071 Managers in Construction & Transportation	081 Managers in Primary Production (Except Agriculture)	091 Managers in Manufacturing & Utilities
072 Facility Operation & Maintenance		
Major Group 72/73 <i>Trades & Skilled Transport & Equipment Operators</i>	Major Group 82 <i>Skilled Occupations in Primary Industry</i>	Major Group 92 <i>Processing, Manufacturing & Utilities Supervisors & Skilled Operators</i>
721 Contractors & Supervisors, Trades & Related Workers	821 Supervisors, Logging & Forestry	921 Supervisors, Processing Occupations
722 Supervisors, Railway & Motor Transportation Occupations	822 Supervisors, Mining, Oil & Gas	922 Supervisors, Assembly & Fabrication
723 Machinists & Related Occupations	823 Underground Miners, Oil & Gas Drillers & Related Workers	923 Central Control & Process Operators in Manufacturing & Processing
724 Electrical Trades & Telecommunication Occupations	824 Logging Machine Operators	
725 Plumbers, Pipefitters & Gas Fitters	825 Contractors, Operators & Supervisors in Agriculture, Horticulture & Aquaculture	
726 Metal Forming, Shaping & Erecting Occupations	826 Fishing Vessel Masters & Skippers & Fishermen/women	
727 Carpenters & Cabinetmakers	Geologist	
728 Masonry & Plastering Trades		
729 Other Construction Trades		
731 Machinery & Transportation		
732 Motor Vehicle Mechanics		
733 Other Mechanics		
734 Upholsterers, Tailors, Shoe Repairers, Jewelers & Related Occupations		
735 Stationary Engineers & Power Station & System Operators		
736 Train Crew Operating Occupations		
737 Crane Operators, Drillers & Blasters		
738 Printing Press Operators, Commercial Divers & Other Trades & Related Occupation, n.e.c.		
Pilots		

7	8	9
<p>Major Group 74 <i>Intermediate Occupations in Transport, Equipment Operation, Installation & Maintenance</i> 741 Motor Vehicle & Transit Drivers 742 Heavy Equipment Operators 743 Other Transport Equipment Operators & Related Workers 744 Other Installers, Repairers, & Servicers 745 Longshore Workers & Material Handlers</p>	<p>Major Group 84 <i>Intermediate Occupation in Primary Industry</i> 841 Mine Service Workers & Operators in Oil & Gas Drilling 842 Logging & Forestry Workers 843 Agriculture & Horticulture Workers 844 Other Fishing & Trapping Occupations</p>	<p>Major Group 94/95 <i>Processing & Manufacturing Machine Operators & Assemblers</i> 941 Machine Operators & Related Workers in Metal & Mineral Products Processing 942 Machine Operators & Related Workers in Chemical, Plastic & Rubber Processing 943 Machine Operators & Related Workers in Pulp & Paper Production & Wood Processing 944 Machine Operators & Related Workers in Textile Processing 945 Machine Operators & Related Workers in Fabric, Fur and Leather Products Manufacturing 946 Machine Operators & Related Workers in Food, Beverage & Tobacco Processing 947 Printing Machine Operators & Related Occupations 948 Mechanical, Electrical & Electronics Assemblers 949 Other Assembly & Related Occupations 951 Machining, Metalworking, Woodworking & Related Machine Operators</p>
<p>Major Group 76 <i>Trades Helpers, Construction Labourers & Related Occupations</i> 761 Trades Helpers & Labourers 762 Public Works & Other Labourers, n.e.c.</p>	<p>Major Group 86 <i>Labourers in Primary Industry</i> 861 Primary Production Labourers Landscaping</p>	<p>Major Group 96 <i>Labourers in Processing, Manufacturing & Utilities</i> 961 Labourers in Processing, Manufacturing & Utilities</p>

Occupational and Volunteer Activity Codes

Note: You may code up to three (3) occupational activities to describe a participant's job title. For activities reported that do not fit any of the codes listed, code as 160 "Other"

Description of Occupational Activity	Code	Met Level 2011	Physical Intensity Level (PIL)
Aerobics, teaching	171	6.8	3-4
Bakery, general , moderate effort	120	4	3
Bakery , light effort	121	2	2
Basketball , officiating	132	7	4
Bending , light (Use Standing - light)	50	3	1-2
Bending , light/moderate (Use Standing - light/moderate)	51	3	2
Bending , moderate (Use Standing - moderate)	52	3.5	3
Bending , moderate/heavy (Use Standing - moderate/heavy)	53	4.5	4
Bicycling , on the job	5	4	3-4
Bookbinding	150	2.3	2
Building road , hauling debris, driving heavy machinery, coal mining, general	122	6	3-4
Camping	137	2.5	2
Canoeing	140	3.5	
Carpentry, general, hammering	116	4.3	2-3
Carrying , moderate loads up stairs, moving boxes (16-40 lbs)	11	8	4
Carrying , heavy loads, such as bricks	10	8	4
Carrying , small children	15	3	2-3
Carrying , all other (Use Walking), Codes 80, 81, 83, 85, 86 or 87 according to PIL			
Child care , sitting/kneeling - dressing, bathing, feeding, occ. lifting, light effort, general	16	2	2
Child care , standing- dressing, bathing, grooming, feeding, occ. lifting, light effort	17	3	2
Chop wood, split logs	177	6.3	3-4
Coaching , football, soccer, basketball, baseball, swimming, hockey, teach phys ed, softball officiating	67	4	3

Coal mining, general	173	5.5	
Construction, outside, remodeling	117	4	3-4
Crawling , Use Walking or crawling on the job 70, 71 or 72 according to PIL			
Custodial work , chambermaid, hotel housekeeper, making bed, cleaning bathroom, pushing cart	25	4	2-3
Custodial work , light effort (e.g., cleaning sink and toilet, dusting, vacuuming, light cleaning)	172	2.3	
Custodial work , general cleaning, mop/sweep, moderate effort	26	3.8	3-4
Dancing on job , (in classroom or day care)	119	4.5	3
Elder care , disabled adult, only active periods, Home aide	18	4	2-3
Electrical work (also used for Plumbing)	123	3.3	2-3
Farming , driving tractor or harvester, cutting hay, light effort	100	2.8	1-2
Farming , farming, feeding small animals	174	3.5	
Farming , chasing cattle or working cattle (walking or horseback), moderate effort	101	4.8	3
Farming , taking care of animals (grooming, brushing, shearing sheep, assisting with birthing, medical care, branding)	124	4.5	4
Farming , baling hay, cleaning barn, poultry work, forking, vigorous effort	102	7.8	4
Feeding horses (Use Walking – moderately, carrying light objects)	81	4.5	2
Firefighter , (use for active work when responding to fire) general	125	8	4
Forestry , sawing, power	151	4.5	3
Forestry , ax chopping, slow	154	5	3-4
Forestry , ax chopping, fast	155	17.5	4
Forestry, general	152	8	4
Furriery	156	4.5	2
Gardening , with heavy power tools, tilling a garden, chain saw	176	5.8	
Gardening , mowing lawn (riding mower), applying fertilizer or seeding a lawn	165	2.5	2
Gardening , walking, applying fertilizer or seeding a lawn	175	3	

Gardening , picking flowers, fruits, vegetables, picking fruit off trees, riding snow blower	166	3	2
Gardening , trimming shrubs or trees, manual cutter	184	4	
Gardening , trimming shrubs or trees, power cutter, using leaf blower, edger	167	3.5	2
Gardening, general , rake lawn, sack grass, leaves	164	4	2-3
Gardening, general , moderate effort	181	3.8	
Gardening , planting trees walking, weeding	168	4.5	2-3
Gardening , planting seedlings, shrubs, stooping, moderate effort	183	4.3	
Gardening , digging, spading, filling garden, composting, laying sod	169	5	3
Gardening , carrying, loading or stacking wood, loading/unloading or carrying lumber	178	5.5	
Gardening , clearing brush/land, undergrowth, or ground, hauling branches, wheelbarrow chores, vigorous effort	179	6.3	
Gardening , mow lawn general,	163	5.5	3
Gardening , mowing lawn, walk, power mower, moderate or vigorous effort	180	5	
Gardening mowing lawn, hand mower	170	6	3-4
Gym classes, general	162	5.5	3
Hiking	136	6	3-4
Hauling , use Walk and Carry Codes 80, 81,83,85			
Home aide/personal care aide	18	4	2-3
Horseback riding , training horses, general	62	5.5	2
Horseback riding , trotting, training horses	63	5.8	3
Horseback riding , galloping, rodeo, training horses	64	7.3	4
Horse grooming	157	7.3	3
Kneeling , light (Use Standing - light)	50	3	1-2
Kneeling , light/moderate (Use Standing - light/moderate)	51	3	2
Kneeling , moderate (Use Standing - moderate)	52	3	3
Kneeling , moderate/heavy (Use Standing - moderate/heavy)	53	4.5	4
Lifting , light (Use Standing - light)	50	3.5	1-2
Lifting , light/moderate (Use Standing - light/moderate)	51	3	2

Lifting, moderate (Use Standing - moderate)	52	3.5	3
Lifting, moderate/heavy (Use Standing - moderate/heavy)	53	4.5	4
Loading/Unloading truck , part of a truck driver's tasks (standing)	115	6.5	1-2
Loading, carrying or stacking wood , loading/unloading or carrying lumber	178	5.5	3
Locksmith	141	3	2-3
Machine tooling , operating lathe, welding, home power tools	126	3	2-3
Masonry work , concrete	142	4.3	3-4
Masseur, masseuse (standing)	143	4	2-3
Moving , pushing heavy objects, 75 lbs or more (desks, moving van work, etc.)	20	7.5	4
Personal care aide/home aide	18	4	2-3
Plumbing , (also used for Electrical work)	123	3.3	2-3
Playing with children , only active periods, moderate	110	3.5	2-3
Playing with children , only active periods, vigorous	111	5.8	3-4
Police , riding in a squad car	146	1.3	1
Police , driving a squad car	145	2.5	1
Police , directing traffic	144	2.5	2
Police , making an arrest	147	4	3
Running , with a backpack	89	15	4
Running, general	95	8.3	4
Shoe repair, general	148	2	1-2
Shoveling , digging ditches	30	7.8	4
Shoveling , less than 10 lbs/min, light, shovel snow by hand	31	5	2
Shoveling , 10-15lbs/min, moderate	32	6.5	3
Shoveling , more than 16 lbs/min, heavy	33	8.8	4
Sitting , light office work, lab work, light hand tools, meetings, talking involved, light assembly/repair, typing, keyboarding, computer, driving to meetings, general	40	1.3	1
Sitting, moderate , heavy levers, riding mower/forklift, crane operation, driving vehicle, tractor, operating heavy equipment, teaching stretching or yoga	41	2.5	1

Sitting , driving heavy truck, bus	118	2.5	1
Snowblower , walking	182	2.5	
Soccer	138	7	3-4
Skating , pro	68	9	4
Skiing , general	139	7	
Standing or lifting or kneeling or bending, (bartending, store clerk, filing, xeroxing, assembling, hair dressing) light	50	3	1-2
Standing or lifting or kneeling or bending, assemble/repair heavy parts, welding, stocking, packing boxes for moving, auto repair, patient care (as in nursing), setting up chairs/furniture, light/moderate	51	3	2
Standing or lifting or kneeling or bending, assembling at a fast rate, lifting 50 lbs., moderate	52	3.5	3
Standing or lifting or kneeling or bending, lifting more than 50 lbs, masonry, painting, paper hanging, continuous lifting (10-20 lbs) with limited walking/rest, moderate/heavy (Home power tools if PIL of 4)	53	4.5	4
Steel mill , general (i.e. hand rolling, merchant mill rolling)	149	8.3	4
Swimming , general	133	6	3-4
Tailoring , general, machine sewing	127	2.5	2
Tailoring , cutting,	185	2.3	
Tools , using heavy power tools , e.g. pneumatic tools, jackhammers, drills, etc.	60	6.3	3-4
Tools , using heavy tools , not power tools, e.g. shovel, pick, tunnel bar, spade	61	8	4
Walking or crawling on job, <2.0 mph, strolling, very slow	70	2	1
Walking or crawling on job, <3.0 mph, not carrying anything, moderate	71	3.5	2-3
Walking or crawling on job, <3.5 mph, not carrying anything, brisk walking	72	4.3	4
Walking slowly, carrying light objects <25 lbs	80	3.5	1
Walking moderately, carrying light objects <25 lbs	81	4.5	2
Walking briskly, carrying light objects <25 lbs	82	4.8	2-3
Walking or walking downstairs or standing, carrying objects about 25-49 lbs, moderate, fencing for farmers & ranchers	83	5	3

Walking or walking downstairs or standing, carrying objects about 50-74 lbs.	84	6.5	3-4
Walking or walking downstairs or standing, carrying objects about 75-99 lbs, heavy	85	7.5	4
Walking or walking downstairs or standing, carrying objects about 100 lbs and over	86	8.5	4
Walking , upstairs, climbing up a ladder	87	8	4
Walking, downstairs	134	3.5	2
Walking , military pace, marching rapidly	88	8	4
Walking , pushing a wheelchair	186	3.5	
Water polo	153	10	4
Working out (as part of job, e.g., police)	135	5.5	3-4
Wrestling	159	6	3
Volunteer, cleaning church etc.	131	3.3	2-3
Volunteer, preparing food at church etc.	129	2	2
Volunteer, serving food at church etc.	128	2.5	2
Volunteer, washing dishes/cleaning kitchen at church etc.	130	3.3	2

Exercise and Sporting Activity Codes

Description of Exercise/Sports Activity	Code	MET Value 2011*
Aerobics, general, cardio	1	7.3
Aerobics, jazzercise, slimnastics	198	6
Aerobics, low impact	2	5
Aerobics, high impact, Tae Bo	3	7.3
Aerobics, step 6-8" step	196	7.5
Aerobics, step 10-12" step	197	9.5
Animals, run/play (not walk dog)	191	4
Aquacize, water calisthenics, water aerobics	160	5.5
Archery (non-hunting)	4	4.3
Arts and crafts, standing, light PIL2	201	2.5
Arts and crafts, standing, moderate PIL3	202	3.3
Arts and crafts, standing, vigorous PIL4	203	3.5
Backpacking	5	7
Badminton, general, social, singles and doubles	6	5.5
Badminton, competitive	7	7
Basketball, game	8	8
Basketball, nongame, general	9	6
Basketball, shooting baskets	10	4.5
Basketball, wheelchair	11	7.8
Baton twirling, playing instrument in marching band	207	4
Bicycling, mountain, general	210	8.5
Bicycling, general	211	7.5
Bicycling, light PIL2	12	4
Bicycling, moderate effort PIL3	13	8
Bicycling, vigorous effort PIL4	14	10
Bicycling, stationary, general PIL2	15	7
Bicycling, stationary, (101-160 watts) moderate effort PIL3	16	8.8
Bicycling, stationary, vigorous effort PIL4	17	11
Bicycling, stationary, RPM/Spin bike class	223	8.5
Billiards	18	2.5
Boating, power	167	2.5
Bootcamp, army type exercise	221	5
Bowling	19	3
Boxing, in ring, general	20	12.8
Boxing, punching bag	21	5.5

Boxing, sparring	22	7.8
Broomball	182	7
Calisthenics, light or moderate (home exercise, going up and down from floor, general, ball exercises) PIL 2-3	23	3.5
Calisthenics, heavy or vigorous (pushups, pullups, situps, jumping jacks) PIL3- 4	24	8
Camping	189	2.5
Canoeing, rowing for pleasure, general	199	3.5
Canoeing, on camping trip	25	4
Canoeing, rowing, in competition, or crew or sculling	26	12
Cheerleading	209	6
Children's games (hopscotch, 4-square, dodgeball, playground apparatus, t-ball, tetherball, marbles, jacks, arcade games)	27	5.8
Circuit training, general with aerobics & some min rest, circuit, curves, interval	28	8
Coaching (football, soccer, basketball, baseball, swimming, etc.)	29	4
Combined , uncoded activity, v. light PIL2	169	2
Combined , uncoded activity, light PIL2	170	4
Combined , uncoded activity, mod. PIL3	171	6
Combined , uncoded activity, heavy PIL4	172	8
Cricket (batting, bowling)	30	4.8
Croquet	31	3.3
Curling, floor curling	32	4
Curves TM	222	3.5
Dancing, general , (Greek, Middle Eastern, Flamenco, belly, swing)	33	4.5
Dancing, slow (ballroom dancing such as foxtrot, waltz)	34	3
Dancing, fast (disco, folk, square, line, Irish step, polka, country)	35	7.8
Dancing, (ballet or modern, jazz, tap, twist, jitterbug)	192	5
Darts, wall or lawn	36	2.5
Deepwater running or water jogging	161	9.8
Diving	37	3
Drag racing, pushing or driving a car	38	6
Elliptical trainer, moderate effort	212	5

Fencing	39	6
Fishing, sitting (fishing from a boat)	40	2
Fishing, general	195	3.5
Fishing, standing (fishing standing from a riverbank)	41	3.5
Fishing walking (fishing from a riverbank and walking)	42	4
Fishing, in stream (in waders)	43	6
Fishing, ice	200	2
Football, competitive	44	8
Football, touch, flag, general	45	8
Football / baseball, playing catch	46	2.5
Frisbee playing, general	47	3
Frisbee, ultimate	48	8
Golf, general	214	4.8
Golf, walking and carrying clubs	49	4.3
Golf, walking and pulling clubs	50	5.3
Golf, miniature, driving range	51	3
Golf, using power cart	53	3.5
Gymnastics, general	54	3.8
Gym classes, general	162	5.5
Hacky Sack	188	4
Handball, general	55	12
Hang gliding	57	3.5
Health club, exercise, general	58	5.5
Hiking, cross country	59	6
Hiking, through fields and hillsides	216	5.3
Hockey, field, hand	60	7.8
Hockey, floor	186	7.8
Hockey, ice, Ringette	61	8
Horseback riding, PIL2	62	5.5
Horseback riding, trotting PIL3	63	5.8
Horseback riding, rodeo, galloping PIL4	64	7.3
Horseshoe pitching	180	3
Hunting, light effort, pistol shooting, trap shooting PIL2	65	2.5
Hunting, moderate effort PIL3	66	5
Hunting, heavy effort PIL4	67	6
Jogging, general, strollercize	68	7
Jogging / walking combination (jogging less than 10 minutes)	69	10.3

Judo, jujitsu, karate, kick boxing, tae kwon do	70	10.3
Kayaking	71	5
Kettlebell workout, interval or continuous	228	9.8
Kickball	72	7
Lacrosse	73	8
Majorette, drum major in marching band	208	3.5
Moto-cross	74	4
Motor cycling	166	2.8
Orienteering, winter survival camping	75	9
Paddleball, competitive	76	10
Paddleball, casual, general, pickleball	77	6
Paddleboat	78	4
Paddle Board, standing	229	6
Pilates	205	3
Polo	79	8
Quading , off roading, ATV, dirt bike	187	2.5
Racketball, competitive	80	10
Racketball, general, casual	81	7
Rock or mountain climbing	82	8
Rock climbing, rappelling	215	5
Rollerblading, in-line skating PIL4	183	7.5
(For PIL2 or 3, use skating, roller code)		
Rope jumping, moderate, general	194	11.8
Rowing, stationary ergometer, glider, general	213	6
Rowing, stationary ergometer, glider, light effort PIL2	83	4.8
Rowing, stationary ergometer, glider, moderate effort, PIL3	84	6
Rowing, stationary ergometer, glider, elliptical trainer, vigorous effort PIL4	85	8.5
Rugby	86	8.3
Running (12 minutes/mile)	87	8.3
Running (11.5 minutes/mile)	88	9
Running (10 minutes/mile)	89	9.8
Running (9 minutes/mile)	90	1.05
Running (8 minutes/mile)	91	11.5
Running (7 minutes/mile)	92	12.3
Running (6 minutes/mile)	93	14.5
Running, cross country	94	9
Running, general	95	8

Running, up stairs	96	15
Running on a track, team practice	97	10
Running, training, pushing a wheelchair	98	8
Sailing, boat and board sailing, windsurfing, ice sailing, general	100	3
Sailing, in competition	101	4.5
Scuba diving, general	102	7
Shuffleboard, lawn bowling, bocci ball	103	3
Skateboarding	104	5
Skating, ice (slow, less than 9mph) PIL2	105	5.5
Skating, ice, moderate PIL3	106	7
Skating, ice (fast, > 9mph) PIL4	107	9
Skating, speed, competitive	108	13.3
Skating, roller or rollerblading, light or moderate (PIL 2 or 3)	109	7
Skiing, general	110	7
Skiing, cross-country (slow or light effort, ski walking) PIL2	111	6.8
Skiing, cross-country (moderate speed and effort) PIL3	112	9
Skiing cross-country (vigorous effort, brisk speed) PIL4	113	12.5
Skiing, cross-country (racing)	114	15
Skiing, downhill (light effort) PIL2	115	4.3
Skiing downhill or snowboarding (moderate effort) PIL3	116	5.3
Skiing, downhill (vigorous effort, racing) PIL4	117	8
Ski jumping (climb up/carry skis)	118	7
Ski machine, general (e.g., Nordic trainer)	119	6.8
Sky diving	120	3.5
Sledding, tobogganing, bobsledding, luge	121	7
Snorkeling	122	5
Snow shoeing	123	5.3
Snowmobiling	165	3.5
Soccer, competitive	124	10
Soccer, casual, general	125	7
Softball or baseball, fast or slow pitch, general	126	5
Softball, officiating	127	4
Softball, pitching	128	6

Squash	129	12
Stair-treadmill ergometer, vigorous, healthwalker, stairclimber PIL4 or 3-4	130	9
(For PIL 2 or 3, use walking code)		
Stretching mild, deep breathing	131	2.3
Surfing, body or board	132	3
Swimming, leisurely, PIL2	133	6
Swimming, moderate PIL3	134	5.8
Swimming, vigorous effort PIL4	135	9.8
Swimming, synchronized	193	8
Swimming, front crawl, fast (75 yds/min), vigorous effort or butterfly	136	13.8
Swimming, breast stroke, genral, training	232	10.3
Swimming, treading water, moderate effort	217	3.5
Table tennis, ping pong, air hockey	137	4
Tai Chi	181	3
Tennis, general	138	7.3
Tennis, doubles	139	6
Tennis, singles	140	8
Track and field, hammer throw, shot, discus	163	4
T&F, high jump, long jump, triple jump, javelin, pole vault	184	6
Track & field, hurdles	185	10
Trampoline, rebounder	141	3.5
Video game, active (e.g. WiiFit) light (e.g. Yoga) PIL 2	218	2.3
Video game, active (e.g. WiiFit) moderate (e.g. aerobic, resistance) PIL3	219	3.8
Video game, active (e.g. WiiFit) vigorous (e.g. dancing) PIL4	220	7.2
Video exercise workout, light (e.g. Yoga) PIL2	224	2.3
Video exercise workout, moderate PIL3	225	4
Video exercise workout, vigorous PIL4	226	6
Volleyball, competitive, in gym PIL4	142	6
Volleyball, non-competitive, 6-9 member team, general PIL 2-3	143	3
Volleyball, beach	144	8
Walking, slow pace PIL 2	145	2.8
Walking, moderate pace PIL3	146	3
Walking, brisk pace, power walking PIL 4	147	4.3
Walking, race walking, speed walking	148	6.5

Walking, uphill and carrying load <10 lbs (4.5 kg)	149	6.5
Walking, uphill and carrying load 10-20 lbs (4.5-9 kg)	150	7.3
Walking, uphill and carrying load 21-42 lbs (9.5-19 kg)	151	8.3
Walking, uphill and carrying load >42 lbs (20kg)	152	9
Walking, upstairs PIL 4 For PIL of 2-3, use walking codes	164	8
Walking, pushing a stroller with child	233	4
Wallyball, general	204	7
Water polo	153	10
Water volleyball	154	3
Water skiing, jet skiing	155	6
Weight lifting, light or moderate (free weights, nautilus or universal-type), light workout, general PIL2-3	156	5
Weight lifting, vigorous (free weights, nautilus or universal-type), power lifting or body building PIL4	157	6
Whitewater rafting, kayaking or canoeing	158	5
Wrestling	159	6
Yoga, Hatha	227	2.5
Yoga, Power	206	4
Zumba, American mix	230	6.5
Zumba, Merengue, Salsa	231	7.3

Physical Activity Compendium 2011

2011 Compendium of Physical Activities				
PAQ CODES	COMPENDIUM CODE	METS 2011	MAJOR HEADING	SPECIFIC ACTIVITY
	01003	14.0	bicycling	bicycling, mountain, uphill, vigorous
	01004	16.0	bicycling	bicycling, mountain, competitive, racing
	01008	8.5	bicycling	bicycling, BMX
210	01009	8.5	bicycling	bicycling, mountain, general
O-5, 12	01010	4.0	bicycling	bicycling, <10 mph, leisure, to work or for pleasure (Taylor Code 115)
	01011	6.8	bicycling	bicycling, to/from work, self selected pace
	01013	5.8	bicycling	bicycling, on dirt or farm road, moderate pace
211	01015	7.5	bicycling	bicycling, general
	01018	3.5	bicycling	bicycling, leisure, 5.5 mph
	01019	5.8	bicycling	bicycling, leisure, 9.4 mph
	01020	6.8	bicycling	bicycling, 10-11.9 mph, leisure, slow, light effort
13	01030	8.0	bicycling	bicycling, 12-13.9 mph, leisure, moderate effort
14	01040	10.0	bicycling	bicycling, 14-15.9 mph, racing or leisure, fast, vigorous effort
	01050	12.0	bicycling	bicycling, 16-19 mph, racing/not drafting or > 19 mph drafting, very fast, racing general
	01060	15.8	bicycling	bicycling, > 20 mph, racing, not drafting
	01065	8.5	bicycling	bicycling, 12 mph, seated, hands on brake hoods or bar drops, 80 rpm
	01066	9.0	bicycling	bicycling, 12 mph, standing, hands on brake hoods, 60 rpm
	01070	5.0	bicycling	unicycling
218	02001	2.3	conditioning exercise	activity promoting video game (e.g., Wii Fit), light effort (e.g., balance, yoga)
219	02003	3.8	conditioning exercise	activity promoting video game (e.g., Wii Fit), moderate effort (e.g., aerobic, resistance)
220	02005	7.2	conditioning exercise	activity promoting video/arcade game (e.g., Exergaming, Dance Dance Revolution), vigorous effort
221	02008	5.0	conditioning exercise	army type obstacle course exercise, boot camp training program
15	02010	7.0	conditioning exercise	bicycling, stationary, general

	02011	3.5	conditioning exercise	bicycling, stationary, 30-50 watts, very light to light effort
	02012	6.8	conditioning exercise	bicycling, stationary, 90-100 watts, moderate to vigorous effort
16	02013	8.8	conditioning exercise	bicycling, stationary, 101-160 watts, vigorous effort
17	02014	11.0	conditioning exercise	bicycling, stationary, 161-200 watts, vigorous effort
	02015	14.0	conditioning exercise	bicycling, stationary, 201-270 watts, very vigorous effort
	02017	4.8	conditioning exercise	bicycling, stationary, 51-89 watts, light-to-moderate effort
223	02019	8.5	conditioning exercise	bicycling, stationary, RPM/Spin bike class
24	02020	8.0	conditioning exercise	calisthenics (e.g., push ups, sit ups, pull-ups, jumping jacks), vigorous effort
	02022	3.8	conditioning exercise	calisthenics (e.g., push ups, sit ups, pull-ups, lunges), moderate effort
	02024	2.8	conditioning exercise	calisthenics (e.g., situps, abdominal crunches), light effort
23	02030	3.5	conditioning exercise	calisthenics, light or moderate effort, general (e.g., back exercises), going up & down from floor (Taylor Code 150)
	02035	4.3	conditioning exercise	circuit training, moderate effort
28	02040	8.0	conditioning exercise	circuit training, including kettlebells, some aerobic movement with minimal rest, general, vigorous intensity
222	02045	3.5	conditioning exercise	Curves TM exercise routines in women
212	02048	5.0	conditioning exercise	Elliptical trainer, moderate effort
157	02050	6.0	conditioning exercise	resistance training (weight lifting, free weight, nautilus or universal), power lifting or body building, vigorous effort (Taylor Code 210)
156	02052	5.0	conditioning exercise	resistance (weight) training, squats , slow or explosive effort
	02054	3.5	conditioning exercise	resistance (weight) training, multiple exercises, 8-15 repetitions at varied resistance
O-135, O-162,	02060	5.5	conditioning exercise	health club exercise, general (Taylor Code 160)

58, 162				
	02061	5.0	conditioning exercise	health club exercise classes, general, gym/weight training combined in one visit
	02062	7.8	conditioning exercise	health club exercise, conditioning classes
	02064	3.8	conditioning exercise	home exercise, general
130	02065	9.0	conditioning exercise	stair-treadmill ergometer, general
	02068	12.3	conditioning exercise	rope skipping, general
213	02070	6.0	conditioning exercise	rowing, stationary ergometer, general, vigorous effort
83	02071	4.8	conditioning exercise	rowing, stationary, general, moderate effort
84	02072	7.0	conditioning exercise	rowing, stationary, 100 watts, moderate effort
85	02073	8.5	conditioning exercise	rowing, stationary, 150 watts, vigorous effort
	02074	12.0	conditioning exercise	rowing, stationary, 200 watts, very vigorous effort
119	02080	6.8	conditioning exercise	ski machine, general
	02085	11.0	conditioning exercise	slide board exercise, general
198	02090	6.0	conditioning exercise	slimnastics, jazzercise
131	02101	2.3	conditioning exercise	stretching, mild
205	02105	3.0	conditioning exercise	pilates, general
O-171	02110	6.8	conditioning exercise	teaching exercise class (e.g., aerobic, water)
	02112	2.8	conditioning exercise	therapeutic exercise ball, Fitball exercise
	02115	2.8	conditioning exercise	upper body exercise, arm ergometer
	02117	4.3	conditioning exercise	upper body exercise, stationary bicycle - Airdyne (arms only) 40 rpm, moderate
160	02120	5.3	conditioning exercise	water aerobics, water calisthenics, water exercise
	02135	1.3	conditioning	whirlpool, sitting

			exercise	
	02140	2.3	conditioning exercise	video exercise workouts, TV conditioning programs (e.g., yoga, stretching), light effort
	02143	4.0	conditioning exercise	video exercise workouts, TV conditioning programs (e.g., cardio-resistance), moderate effort
	02146	6.0	conditioning exercise	video exercise workouts, TV conditioning programs (e.g., cardio-resistance), vigorous effort
227	02150	2.5	conditioning exercise	yoga, Hatha
206	02160	4.0	conditioning exercise	yoga, Power
	02170	2.0	conditioning exercise	yoga, Nadisodhana
	02180	3.3	conditioning exercise	yoga, Surya Namaskar
	02200	5.3	conditioning exercise	native New Zealander physical activities (e.g., Haka Powhiri, Moteatea, Waita Tira, Whakawatea, etc.), general, moderate effort
	02205	6.8	conditioning exercise	native New Zealander physical activities (e.g., Haka, Taiaha), general, vigorous effort
192	03010	5.0	dancing	ballet, modern, or jazz, general, rehearsal or class
	03012	6.8	dancing	ballet, modern, or jazz, performance, vigorous effort
	03014	4.8	dancing	tap
1	03015	7.3	dancing	aerobic, general
196	03016	7.5	dancing	aerobic, step, with 6 - 8 inch step
197	03017	9.5	dancing	aerobic, step, with 10 - 12 inch step
	03018	5.5	dancing	aerobic, step, with 4-inch step
	03019	8.5	dancing	bench step class, general
2	03020	5.0	dancing	aerobic, low impact
3	03021	7.3	dancing	aerobic, high impact
	03022	10.0	dancing	aerobic dance wearing 10-15 lb weights
O-119,33	03025	4.5	dancing	ethnic or cultural dancing (e.g., Greek, Middle Eastern, hula, salsa, merengue, bamba y plena, flamenco, belly, and swing)
	03030	5.5	dancing	ballroom, fast (Taylor Code 125)
35	03031	7.8	dancing	general dancing (e.g., disco, folk, Irish step)

				dancing, line dancing, polka, contra, country)
	03038	11.3	dancing	ballroom dancing, competitive, general
34	03040	3.0	dancing	ballroom, slow (e.g., waltz, foxtrot, slow dancing, samba, tango, 19 th century dance, mambo, cha cha)
	03050	5.5	dancing	Anishinaabe Jingle Dancing
	03060	3.5	dancing	Caribbean dance (Abakua, Beguine, Bellair, Bongo, Brukin's, Caribbean Quadrills, Dinki Mini, Gere, Gumbay, Ibo, Jonkonnu, Kumina, Oreisha, Jambu)
195	04001	3.5	fishing and hunting	fishing, general
	04005	4.5	fishing and hunting	fishing, crab fishing
	04007	4.0	fishing and hunting	fishing, catching fish with hands
	04010	4.3	fishing and hunting	fishing related, digging worms, with shovel
42	04020	4.0	fishing and hunting	fishing from river bank and walking
40	04030	2.0	fishing and hunting	fishing from boat or canoe, sitting
41	04040	3.5	fishing and hunting	fishing from river bank, standing (Taylor Code 660)
43	04050	6.0	fishing and hunting	fishing in stream, in waders (Taylor Code 670)
200	04060	2.0	fishing and hunting	fishing, ice, sitting
	04061	1.8	fishing and hunting	fishing, jog or line, standing, general
	04062	3.5	fishing and hunting	fishing, dip net, setting net and retrieving fish, general
	04063	3.8	fishing and hunting	fishing, set net, setting net and retrieving fish, general
	04064	3.0	fishing and hunting	fishing, fishing wheel, setting net and retrieving fish, general
	04065	2.3	fishing and hunting	fishing with a spear, standing
65	04070	2.5	fishing and hunting	hunting, bow and arrow, or crossbow
67	04080	6.0	fishing and hunting	hunting, deer, elk, large game (Taylor Code 170)

	04081	11.3	fishing and hunting	hunting large game, dragging carcass
	04083	4.0	fishing and hunting	hunting large marine animals
	04085	2.5	fishing and hunting	hunting large game, from a hunting stand, limited walking
	04086	2.0	fishing and hunting	hunting large game from a car, plane, or boat
65	04090	2.5	fishing and hunting	hunting, duck, wading
	04095	3.0	fishing and hunting	hunting, flying fox, squirrel
66	04100	5.0	fishing and hunting	hunting, general
67	04110	6.0	fishing and hunting	hunting, pheasants or grouse (Taylor Code 680)
	04115	3.3	fishing and hunting	hunting, birds
66	04120	5.0	fishing and hunting	hunting, rabbit, squirrel, prairie chick, raccoon, small game (Taylor Code 690)
	04123	3.3	fishing and hunting	hunting, pigs, wild
	04124	2.0	fishing and hunting	trapping game, general
	04125	9.5	fishing and hunting	hunting, hiking with hunting gear
65	04130	2.5	fishing and hunting	pistol shooting or trap shooting, standing
	04140	2.3	fishing and hunting	rifle exercises, shooting, lying down
	04145	2.5	fishing and hunting	rifle exercises, shooting, kneeling or standing
	05010	3.3	home activities	cleaning, sweeping carpet or floors, general
	05011	2.3	home activities	cleaning, sweeping, slow, light effort
	05012	3.8	home activities	cleaning, sweeping, slow, moderate effort
	05020	3.5	home activities	cleaning, heavy or major (e.g. wash car, wash windows, clean garage), moderate effort
	05021	3.5	home activities	cleaning, mopping, standing, moderate effort

	05022	3.2	home activities	cleaning windows, washing windows, general
	05023	2.5	home activities	mopping, standing, light effort
	05024	4.5	home activities	polishing floors, standing, walking slowly, using electric polishing machine
	05025	2.8	home activities	multiple household tasks all at once, light effort
	05026	3.5	home activities	multiple household tasks all at once, moderate effort
	05027	4.3	home activities	multiple household tasks all at once, vigorous effort
	05030	3.3	home activities	cleaning, house or cabin, general, moderate effort
	05032	2.3	home activities	dusting or polishing furniture, general
	05035	3.3	home activities	kitchen activity, general, (e.g., cooking, washing dishes, cleaning up), moderate effort
	05040	2.5	home activities	cleaning, general (straightening up, changing linen, carrying out trash, light effort
	05041	1.8	home activities	wash dishes, standing or in general (not broken into stand/walk components)
	05042	2.5	home activities	wash dishes, clearing dishes from table, walking, light effort
	05043	3.3	home activities	vacuuming, general, moderate effort
	05044	3.0	home activities	butchering animals, small
	05045	6.0	home activities	butchering animal, large, vigorous effort
	05046	2.3	home activities	cutting and smoking fish, drying fish or meat
	05048	4.0	home activities	tanning hides, general
	05049	3.5	home activities	cooking or food preparation, moderate effort
	05050	2.0	home activities	cooking or food preparation - standing or sitting or in general (not broken into stand/walk components), manual appliances, light effort
	05051	2.5	home	serving food, setting table, implied walking

			activities	or standing
	05052	2.5	home activities	cooking or food preparation, walking
	05053	2.5	home activities	feeding household animals
	05055	2.5	home activities	putting away groceries (e.g. carrying groceries, shopping without a grocery cart), carrying packages
	05056	7.5	home activities	carrying groceries upstairs
	05057	3.0	home activities	cooking Indian bread on an outside stove
	05060	2.3	home activities	food shopping with or without a grocery cart, standing or walking
	05065	2.3	home activities	non-food shopping, with or without a cart, standing or walking
	05070	1.8	home activities	ironing
	05080	1.3	home activities	knitting, sewing, light effort, wrapping presents, sitting
	05082	2.8	home activities	sewing with a machine
	05090	2.0	home activities	laundry, fold or hang clothes, put clothes in washer or dryer, packing suitcase, washing clothes by hand, implied standing, light effort
	05092	4.0	home activities	laundry, hanging wash, washing clothes by hand, moderate effort
	05095	2.3	home activities	laundry, putting away clothes, gathering clothes to pack, putting away laundry, implied walking
	05100	3.3	home activities	making bed, changing linens
	05110	5.0	home activities	maple syruping/sugar bushing (including carrying buckets, carrying wood)
	05120	5.8	home activities	moving furniture, household items, carrying boxes
	05121	5.0	home activities	moving, lifting light loads
	05125	4.8	home activities	organizing room
	05130	3.5	home activities	scrubbing floors, on hands and knees, scrubbing bathroom, bathtub, moderate

				effort
	05131	2.0	home activities	scrubbing floors, on hands and knees, scrubbing bathroom, bathtub, light effort
	05132	6.5	home activities	scrubbing floors, on hands and knees, scrubbing bathroom, bathtub, vigorous effort
	05140	4.0	home activities	sweeping garage, sidewalk or outside of house
	05146	3.5	home activities	standing, packing/unpacking boxes, occasional lifting of lightweight household items, loading or unloading items in car, moderate effort
	05147	3.0	home activities	implied walking, putting away household items, moderate effort
	05148	2.5	home activities	watering plants
	05149	2.5	home activities	building a fire inside
	05150	9.0	home activities	moving household items upstairs, carrying boxes or furniture
	05160	2.0	home activities	standing, light effort tasks (pump gas, change light bulb, etc.)
	05165	3.5	home activities	walking, moderate effort tasks, non-cleaning (readying to leave, shut/lock doors, close windows, etc.)
	05170	2.2	home activities	sitting, playing with child(ren), light effort, only active periods
	05171	2.8	home activities	standing, playing with child(ren) light effort, only active periods
O-110	05175	3.5	home activities	walking/running, playing with child(ren), moderate effort, only active periods
O-111	05180	5.8	home activities	walking/running, playing with child(ren), vigorous effort, only active periods
O-15	05181	3.0	home activities	walking and carrying small child, child weighing 15 lbs or more
	05182	2.3	home activities	walking and carrying small child, child weighing less than 15 lbs
	05183	2.0	home activities	standing, holding child
	05184	2.5	home activities	child care, infant, general
O-16	05185	2.0	home activities	child care, sitting/kneeling (e.g., dressing, bathing, grooming, feeding, occasional

				lifting of child), light effort, general
O-17	05186	3.0	home activities	child care, standing (e.g., dressing, bathing, grooming, feeding, occasional lifting of child), moderate effort
	05188	1.5	home activities	reclining with baby
	05189	2.0	home activities	breastfeeding, sitting or reclining
	05190	2.5	home activities	sit, playing with animals, light effort, only active periods
	05191	2.8	home activities	stand, playing with animals, light effort, only active periods
	05192	3.0	home activities	walk/run, playing with animals, general, light effort, only active periods
191	05193	4.0	home activities	walk/run, playing with animals, moderate effort, only active periods
	05194	5.0	home activities	walk/run, playing with animals, vigorous effort, only active periods
	05195	3.5	home activities	standing, bathing dog
	05197	2.3	home activities	animal care, household animals, general
O-18	05200	4.0	home activities	elder care, disabled adult, bathing, dressing, moving into and out of bed, only active periods
	05205	2.3	home activities	elder care, disabled adult, feeding, combing hair, light effort, only active periods
	06010	3.0	home repair	airplane repair
	06020	4.0	home repair	automobile body work
	06030	3.3	home repair	automobile repair, light or moderate effort
	06040	3.0	home repair	carpentry, general, workshop (Taylor Code 620)
	06050	6.0	home repair	carpentry, outside house, installing rain gutters (Taylor Code 640),carpentry, outside house, building a fence
	06052	3.8	home repair	carpentry, outside house, building a fence
	06060	3.3	home repair	carpentry, finishing or refinishing cabinets or furniture
	06070	6.0	home repair	carpentry, sawing hardwood
	06072	4.0	home repair	carpentry, home remodeling tasks, moderate effort
	06074	2.3	home repair	carpentry, home remodeling tasks, light

				effort
	06080	5.0	home repair	caulking, chinking log cabin
	06090	4.5	home repair	caulking, except log cabin
	06100	5.0	home repair	cleaning gutters
	06110	5.0	home repair	excavating garage
	06120	5.0	home repair	hanging storm windows
	06122	5.0	home repair	hanging sheet rock inside house
	06124	3.0	home repair	hammering nails
	06126	2.5	home repair	home repair, general, light effort
	06127	4.5	home repair	home repair, general, moderate effort
	06128	6.0	home repair	home repair, general, vigorous effort
	06130	4.5	home repair	laying or removing carpet
	06140	3.8	home repair	laying tile or linoleum, repairing appliances
	06144	3.0	home repair	repairing appliances
	06150	5.0	home repair	painting, outside home (Taylor Code 650)
	06160	3.3	home repair	painting inside house, wallpapering, scraping paint
	06165	4.5	home repair	painting, (Taylor Code 630)
	06167	3.0	home repair	plumbing, general
	06170	3.0	home repair	put on and removal of tarp - sailboat
	06180	6.0	home repair	roofing
	06190	4.5	home repair	sanding floors with a power sander
	06200	4.5	home repair	scraping and painting sailboat or powerboat
	06205	2.0	home repair	sharpening tools
	06210	5.0	home repair	spreading dirt with a shovel
	06220	4.5	home repair	washing and waxing hull of sailboat or airplane
	06225	2.0	home repair	washing and waxing car
	06230	4.5	home repair	washing fence, painting fence, moderate effort
	06240	3.3	home repair	wiring, tapping-splicing
	07010	1.0	inactivity quiet/light	lying quietly and watching television
	07011	1.3	inactivity quiet/light	lying quietly, doing nothing, lying in bed awake, listening to music (not talking or reading)
	07020	1.3	inactivity quiet/light	sitting quietly and watching television
	07021	1.3	inactivity quiet/light	sitting quietly, general
	07022	1.5	inactivity	sitting quietly, fidgeting, general, fidgeting

			quiet/light	hands
	07023	1.8	inactivity quiet/light	sitting, fidgeting feet
	07024	1.3	inactivity quiet/light	sitting, smoking
	07025	1.5	inactivity quiet/light	sitting, listening to music (not talking or reading) or watching a movie in a theater
	07026	1.3	inactivity quiet/light	sitting at a desk, resting head in hands
	07030	0.95	inactivity quiet/light	sleeping
	07040	1.3	inactivity quiet/light	standing quietly, standing in a line
	07041	1.8	inactivity quiet/light	standing, fidgeting
	07050	1.3	inactivity quiet/light	reclining, writing
	07060	1.3	inactivity quiet/light	reclining, talking or talking on phone
	07070	1.3	inactivity quiet/light	reclining, reading
	07075	1.0	inactivity quiet/light	meditating
	08009	3.3	lawn and garden	carrying, loading or stacking wood, loading/unloading or carrying lumber, light-to-moderate effort
O-178	08010	5.5	lawn and garden	carrying, loading or stacking wood, loading/unloading or carrying lumber
	08019	4.5	lawn and garden	chopping wood, splitting logs, moderate effort
O-177	08020	6.3	lawn and garden	chopping wood, splitting logs, vigorous effort
	08025	3.5	lawn and garden	clearing light brush, thinning garden, moderate effort
O-179	08030	6.3	lawn and garden	clearing brush/land, undergrowth, or ground, hauling branches, wheelbarrow chores, vigorous effort
	08040	5.0	lawn and garden	digging sandbox, shoveling sand
	08045	3.5	lawn and garden	digging, spading, filling garden, composting, light-to-moderate effort
O-169	08050	5.0	lawn and garden	digging, spading, filling garden, compositing, (Taylor Code 590)

	08052	7.8	lawn and garden	digging, spading, filling garden, composting, vigorous effort
	08055	2.8	lawn and garden	driving tractor
	08057	8.3	lawn and garden	felling trees, large size
	08058	5.3	lawn and garden	felling trees, small-medium size
O-176	08060	5.8	lawn and garden	gardening with heavy power tools, tilling a garden, chain saw
	08065	2.3	lawn and garden	gardening, using containers, older adults > 60 years
	08070	4.0	lawn and garden	irrigation channels, opening and closing ports
	08080	6.3	lawn and garden	laying crushed rock
O-169	08090	5.0	lawn and garden	laying sod
O-163	08095	5.5	lawn and garden	mowing lawn, general
O-165	08100	2.5	lawn and garden	mowing lawn, riding mower (Taylor Code 550)
O-170	08110	6.0	lawn and garden	mowing lawn, walk, hand mower (Taylor Code 570)
O-180	08120	5.0	lawn and garden	mowing lawn, walk, power mower, moderate or vigorous effort
	08125	4.5	lawn and garden	mowing lawn, power mower, light or moderate effort (Taylor Code 590)
O-182	08130	2.5	lawn and garden	operating snow blower, walking
	08135	2.0	lawn and garden	planting, potting, transplanting seedlings or plants, light effort
O-183	08140	4.3	lawn and garden	planting seedlings, shrub, stooping, moderate effort
	08145	4.3	lawn and garden	planting crops or garden, stooping, moderate effort
O-168	08150	4.5	lawn and garden	planting trees
	08160	3.8	lawn and garden	raking lawn or leaves, moderate effort
O-164	08165	4.0	lawn and garden	raking lawn (Taylor Code 600)
	08170	4.0	lawn and	raking roof with snow rake

			garden	
O-166	08180	3.0	lawn and garden	riding snow blower
O-164	08190	4.0	lawn and garden	sacking grass, leaves
	08192	5.5	lawn and garden	shoveling dirt or mud
	08195	5.3	lawn and garden	shoveling snow, by hand, moderate effort
O-170	08200	6.0	lawn and garden	shovelling snow, by hand (Taylor Code 610)
	08202	7.5	lawn and garden	shoveling snow, by hand, vigorous effort
O-184	08210	4.0	lawn and garden	trimming shrubs or trees, manual cutter
O-167	08215	3.5	lawn and garden	trimming shrubs or trees, power cutter, using leaf blower, edge, moderate effort
O-175	08220	3.0	lawn and garden	walking, applying fertilizer or seeding a lawn, push applicator
	08230	1.5	lawn and garden	watering lawn or garden, standing or walking
	08239	3.5	lawn and garden	weeding, cultivating garden, light-to-moderate effort
O -168	08240	4.5	lawn and garden	weeding, cultivating garden (Taylor Code 580)
	08241	5.0	lawn and garden	weeding, cultivating garden, using a hoe, moderate-to-vigorous effort
O-181	08245	3.8	lawn and garden	gardening, general, moderate effort
O-166	08246	3.5	lawn and garden	picking fruit off trees, picking fruits/vegetables, moderate effort
	08248	4.5	lawn and garden	picking fruit off trees, gleaning fruits, picking fruits/vegetables, climbing ladder to pick fruit, vigorous effort
	08250	3.3	lawn and garden	implied walking/standing - picking up yard, light, picking flowers or vegetables
	08251	3.0	lawn and garden	walking, gathering gardening tools
	08255	5.5	lawn and garden	wheelbarrow, pushing garden cart or wheelbarrow
	08260	3.0	lawn and garden	yard work, general, light effort
	08261	4.0	lawn and	yard work, general, moderate effort

			garden	
	08262	6.0	lawn and garden	yard work, general, vigorous effort
	09000	1.5	miscellaneous	board game playing, sitting
	09005	2.5	miscellaneous	casino gambling, standing
	09010	1.5	miscellaneous	card playing, sitting
	09013	1.5	miscellaneous	chess game, sitting
	09015	1.5	miscellaneous	copying documents, standing
	09020	1.8	miscellaneous	drawing, writing, painting, standing
	09025	1.0	miscellaneous	laughing, sitting
	09030	1.3	miscellaneous	sitting, reading, book, newspaper, etc.
	09040	1.3	miscellaneous	sitting, writing, desk work, typing
	09045	1.0	miscellaneous	sitting, playing traditional video game, computer game
	09050	1.8	miscellaneous	standing, talking in person, on the phone, computer, or text messaging, light effort
	09055	1.5	miscellaneous	sitting, talking in person, on the phone, computer, or text messaging, light effort
	09060	1.3	miscellaneous	sitting, studying, general, including reading and/or writing, light effort
	09065	1.8	miscellaneous	sitting, in class, general, including note-taking or class discussion
	09070	1.8	miscellaneous	standing, reading
	09071	2.5	miscellaneous	standing, miscellaneous
	09075	1.8	miscellaneous	sitting, arts and crafts, carving wood, weaving, spinning wool, light effort
	09080	3.0	miscellaneous	sitting, arts and crafts, carving wood, weaving, spinning wool, moderate effort
201	09085	2.5	miscellaneous	standing, arts and crafts, sand painting, carving, weaving, light effort
202	09090	3.3	miscellaneous	standing, arts and crafts, sand painting, carving, weaving, moderate effort
203	09095	3.5	miscellaneous	standing, arts and crafts, sand painting, carving, weaving, vigorous effort
	09100	1.8	miscellaneous	retreat/family reunion activities involving sitting, relaxing, talking, eating
	09101	3.0	miscellaneous	retreat/family reunion activities involving playing games with children
	09105	2.0	miscellaneous	touring/traveling/vacation involving riding in a vehicle
	09106	3.5	miscellaneous	touring/traveling/vacation involving walking

O-137, 189	09110	2.5	miscellaneous	camping involving standing, walking, sitting, light-to-moderate effort
	09115	1.5	miscellaneous	sitting at a sporting event, spectator
	10010	1.8	music playing	accordion, sitting
	10020	2.3	music playing	cello, sitting
	10030	2.3	music playing	conducting orchestra, standing
	10035	2.5	music playing	double bass, standing
	10040	3.8	music playing	drums, sitting
	10045	3.0	music playing	drumming (e.g., bongo, conga, benbe), moderate, sitting
	10050	2.0	music playing	flute, sitting
	10060	1.8	music playing	horn, standing
	10070	2.3	music playing	piano, sitting
	10074	2.0	music playing	playing musical instruments, general
	10077	2.0	music playing	organ, sitting
	10080	3.5	music playing	trombone, standing
	10090	1.8	music playing	trumpet, standing
	10100	2.5	music playing	violin, sitting
	10110	1.8	music playing	woodwind, sitting
	10120	2.0	music playing	guitar, classical, folk, sitting
	10125	3.0	music playing	guitar, rock and roll band, standing
207	10130	4.0	music playing	marching band, baton twirling, walking, moderate pace, general
	10131	5.5	music playing	marching band, playing an instrument, walking, brisk pace, general
208	10135	3.5	music playing	marching band, drum major, walking
	11003	2.3	occupation	active workstation, treadmill desk, walking
	11006	3.0	occupation	airline flight attendant
O-120	11010	4.0	occupation	bakery, general, moderate effort
O-121	11015	2.0	occupation	bakery, light effort
O-150	11020	2.3	occupation	bookbinding
O-122	11030	6.0	occupation	building road, driving heavy machinery
	11035	2.0	occupation	building road, directing traffic, standing
	11038	2.5	occupation	carpentry, general, light effort
O-116	11040	4.3	occupation	carpentry, general, moderate effort
	11042	7.0	occupation	carpentry, general, heavy or vigorous effort
O-10	11050	8.0	occupation	carrying heavy loads (e.g., bricks, tools)
O-11	11060	8.0	occupation	carrying moderate loads up stairs, moving boxes 25-49 lbs
O-25	11070	4.0	occupation	chambermaid, hotel housekeeper, making bed, cleaning bathroom, pushing cart

	11080	5.3	occupation	coal mining, drilling coal, rock
	11090	5.0	occupation	coal mining, erecting supports
O-173	11100	5.5	occupation	coal mining, general
	11110	6.3	occupation	coal mining, shoveling coal
	11115	2.5	occupation	cook, chef
O-117	11120	4.0	occupation	construction, outside, remodeling, new structures (e.g., roof repair, miscellaneous)
O-172	11125	2.3	occupation	custodial work, light effort (e.g., cleaning sink and toilet, dusting, vacuuming, light cleaning)
O-26	11126	3.8	occupation	custodial work, moderate effort (e.g., electric buffer, feathering arena floors, mopping, taking out trash, vacuuming)
O-123	11130	3.3	occupation	electrical work (e.g., hook up wire, tapping-splicing)
	11135	1.8	occupation	engineer (e.g., mechanical or electrical)
O-102	11145	7.8	occupation	farming, vigorous effort (e.g., baling hay, cleaning barn)
O-101	11146	4.8	occupation	farming, moderate effort (e.g., feeding animals, chasing cattle by walking and/or horseback, spreading manure, harvesting crops)
	11147	2.0	occupation	farming, light effort (e.g., cleaning animal sheds, preparing animal feed)
O-100	11170	2.8	occupation	farming, driving tasks (e.g., driving tractor or harvester)
O-174	11180	3.5	occupation	farming, feeding small animals
	11190	4.3	occupation	farming, feeding cattle, horses
	11191	4.3	occupation	farming, hauling water for animals, general hauling water, farming, general hauling water
O-124	11192	4.5	occupation	farming, taking care of animals (e.g., grooming, brushing, shearing sheep, assisting with birthing, medical care, branding), general
	11195	3.8	occupation	farming, rice, planting, grain milling activities
	11210	3.5	occupation	farming, milking by hand, cleaning pails, moderate effort
	11220	1.3	occupation	farming, milking by machine, light effort
O-125	11240	8.0	occupation	fire fighter, general
	11244	6.8	occupation	fire fighter, rescue victim, automobile accident, using pike pole

	11245	8.0	occupation	fire fighter, raising and climbing ladder with full gear, simulated fire suppression
	11246	9.0	occupation	fire fighter, hauling hoses on ground, carrying/hoisting equipment, breaking down walls etc., wearing full gear
	11247	3.5	occupation	fishing, commercial, light effort
	11248	5.0	occupation	fishing, commercial, moderate effort
	11249	7.0	occupation	fishing, commercial, vigorous effort
O-155	11250	17.5	occupation	forestry, ax chopping, very fast, 1.25 kg axe, 51 blows/min, extremely vigorous effort
O-154	11260	5.0	occupation	forestry, ax chopping, slow, 1.25 kg axe, 19 blows/min, moderate effort
	11262	8.0	occupation	forestry, ax chopping, fast, 1.25 kg axe, 35 blows/min, vigorous effort
O-151	11264	4.5	occupation	forestry, moderate effort (e.g., sawing wood with power saw, weeding, hoeing)
O-152	11266	8.0	occupation	forestry, vigorous effort (e.g., barking, felling, or trimming trees, carrying or stacking logs, planting seeds, sawing lumber by hand)
O-156	11370	4.5	occupation	furriery
	11375	4.0	occupation	garbage collector, walking, dumping bins into truck
	11378	1.8	occupation	hairstylist (e.g., plaiting hair, manicure, make-up artist)
O-157	11380	7.3	occupation	horse grooming, including feeding, cleaning stalls, bathing, brushing, clipping, longeing and exercising horses
	11381	4.3	occupation	horse, feeding, watering, cleaning stalls, implied walking and lifting loads
O-64, 64	11390	7.3	occupation	horse racing, galloping
	11400	5.8	occupation	horse racing, trotting
	11410	3.8	occupation	horse racing, walking
	11413	3.0	occupation	kitchen maid
	11415	4.0	occupation	lawn keeper, yard work, general
	11418	3.3	occupation	laundry worker
O-141	11420	3.0	occupation	locksmith
O-126	11430	3.0	occupation	machine tooling (e.g., machining, working sheet metal, machine fitter, operating lathe, welding) light-to-moderate effort
	11450	5.0	occupation	Machine tooling, operating punch press,

				moderate effort
	11472	1.8	occupation	manager, property
	11475	2.8	occupation	manual or unskilled labor, general, light effort
	11476	4.5	occupation	manual or unskilled labor, general, moderate effort
	11477	6.5	occupation	manual or unskilled labor, general, vigorous effort
O-142	11480	4.3	occupation	masonry, concrete, moderate effort
	11482	2.5	occupation	masonry, concrete, light effort
O-143	11485	4.0	occupation	massage therapist, standing
O-20	11490	7.5	occupation	moving, carrying or pushing heavy objects, 75 lbs or more, only active time (e.g., desks, moving van work)
	11495	12.0	occupation	skindiving or SCUBA diving as a frogman, Navy Seal
O-41	11500	2.5	occupation	operating heavy duty equipment, automated, not driving
	11510	4.5	occupation	orange grove work, picking fruit
	11514	3.3	occupation	painting,house, furniture, moderate effort
	11516	3.0	occupation	plumbing activities
	11520	2.0	occupation	printing, paper industry worker, standing
O-144	11525	2.5	occupation	police, directing traffic, standing
O-145	11526	2.5	occupation	police, driving a squad car, sitting
O-146	11527	1.3	occupation	police, riding in a squad car, sitting
O-147	11528	4.0	occupation	police, making an arrest, standing
	11529	2.3	occupation	postal carrier, walking to deliver mail
O-148	11530	2.0	occupation	shoe repair, general
O-30	11540	7.8	occupation	shoveling, digging ditches
O-33	11550	8.8	occupation	shoveling, more than 16 lbs/minute, deep digging, vigorous effort
O-31	11560	5.0	occupation	shoveling, less than 10 lbs/minute, moderate effort
O-32	11570	6.5	occupation	shoveling, 10 to 15 lbs/minute, vigorous effort
O-40	11580	1.5	occupation	sitting tasks, light effort (e.g., office work, chemistry lab work, computer work, light assembly repair, watch repair, reading, desk work)
O-40	11585	1.5	occupation	sitting meetings, light effort, general, and/or with talking involved (e.g., eating at a business meeting)

O-41	11590	2.5	occupation	sitting tasks, moderate effort (e.g., pushing heavy levers, riding mower/forklift, crane operation)
	11593	2.8	occupation	sitting, teaching stretching or yoga, or light effort exercise class
O-50	11600	3.0	occupation	standing tasks, light effort (e.g., bartending, store clerk, assembling, filing, duplicating, librarian, putting up a Christmas tree, standing and talking at work, changing clothes when teaching physical education, standing)
O-51	11610	3.0	occupation	standing, light/moderate effort (e.g., assemble/repair heavy parts, welding, stocking parts, auto repair, standing, packing boxes, nursing patient care)
O-53	11615	4.5	occupation	standing, moderate effort, lifting items continuously, 10 – 20 lbs, with limited walking or resting
O-52	11620	3.5	occupation	standing, moderate effort, intermittent lifting 50 lbs, hitch/twisting ropes
O-53	11630	4.5	occupation	standing, moderate/heavy tasks (e.g., lifting more than 50 lbs, masonry, painting, paper hanging)
	11708	5.3	occupation	steel mill, moderate effort (e.g., fettling, forging, tipping molds)
O-149	11710	8.3	occupation	steel mill, vigorous effort (e.g., hand rolling, merchant mill rolling, removing slag, tending furnace)
O-185	11720	2.3	occupation	tailoring, cutting fabric
O-127	11730	2.5	occupation	tailoring, general
	11740	1.8	occupation	tailoring, hand sewing
O-127	11750	2.5	occupation	tailoring, machine sewing
	11760	3.5	occupation	tailoring, pressing
	11763	2.0	occupation	tailoring, weaving, light effort (e.g., finishing operations, washing, dyeing, inspecting cloth, counting yards, paperwork)
	11765	4.0	occupation	tailoring, weaving, moderate effort (e.g., spinning and weaving operations, delivering boxes of yarn to spinners, loading of warp beam, pinwinding, conewinding, warping, cloth cutting)

O-115	11766	6.5	occupation	truck driving, loading and unloading truck, tying down load, standing, walking and carrying heavy loads
	11767	2.0	occupation	truck, driving delivery truck, taxi, shuttlebus, school bus
O-40	11770	1.3	occupation	typing, electric, manual or computer
O-60	11780	6.3	occupation	using heavy power tools such as pneumatic tools (e.g., jackhammers, drills)
O-61	11790	8.0	occupation	using heavy tools (not power) such as shovel, pick, tunnel bar, spade
O-70	11791	2.0	occupation	walking on job, less than 2.0 mph, very slow speed, in office or lab area
O-71	11792	3.5	occupation	walking on job, 3.0 mph, in office, moderate speed, not carrying anything
O-72	11793	4.3	occupation	walking on job, 3.5 mph, in office, brisk speed, not carrying anything
O-80	11795	3.5	occupation	walking on job, 2.5 mph, slow speed and carrying light objects less than 25 lbs
	11796	3.0	occupation	walking, gathering things at work, ready to leave
	11797	3.8	occupation	walking, 2.5 mph, slow speed, carrying heavy objects more than 25 lbs
O-81	11800	4.5	occupation	walking, 3.0 mph, moderately and carrying light objects less than 25 lbs
O-186	11805	3.5	occupation	walking, pushing a wheelchair
O-82	11810	4.8	occupation	walking, 3.5 mph, briskly and carrying objects less than 25 lbs
O-83	11820	5.0	occupation	walking or walk downstairs or standing, carrying objects about 25 to 49 lbs
O-84	11830	6.5	occupation	walking or walk downstairs or standing, carrying objects about 50 to 74 lbs
O-85	11840	7.5	occupation	walking or walk downstairs or standing, carrying objects about 75 to 99 lbs
O-86	11850	8.5	occupation	walking or walk downstairs or standing, carrying objects about 100 lbs or more
	11870	3.0	occupation	working in scene shop, theater actor, backstage employee
69	12010	6.0	running	jog/walk combination (jogging component of less than 10 minutes) (Taylor Code 180)
68	12020	7.0	running	jogging, general
	12025	8.0	running	jogging, in place
	12027	4.5	running	jogging, on a mini-tramp
	12029	6.0	running	Running, 4 mph (15 min/mile)

O-95, 87	12030	8.3	running	running, 5 mph (12 min/mile)
88	12040	9.0	running	running, 5.2 mph (11.5 min/mile)
89	12050	9.8	running	running, 6 mph (10 min/mile)
90	12060	10.5	running	running, 6.7 mph (9 min/mile)
	12070	11.0	running	running, 7 mph (8.5 min/mile)
91	12080	11.5	running	running, 7.5 mph (8 min/mile)
	12090	11.8	running	running, 8 mph (7.5 min/mile)
92	12100	12.3	running	running, 8.6 mph (7 min/mile)
	12110	12.8	running	running, 9 mph (6.5 min/mile)
93	12120	14.5	running	running, 10 mph (6 min/mile)
	12130	16.0	running	running, 11 mph (5.5 min/mile)
	12132	19.0	running	running, 12 mph (5 min/mile)
	12134	19.8	running	running, 13 mph (4.6 min/mile)
	12135	23.0	running	running, 14 mph (4.3 min/mile)
94	12140	9.0	running	running, cross country
95	12150	8.0	running	running, (Taylor code 200)
O-89,96	12170	15.0	running	running, stairs, up
97	12180	10.0	running	running, on a track, team practice
98	12190	8.0	running	running, training, pushing a wheelchair or baby carrier
	12200	13.3	running	running, marathon
	13000	2.3	self care	getting ready for bed, general, standing
	13009	1.8	self care	sitting on toilet, eliminating while standing or squatting
	13010	1.5	self care	bathing, sitting
	13020	2.5	self care	dressing, undressing, standing or sitting
	13030	1.5	self care	eating, sitting
	13035	2.0	self care	talking and eating or eating only, standing
	13036	1.5	self care	taking medication, sitting or standing
	13040	2.0	self care	grooming, washing hands, shaving, brushing teeth, putting on make-up, sitting or standing
	13045	2.5	self care	hairstyling, standing
	13046	1.3	self care	having hair or nails done by someone else, sitting
	13050	2.0	self care	showering, toweling off, standing
	14010	2.8	sexual activity	active, vigorous effort
	14020	1.8	sexual activity	general, moderate effort
	14030	1.3	sexual activity	passive, light effort, kissing, hugging
	15000	5.5	sports	Alaska Native Games, Eskimo Olympics, general

4	15010	4.3	sports	archery, non-hunting
7	15020	7.0	sports	badminton, competitive (Taylor Code 450)
6	15030	5.5	sports	badminton, social singles and doubles, general
8	15040	8.0	sports	basketball, game (Taylor Code 490)
9	15050	6.0	sports	basketball, non-game, general (Taylor Code 480)
	15055	6.5	sports	basketball, general
O-132	15060	7.0	sports	basketball, officiating (Taylor Code 500)
10	15070	4.5	sports	basketball, shooting baskets
	15072	9.3	sports	basketball, drills, practice
11	15075	7.8	sports	basketball, wheelchair
18	15080	2.5	sports	billiards
19	15090	3.0	sports	bowling (Taylor Code 390)
	15092	3.8	sports	bowling, indoor, bowling alley
20	15100	12.8	sports	boxing, in ring, general
21	15110	5.5	sports	boxing, punching bag
22	15120	7.8	sports	boxing, sparring
182	15130	7.0	sports	broomball
27	15135	5.8	sports	children's games, adults playing (e.g., hopscotch, 4-square, dodgeball, playground apparatus, t-ball, tetherball, marbles, arcade games), moderate effort
209	15138	6.0	sports	cheerleading, gymnastic moves, competitive
29	15140	4.0	sports	coaching, football, soccer, basketball, baseball, swimming, etc.
	15142	8.0	sports	coaching, actively playing sport with players
30	15150	4.8	sports	cricket, batting, bowling, fielding
31	15160	3.3	sports	croquet
32	15170	4.0	sports	curling
36	15180	2.5	sports	darts, wall or lawn
38	15190	6.0	sports	drag racing, pushing or driving a car
	15192	8.5	sports	auto racing, open wheel
39	15200	6.0	sports	fencing
44	15210	8.0	sports	football, competitive
45	15230	8.0	sports	football, touch, flag, general (Taylor Code 510)
	15232	4.0	sports	football, touch, flag, light effort
46	15235	2.5	sports	football or baseball, playing catch
47	15240	3.0	sports	frisbee playing, general

48	15250	8.0	sports	frisbee, ultimate
214	15255	4.8	sports	golf, general
49	15265	4.3	sports	golf, walking, carrying clubs
51	15270	3.0	sports	golf, miniature, driving range
50	15285	5.3	sports	golf, walking, pulling clubs
53	15290	3.5	sports	golf, using power cart (Taylor Code 070)
54	15300	3.8	sports	gymnastics, general
188	15310	4.0	sports	hacky sack
55	15320	12.0	sports	handball, general (Taylor Code 520)
	15330	8.0	sports	handball, team
	15335	4.0	sports	high ropes course, multiple elements
57	15340	3.5	sports	hang gliding
60, 186	15350	7.8	sports	hockey, field
61	15360	8.0	sports	hockey, ice, general
	15362	10.0	sports	hockey, ice, competitive
O-62, 62	15370	5.5	sports	horseback riding, general
	15375	4.3	sports	horse chores, feeding, watering, cleaning stalls, implied walking and lifting loads
	15380	4.5	sports	saddling, cleaning, grooming, harnessing and unharnessing horse
O-63, 63	15390	5.8	sports	horseback riding, trotting
	15395	7.3	sports	horseback riding, canter or gallop
	15400	3.8	sports	horseback riding, walking
	15402	9.0	sports	horseback riding, jumping
	15408	1.8	sports	horse cart, driving, standing or sitting
180	15410	3.0	sports	horseshoe pitching, quoits
	15420	12.0	sports	jai alai
	15425	5.3	sports	martial arts, different types, slower pace, novice performers, practice
70	15430	10.3	sports	martial arts, different types, moderate pace (e.g., judo, jujitsu, karate, kick boxing, tae kwan do, tai-bo, Muay Thai boxing)
	15440	4.0	sports	juggling
72	15450	7.0	sports	kickball
73	15460	8.0	sports	lacrosse
	15465	3.3	sports	lawn bowling, bocce ball, outdoor
74	15470	4.0	sports	moto-cross, off-road motor sports, all-terrain vehicle, general
	15480	9.0	sports	orienteering
76	15490	10.0	sports	paddleball, competitive

77	15500	6.0	sports	paddleball, casual, general (Taylor Code 460)
79	15510	8.0	sports	polo, on horseback
80	15520	10.0	sports	racquetball, competitive
81	15530	7.0	sports	racquetball, general (Taylor Code 470)
82	15533	8.0	sports	rock or mountain climbing (Taylor Code 470) (Formerly code = 17120)
	15535	7.5	sports	rock climbing, ascending rock, high difficulty
	15537	5.8	sports	rock climbing, ascending or traversing rock, low-to-moderate difficulty
215	15540	5.0	sports	rock climbing, rappelling
	15542	4.0	sports	rodeo sports, general, light effort
	15544	5.5	sports	rodeo sports, general, moderate effort
	15546	7.0	sports	rodeo sports, general, vigorous effort
	15550	12.3	sports	rope jumping, fast pace, 120-160 skips/min
194	15551	11.8	sports	rope jumping, moderate pace, 100-120 skips/min, general, 2 foot skip, plain bounce
	15552	8.8	sports	rope jumping, slow pace, < 100 skips/min, 2 foot skip, rhythm bounce
86	15560	8.3	sports	rugby, union, team, competitive
	15562	6.3	sports	rugby, touch, non-competitive
103	15570	3.0	sports	shuffleboard
104	15580	5.0	sports	skateboarding, general, moderate effort
	15582	6.0	sports	skateboarding, competitive, vigorous effort
109	15590	7.0	sports	skating, roller (Taylor Code 360)
183	15591	7.5	sports	rollerblading, in-line skating, 14.4 km/h (9.0 mph), recreational pace
	15592	9.8	sports	rollerblading, in-line skating, 17.7 km/h (11.0 mph), moderate pace, exercise training
	15593	12.3	sports	rollerblading, in-line skating, 21.0 to 21.7 km/h (13.0 to 13.6 mph), fast pace, exercise training
	15594	14.0	sports	rollerblading, in-line skating, 24.0 km/h (15.0 mph), maximal effort
120	15600	3.5	sports	skydiving, base jumping, bungee jumping
124	15605	10.0	sports	soccer, competitive
O-138, 125	15610	7.0	sports	soccer, casual, general (Taylor Code 540)

126	15620	5.0	sports	softball or baseball, fast or slow pitch, general (Taylor Code 440)
	15625	4.0	sports	softball, practice
O-67, 127	15630	4.0	sports	softball, officiating
128	15640	6.0	sports	softball, pitching
	15645	3.3	sports	sports spectator, very excited, emotional, physically moving
129	15650	12.0	sports	squash (Taylor Code 530)
	15652	7.3	sports	squash, general
137	15660	4.0	sports	table tennis, ping pong (Taylor Code 410)
181	15670	3.0	sports	tai chi, qi gong, general
	15672	1.5	sports	tai chi, qi gong, sitting, light effort
138	15675	7.3	sports	tennis, general
139	15680	6.0	sports	tennis, doubles (Taylor Code 430)
	15685	4.5	sports	tennis, doubles
140	15690	8.0	sports	tennis, singles (Taylor Code 420)
	15695	5.0	sports	tennis, hitting balls, non-game play, moderate effort
141	15700	3.5	sports	trampoline, recreational
	15702	4.5	sports	trampoline, competitive
	15710	4.0	sports	volleyball (Taylor Code 400)
142	15711	6.0	sports	volleyball, competitive, in gymnasium
143	15720	3.0	sports	volleyball, non-competitive, 6 - 9 member team, general
144	15725	8.0	sports	volleyball, beach, in sand
O-159, 159	15730	6.0	sports	wrestling (one match = 5 minutes)
204	15731	7.0	sports	wallyball, general
163	15732	4.0	sports	track and field (e.g., shot, discus, hammer throw)
184	15733	6.0	sports	track and field (e.g., high jump, long jump, triple jump, javelin, pole vault)
185	15734	10.0	sports	track and field (e.g., steeplechase, hurdles)
	16010	2.5	transportation	automobile or light truck (not a semi) driving
	16015	1.3	transportation	riding in a car or truck
	16016	1.3	transportation	riding in a bus or train
	16020	1.8	transportation	flying airplane or helicopter
166	16030	2.8	transportation	motor scooter, motorcycle
	16035	6.3	transportation	pulling rickshaw
	16040	6.0	transportation	pushing plane in and out of hangar

O-118,187	16050	2.5	transportation	truck, semi, tractor, > 1 ton, or bus, driving
	16060	3.5	transportation	walking for transportation, 2.8-3.2 mph, level, moderate pace, firm surface
5	17010	7.0	walking	backpacking (Taylor Code 050)
	17012	7.8	walking	backpacking, hiking or organized walking with a daypack
	17020	5.0	walking	carrying 15 pound load (e.g. suitcase), level ground or downstairs
	17021	2.3	walking	carrying 15 lb child, slow walking
	17025	8.3	walking	carrying load upstairs, general
	17026	5.0	walking	carrying 1 to 15 lb load, upstairs
	17027	6.0	walking	carrying 16 to 24 lb load, upstairs
	17028	8.0	walking	carrying 25 to 49 lb load, upstairs
	17029	10.0	walking	carrying 50 to 74 lb load, upstairs
	17030	12.0	walking	carrying > 74 lb load, upstairs
	17031	3.5	walking	loading /unloading a car, implied walking
	17033	6.3	walking	climbing hills, no load
149	17035	6.5	walking	climbing hills with 0 to 9 lb load
150	17040	7.3	walking	climbing hills with 10 to 20 lb load
151	17050	8.3	walking	climbing hills with 21 to 42 lb load
152	17060	9.0	walking	climbing hills with 42+ lb load
O-134	17070	3.5	walking	descending stairs
O-136, 59	17080	6.0	walking	hiking, cross country (Taylor Code 040)
216	17082	5.3	walking	hiking or walking at a normal pace through fields and hillsides
	17085	2.5	walking	bird watching, slow walk
	17088	4.5	walking	marching, moderate speed, military, no pack
O-88	17090	8.0	walking	marching rapidly, military, no pack
233	17100	4.0	walking	pushing or pulling stroller with child or walking with children, 2.5 to 3.1 mph
O-81	17105	3.8	walking	pushing a wheelchair, non-occupational
148	17110	6.5	walking	race walking
O-87, 164	17130	8.0	walking	stair climbing, using or climbing up ladder (Taylor Code 030)
	17133	4.0	walking	stair climbing, slow pace
	17134	8.8	walking	stair climbing, fast pace
	17140	5.0	walking	using crutches
	17150	2.0	walking	walking, household
	17151	2.0	walking	walking, less than 2.0 mph, level, strolling,

				very slow
145	17152	2.8	walking	walking, 2.0 mph, level, slow pace, firm surface
	17160	3.5	walking	walking for pleasure (Taylor Code 010)
	17161	2.5	walking	walking from house to car or bus, from car or bus to go places, from car or bus to and from the worksite
	17162	2.5	walking	walking to neighbor's house or family's house for social reasons
146	17165	3.0	walking	walking the dog
	17170	3.0	walking	walking, 2.5 mph, level, firm surface
	17180	3.3	walking	walking, 2.5 mph, downhill
	17190	3.5	walking	walking, 2.8 to 3.2 mph, level, moderate pace, firm surface
147	17200	4.3	walking	walking, 3.5 mph, level, brisk, firm surface, walking for exercise
	17210	5.3	walking	walking, 2.9 to 3.5 mph, uphill, 1 to 5% grade
	17211	8.0	walking	walking, 2.9 to 3.5 mph, uphill, 6% to 15% grade
	17220	5.0	walking	walking, 4.0 mph, level, firm surface, very brisk pace
	17230	7.0	walking	walking, 4.5 mph, level, firm surface, very, very brisk
	17231	8.3	walking	walking, 5.0 mph, level, firm surface
	17235	9.8	walking	walking, 5.0 mph, uphill, 3% grade
	17250	3.5	walking	walking, for pleasure, work break
	17260	4.8	walking	walking, grass track
	17262	4.5	walking	walking, normal pace, plowed field or sand
	17270	4.0	walking	walking, to work or class (Taylor Code 015)
	17280	2.5	walking	walking, to and from an outhouse
	17302	4.8	walking	walking, for exercise, 3.5 to 4 mph, with ski poles, Nordic walking, level, moderate pace
	17305	9.5	walking	walking, for exercise, 5.0 mph, with ski poles, Nordic walking, level, fast pace
	17310	6.8	walking	walking, for exercise, with ski poles, Nordic walking, uphill
	17320	6.0	walking	walking, backwards, 3.5 mph, level
	17325	8.0	walking	walking, backwards, 3.5 mph, uphill, 5% grade
167	18010	2.5	water	boating, power, driving

			activities	
	18012	1.3	water activities	boating, power, passenger, light
	18020	4.0	water activities	canoeing, on camping trip (Taylor Code 270)
	18025	3.3	water activities	canoeing, harvesting wild rice, knocking rice off the stalks
	18030	7.0	water activities	canoeing, portaging
	18040	2.8	water activities	canoeing, rowing, 2.0-3.9 mph, light effort
	18050	5.8	water activities	canoeing, rowing, 4.0-5.9 mph, moderate effort
	18060	12.5	water activities	canoeing, rowing, kayaking, competition, >6 mph, vigorous effort
O-140, 199	18070	3.5	water activities	canoeing, rowing, for pleasure, general (Taylor Code 250)
26	18080	12.0	water activities	canoeing, rowing, in competition, or crew or sculling (Taylor Code 260)
37	18090	3.0	water activities	diving, springboard or platform
71	18100	5.0	water activities	kayaking, moderate effort
78	18110	4.0	water activities	paddle boat
100	18120	3.0	water activities	sailing, boat and board sailing, windsurfing, ice sailing, general (Taylor Code 235)
101	18130	4.5	water activities	sailing, in competition
100	18140	3.3	water activities	sailing, Sunfish/Laser/Hobby Cat, Keel boats, ocean sailing, yachting, leisure
155	18150	6.0	water activities	skiing, water or wakeboarding (Taylor Code 220)
	18160	7.0	water activities	jet skiing, driving, in water
	18180	15.8	water activities	skindiving, fast
	18190	11.8	water activities	skindiving, moderate
102	18200	7.0	water activities	skindiving, scuba diving, general (Taylor Code 310)
122	18210	5.0	water activities	snorkeling (Taylor Code 310)

132	18220	3.0	water activities	surfing, body or board, general
	18222	5.0	water activities	surfing, body or board, competitive
229	18225	6.0	water activities	paddle boarding, standing
135	18230	9.8	water activities	swimming laps, freestyle, fast, vigorous effort
134	18240	5.8	water activities	swimming laps, freestyle, front crawl, slow, light or moderate effort
	18250	9.5	water activities	swimming, backstroke, general, training or competition
	18255	4.8	water activities	swimming, backstroke, recreational
232	18260	10.3	water activities	swimming, breaststroke, general, training or competition
	18265	5.3	water activities	swimming, breaststroke, recreational
136	18270	13.8	water activities	swimming, butterfly, general
	18280	10.0	water activities	swimming, crawl, fast speed, ~75 yards/minute, vigorous effort
	18290	8.3	water activities	swimming, crawl, medium speed, ~50 yards/minute, vigorous effort
133	18300	6.0	water activities	swimming, lake, ocean, river (Taylor Codes 280, 295)
133	18310	6.0	water activities	swimming, leisurely, not lap swimming, general
	18320	7.0	water activities	swimming, sidestroke, general
193	18330	8.0	water activities	swimming, synchronized
135	18340	9.8	water activities	swimming, treading water, fast, vigorous effort
217	18350	3.5	water activities	swimming, treading water, moderate effort, general
	18352	2.3	water activities	tubing, floating on a river, general
160	18355	5.5	water activities	water aerobics, water calisthenics
O-153,153	18360	10.0	water activities	water polo
154	18365	3.0	water	water volleyball

			activities	
161	18366	9.8	water activities	water jogging
	18367	2.5	water activities	water walking, light effort, slow pace
	18368	4.5	water activities	water walking, moderate effort, moderate pace
	18369	6.8	water activities	water walking, vigorous effort, brisk pace
158	18370	5.0	water activities	whitewater rafting, kayaking, or canoeing
	18380	5.0	water activities	windsurfing, not pumping for speed
	18385	11.0	water activities	windsurfing or kitesurfing, crossing trial
	18390	13.5	water activities	windsurfing, competition, pumping for speed
	19005	7.5	winter activities	dog sledding, mushing
	19006	2.5	winter activities	dog sledding, passenger
	19010	6.0	winter activities	moving ice house, set up/drill holes
	19011	2.0	winter activities	ice fishing, sitting
	19018	14.0	winter activities	skating, ice dancing
105	19020	5.5	winter activities	skating, ice, 9 mph or less
106	19030	7.0	winter activities	skating, ice, general (Taylor Code 360)
O-68, 107	19040	9.0	winter activities	skating, ice, rapidly, more than 9 mph, not competitive
108	19050	13.3	winter activities	skating, speed, competitive
118	19060	7.0	winter activities	ski jumping, climb up carrying skis
O-139, 110	19075	7.0	winter activities	skiing, general
111	19080	6.8	winter activities	skiing, cross country, 2.5 mph, slow or light effort, ski walking
112	19090	9.0	winter activities	skiing, cross country, 4.0-4.9 mph, moderate speed and effort, general

113	19100	12.5	winter activities	skiing, cross country, 5.0-7.9 mph, brisk speed, vigorous effort
114	19110	15.0	winter activities	skiing, cross country, >8.0 mph, elite skier, racing
	19130	15.5	winter activities	skiing, cross country, hard snow, uphill, maximum, snow mountaineering
	19135	13.3	winter activities	skiing, cross-country, skating
	19140	13.5	winter activities	skiing, cross-country, biathlon, skating technique
115	19150	4.3	winter activities	skiing, downhill, alpine or snowboarding, light effort, active time only
116	19160	5.3	winter activities	skiing, downhill, alpine or snowboarding, moderate effort, general, active time only
117	19170	8.0	winter activities	skiing, downhill, vigorous effort, racing
	19175	12.5	winter activities	skiing, roller, elite racers
121	19180	7.0	winter activities	sledding, tobogganing, bobsledding, luge (Taylor Code 370)
123	19190	5.3	winter activities	snow shoeing, moderate effort
	19192	10.0	winter activities	snow shoeing, vigorous effort
165	19200	3.5	winter activities	snowmobiling, driving, moderate
	19202	2.0	winter activities	snowmobiling, passenger
	19252	5.3	winter activities	snow shoveling, by hand, moderate effort
	19254	7.5	winter activities	snow shoveling, by hand, vigorous effort
	19260	2.5	winter activities	snow blower, walking and pushing
	20000	1.3	religious activities	sitting in church, in service, attending a ceremony, sitting quietly
	20001	2.0	religious activities	sitting, playing an instrument at church
	20005	1.8	religious activities	sitting in church, talking or singing, attending a ceremony, sitting, active participation
	20010	1.3	religious activities	sitting, reading religious materials at home

	20015	1.3	religious activities	standing quietly in church, attending a ceremony
	20020	2.0	religious activities	standing, singing in church, attending a ceremony, standing, active participation
	20025	1.3	religious activities	kneeling in church or at home, praying
	20030	1.8	religious activities	standing, talking in church
	20035	2.0	religious activities	walking in church
	20036	2.0	religious activities	walking, less than 2.0 mph, very slow
	20037	3.5	religious activities	walking, 3.0 mph, moderate speed, not carrying anything
	20038	4.3	religious activities	walking, 3.5 mph, brisk speed, not carrying anything
	20039	2.0	religious activities	walk/stand combination for religious purposes, usher
	20040	5.0	religious activities	praise with dance or run, spiritual dancing in church
O-128	20045	2.5	religious activities	serving food at church
O-129	20046	2.0	religious activities	preparing food at church
O-130	20047	3.3	religious activities	washing dishes, cleaning kitchen at church
	20050	1.5	religious activities	eating at church
	20055	2.0	religious activities	eating/talking at church or standing eating, American Indian Feast days
O-131	20060	3.3	religious activities	cleaning church
	20061	4.0	religious activities	general yard work at church
O-52	20065	3.5	religious activities	standing, moderate effort (e.g., lifting heavy objects, assembling at fast rate)
	20095	4.5	religious activities	Standing, moderate-to-heavy effort, manual labor, lifting \geq 50 lbs, heavy maintenance
	20100	1.3	religious activities	typing, electric, manual, or computer
	21000	1.5	volunteer activities	sitting, meeting, general, and/or with talking involved

	21005	1.5	volunteer activities	sitting, light office work, in general
	21010	2.5	volunteer activities	sitting, moderate work
	21015	2.3	volunteer activities	standing, light work (filing, talking, assembling)
	21016	2.0	volunteer activities	sitting, child care, only active periods
O-17	21017	3.0	volunteer activities	standing, child care, only active periods
O-110	21018	3.5	volunteer activities	walk/run play with children, moderate, only active periods
O-111	21019	5.8	volunteer activities	walk/run play with children, vigorous, only active periods
O-51	21020	3.0	volunteer activities	standing, light/moderate work (e.g., pack boxes, assemble/repair, set up chairs/furniture)
O-52	21025	3.5	volunteer activities	standing, moderate (lifting 50 lbs., assembling at fast rate)
O-53	21030	4.5	volunteer activities	standing, moderate/heavy work
O-40	21035	1.3	volunteer activities	typing, electric, manual, or computer
O-70	21040	2.0	volunteer activities	walking, less than 2.0 mph, very slow
O-71	21045	3.5	volunteer activities	walking, 3.0 mph, moderate speed, not carrying anything
O-72	21050	4.3	volunteer activities	walking, 3.5 mph, brisk speed, not carrying anything
O-80	21055	3.5	volunteer activities	walking, 2.5 mph slowly and carrying objects less than 25 lbs
O-81	21060	4.5	volunteer activities	walking, 3.0 mph moderately and carrying objects less than 25 lbs, pushing something
	21065	4.8	volunteer activities	walking, 3.5 mph, briskly and carrying objects less than 25 lbs
	21070	3.0	volunteer activities	walk/stand combination, for volunteer purposes

Derivation of Variables for Analysis

SAS Code

*** This code is a sample of how to score the LTPAQ in SAS, this sample may not be comprehensive and is specific to one data analysis.**

* change to non-sedentary occupational PA;

```
*****
summarizes occupational, household recreational and total
lifetime physical activity in hrs/wk/yr and MET hrs/wk/yr
*****
options ls=80 ps=100;
```

*** OCCUPATIONAL ACTIVITIES;

```
*****OCCUPATIONAL ACTIVITY*****;
/*Code sedentary behavior separately;
array tmp {33} wrkdesc101 - wrkdesc111 wrkdesc201 - wrkdesc211 wrkdesc301-wrkdesc311;
array omet {33} omet01 - omet33;
    if tmp{i}=40 then omet{i}=1.5;
    if tmp{i}=146 then omet{i}=1.3;
*/
```

*NOTE: sedentary behaviour's contribution to METs are excluded in the following code;
*code sedentary behv has mets 0;

```
data occup1;
set SAS.occup;
proc sort;
by prid rowocc;
```

```
data occup2;
set occup1;
array tmp {3} occact occact2 occact3;
array omet {3} omet1 omet2 omet3;
do i=1 to 3;
    if tmp{i}=5 then omet{i}=4.0;
    if tmp{i}=10 then omet{i}=8.0;
    if tmp{i}=11 then omet{i}=8.0;
    if tmp{i}=15 then omet{i}=3.0;
    if tmp{i}=16 then omet{i}=2.0;
    if tmp{i}=17 then omet{i}=3.0;
    if tmp{i}=18 then omet{i}=4.0;
    if tmp{i}=20 then omet{i}=7.5;
```

if tmp{i}=25 then omet{i}=4.0;
if tmp{i}=26 then omet{i}=3.8;
if tmp{i}=30 then omet{i}=7.8;
if tmp{i}=31 then omet{i}=5.0;
if tmp{i}=32 then omet{i}=6.5;
if tmp{i}=33 then omet{i}=8.8;
if tmp{i}=40 then omet{i}=1.3;
if tmp{i}=41 then omet{i}=2.5;
if tmp{i}=50 then omet{i}=3.0;
if tmp{i}=51 then omet{i}=3.0;
if tmp{i}=52 then omet{i}=3.5;
if tmp{i}=53 then omet{i}=4.5;
if tmp{i}=60 then omet{i}=6.3;
if tmp{i}=61 then omet{i}=8.0;
if tmp{i}=62 then omet{i}=5.5;
if tmp{i}=63 then omet{i}=5.8;
if tmp{i}=64 then omet{i}=7.3;
if tmp{i}=67 then omet{i}=4.0;
if tmp{i}=68 then omet{i}=9.0;
if tmp{i}=70 then omet{i}=2.0;
if tmp{i}=71 then omet{i}=3.5;
if tmp{i}=72 then omet{i}=4.3;
if tmp{i}=80 then omet{i}=3.5;
if tmp{i}=81 then omet{i}=4.5;
if tmp{i}=82 then omet{i}=4.8;
if tmp{i}=83 then omet{i}=5.0;
if tmp{i}=84 then omet{i}=6.5;
if tmp{i}=85 then omet{i}=7.5;
if tmp{i}=86 then omet{i}=8.5;
if tmp{i}=87 then omet{i}=8.0;
if tmp{i}=88 then omet{i}=8.0;
if tmp{i}=89 then omet{i}=15.0;
if tmp{i}=95 then omet{i}=8.3;
if tmp{i}=100 then omet{i}=2.8;
if tmp{i}=101 then omet{i}=4.8;
if tmp{i}=102 then omet{i}=7.8;
if tmp{i}=110 then omet{i}=3.5;
if tmp{i}=111 then omet{i}=5.8;
if tmp{i}=115 then omet{i}=6.5;
if tmp{i}=116 then omet{i}=4.3;
if tmp{i}=117 then omet{i}=4.0;
if tmp{i}=118 then omet{i}=2.5;
if tmp{i}=119 then omet{i}=4.5;
if tmp{i}=120 then omet{i}=4.0;
if tmp{i}=121 then omet{i}=2.0;
if tmp{i}=122 then omet{i}=6.0;
if tmp{i}=123 then omet{i}=3.3;
if tmp{i}=124 then omet{i}=4.5;

```

    if tmp{i}=125 then omet{i}=8.0;
    if tmp{i}=126 then omet{i}=3.0;
    if tmp{i}=127 then omet{i}=2.5;
    if tmp{i}=128 then omet{i}=2.5;
    if tmp{i}=129 then omet{i}=2.0;
    if tmp{i}=130 then omet{i}=3.3;
    if tmp{i}=131 then omet{i}=3.3;
    if tmp{i}=132 then omet{i}=7.0;
    if tmp{i}=133 then omet{i}=6.0;
    if tmp{i}=134 then omet{i}=3.5;
    if tmp{i}=135 then omet{i}=5.5;
    if tmp{i}=136 then omet{i}=6.0;
    if tmp{i}=137 then omet{i}=2.5;
    if tmp{i}=138 then omet{i}=7.0;
    if tmp{i}=139 then omet{i}=7.0;
    if tmp{i}=140 then omet{i}=3.5;
    if tmp{i}=141 then omet{i}=3.0;
    if tmp{i}=142 then omet{i}=4.3;
    if tmp{i}=143 then omet{i}=4.0;
    if tmp{i}=144 then omet{i}=2.5;
    if tmp{i}=145 then omet{i}=2.5;
    if tmp{i}=146 then omet{i}=1.3;
    if tmp{i}=147 then omet{i}=4.0;
    if tmp{i}=148 then omet{i}=2.0;
    if tmp{i}=149 then omet{i}=8.3;
    if tmp{i}=150 then omet{i}=2.3;
    if tmp{i}=151 then omet{i}=4.5;
    if tmp{i}=152 then omet{i}=8.0;
    if tmp{i}=153 then omet{i}=10.0;
    if tmp{i}=154 then omet{i}=5.0;
    if tmp{i}=155 then omet{i}=17.5;
    if tmp{i}=156 then omet{i}=4.5;
    if tmp{i}=157 then omet{i}=7.3;
    if tmp{i}=159 then omet{i}=6.0;
    if tmp{i}=162 then omet{i}=5.5;
    if tmp{i}=163 then omet{i}=5.5;
    if tmp{i}=164 then omet{i}=4.0;

end;
ometcode=mean(omet1,omet2,omet3);
label ometcode='Occupational MET level';

*recoding missing values to 0;
array temp (i) mocc dayocc ttimocc occint ometcode;
do over temp;
  if temp<0 or temp=. then temp=0;
end;

```

```

data occup4;
set occup2;
by prid;
retain occ_time occ_mets;
if first.prid then do;
  occ_time=0; occ_mets=0;
end;

if sageoc=eageoc then eageoc=sageoc+1;
occhrs=(eageoc-sageoc)*mocc*4.33*dayocc*ttimocc/52;
if occhrs=. then occhrs=0;
occmets=occhrs*ometcode;
*if occmets=. then occmets=0;
occ_time=occ_time+occhrs;
occ_mets=occ_mets+occmets;
if last.prid then output;
label occ_time='Total occupational activity (Hrs/Wk)';
label occ_mets='Total occupational MET activity (MET Hrs/Wk)';
*proc contents;

*data occup5;
*set occup4 (obs=40);
*proc print;

data occup6;
set occup4;
keep prid rowocc occ_time occ_mets;

***HOUSEHOLD ACTIVITY;

data house1;
set SAS.house;
proc sort;
by prid rowhous;

data house2;
set house1;
*recoding missing values to 0;
array temp (i) monhs dayhs timhs hrhsl hrhsm hrhsh;
do over temp;
  if temp<0 or temp=. then temp=0;
end;

data house3;
set house2;
by prid;

```

```

retain hou_time hou_mets;
if first.prid then do;
  hou_time=0; hou_mets=0;
end;

if saghs=eagehs then eagehs=saghs+1;
lhou=(eagehs-saghs)*monhs*4.33*dayhs*hrhsl/52;
mhou=(eagehs-saghs)*monhs*4.33*dayhs*hrhsm/52;
hhou=(eagehs-saghs)*monhs*4.33*dayhs*hrhsh/52;
if lhou=. then lhou=0;
if mhou=. then mhou=0;
if hhou=. then hhou=0;
lhsmets=lhou*2.5;
mhsmets=mhou*3.5;
hhsmets=hhou*4.5;
houhrs=sum(lhou, mhou, hhou);
houmets=sum(lhsmets, mhsmets, hhsmets);
hou_time=hou_time+houhrs; hou_mets=hou_mets+houmets;
if last.prid then output;
label hou_time='Total household activity (Hrs/Wk)';
label hou_mets='Total household MET activity (MET Hrs/Wk)';

data house5;
set house3;
keep prid rowhou hou_time hou_mets;

```

***EXERCISE AND SPORT ACTIVITY;

```

data exer1;
set SAS.exercise;
proc sort;
by prid rowspt;

data exer2;
set exer1;
if leisact=1 then lmetcode=7.3;
if leisact=2 then lmetcode=5.0;
if leisact=3 then lmetcode=7.3;
if leisact=4 then lmetcode=4.3;
if leisact=5 then lmetcode=7.0;
if leisact=6 then lmetcode=5.5;
if leisact=7 then lmetcode=7.0;
if leisact=8 then lmetcode=8.0;
if leisact=9 then lmetcode=6.0;
if leisact=10 then lmetcode=4.5;
if leisact=11 then lmetcode=7.8;
if leisact=12 then lmetcode=4.0;

```

if leisact=13 then lmetcode=8.0;
if leisact=14 then lmetcode=10.0;
if leisact=15 then lmetcode=7.0;
if leisact=16 then lmetcode=8.8;
if leisact=17 then lmetcode=11.0;
if leisact=18 then lmetcode=2.5;
if leisact=19 then lmetcode=3.0;
if leisact=20 then lmetcode=12.8;
if leisact=21 then lmetcode=5.5;
if leisact=22 then lmetcode=7.8;
if leisact=23 then lmetcode=3.5;
if leisact=24 then lmetcode=8.0;
if leisact=25 then lmetcode=4.0;
if leisact=26 then lmetcode=12.0;
if leisact=27 then lmetcode=5.8;
if leisact=28 then lmetcode=8.0;
if leisact=29 then lmetcode=4.0;
if leisact=30 then lmetcode=4.8;
if leisact=31 then lmetcode=3.3;
if leisact=32 then lmetcode=4.0;
if leisact=33 then lmetcode=4.5;
if leisact=34 then lmetcode=3.0;
if leisact=35 then lmetcode=7.8;
if leisact=36 then lmetcode=2.5;
if leisact=37 then lmetcode=3.0;
if leisact=38 then lmetcode=6.0;
if leisact=39 then lmetcode=6.0;
if leisact=40 then lmetcode=2.0;
if leisact=41 then lmetcode=3.5;
if leisact=42 then lmetcode=4.0;
if leisact=43 then lmetcode=6.0;
if leisact=44 then lmetcode=8.0;
if leisact=45 then lmetcode=8.0;
if leisact=46 then lmetcode=2.5;
if leisact=47 then lmetcode=3.0;
if leisact=48 then lmetcode=8.0;
if leisact=49 then lmetcode=4.3;
if leisact=50 then lmetcode=5.3;
if leisact=51 then lmetcode=3.0;
if leisact=53 then lmetcode=3.5;
if leisact=54 then lmetcode=3.8;
if leisact=55 then lmetcode=12.0;
if leisact=57 then lmetcode=3.5;
if leisact=58 then lmetcode=5.5;
if leisact=59 then lmetcode=6.0;
if leisact=60 then lmetcode=7.8;
if leisact=61 then lmetcode=8.0;
if leisact=62 then lmetcode=5.5;

if leisact=63 then lmetcode=5.8;
if leisact=64 then lmetcode=7.3;
if leisact=65 then lmetcode=2.5;
if leisact=66 then lmetcode=5.0;
if leisact=67 then lmetcode=6.0;
if leisact=68 then lmetcode=7.0;
if leisact=69 then lmetcode=10.3;
if leisact=70 then lmetcode=10.3;
if leisact=71 then lmetcode=5.0;
if leisact=72 then lmetcode=7.0;
if leisact=73 then lmetcode=8.0;
if leisact=74 then lmetcode=4.0;
if leisact=75 then lmetcode=9.0;
if leisact=76 then lmetcode=10.0;
if leisact=77 then lmetcode=6.0;
if leisact=78 then lmetcode=4.0;
if leisact=79 then lmetcode=8.0;
if leisact=80 then lmetcode=10.0;
if leisact=81 then lmetcode=7.0;
if leisact=82 then lmetcode=8.0;
if leisact=83 then lmetcode=4.8;
if leisact=84 then lmetcode=6.0;
if leisact=85 then lmetcode=8.5;
if leisact=86 then lmetcode=8.3;
if leisact=87 then lmetcode=8.3;
if leisact=88 then lmetcode=9.0;
if leisact=89 then lmetcode=9.8;
if leisact=90 then lmetcode=10.5;
if leisact=91 then lmetcode=11.5;
if leisact=92 then lmetcode=12.3;
if leisact=93 then lmetcode=14.5;
if leisact=94 then lmetcode=9.0;
if leisact=95 then lmetcode=8.0;
if leisact=96 then lmetcode=15.0;
if leisact=97 then lmetcode=10.0;
if leisact=98 then lmetcode=8.0;
if leisact=100 then lmetcode=3.0;
if leisact=101 then lmetcode=4.5;
if leisact=102 then lmetcode=7.0;
if leisact=103 then lmetcode=3.0;
if leisact=104 then lmetcode=5.0;
if leisact=105 then lmetcode=5.5;
if leisact=106 then lmetcode=7.0;
if leisact=107 then lmetcode=9.0;
if leisact=108 then lmetcode=13.3;
if leisact=109 then lmetcode=7.0;
if leisact=110 then lmetcode=7.0;
if leisact=111 then lmetcode=6.8;

if leisact=112 then lmetcode=9.0;
if leisact=113 then lmetcode=12.5;
if leisact=114 then lmetcode=15.0;
if leisact=115 then lmetcode=4.3;
if leisact=116 then lmetcode=5.3;
if leisact=117 then lmetcode=8.0;
if leisact=118 then lmetcode=7.0;
if leisact=119 then lmetcode=6.8;
if leisact=120 then lmetcode=3.5;
if leisact=121 then lmetcode=7.0;
if leisact=122 then lmetcode=5.0;
if leisact=123 then lmetcode=5.3;
if leisact=124 then lmetcode=10.0;
if leisact=125 then lmetcode=7.0;
if leisact=126 then lmetcode=5.0;
if leisact=127 then lmetcode=4.0;
if leisact=128 then lmetcode=6.0;
if leisact=129 then lmetcode=12.0;
if leisact=130 then lmetcode=9.0;
if leisact=131 then lmetcode=2.3;
if leisact=132 then lmetcode=3.0;
if leisact=133 then lmetcode=6.0;
if leisact=134 then lmetcode=5.8;
if leisact=135 then lmetcode=9.8;
if leisact=136 then lmetcode=13.8;
if leisact=137 then lmetcode=4.0;
if leisact=138 then lmetcode=7.3;
if leisact=139 then lmetcode=6.0;
if leisact=140 then lmetcode=8.0;
if leisact=141 then lmetcode=3.5;
if leisact=142 then lmetcode=6.0;
if leisact=143 then lmetcode=3.0;
if leisact=144 then lmetcode=8.0;
if leisact=145 then lmetcode=2.8;
if leisact=146 then lmetcode=3.0;
if leisact=147 then lmetcode=4.3;
if leisact=148 then lmetcode=6.5;
if leisact=149 then lmetcode=6.5;
if leisact=150 then lmetcode=7.3;
if leisact=151 then lmetcode=8.3;
if leisact=152 then lmetcode=9.0;
if leisact=153 then lmetcode=10.0;
if leisact=154 then lmetcode=3.0;
if leisact=155 then lmetcode=6.0;
if leisact=156 then lmetcode=5.0;
if leisact=157 then lmetcode=6.0;
if leisact=158 then lmetcode=5.0;
if leisact=159 then lmetcode=6.0;


```

if leisact=160 then lmetcode=5.5;
if leisact=161 then lmetcode=9.8;
if leisact=162 then lmetcode=5.5;
if leisact=163 then lmetcode=4.0;
if leisact=164 then lmetcode=8.0;
if leisact=165 then lmetcode=3.5;
if leisact=166 then lmetcode=2.8;
if leisact=167 then lmetcode=2.5;
if leisact=169 then lmetcode=2.0;
if leisact=170 then lmetcode=4.0;
if leisact=171 then lmetcode=6.0;
if leisact=172 then lmetcode=8.0;
if leisact=180 then lmetcode=3.0;
if leisact=181 then lmetcode=3.0;
if leisact=182 then lmetcode=7.0;
if leisact=183 then lmetcode=7.5;
if leisact=184 then lmetcode=6.0;
if leisact=185 then lmetcode=10.0;
if leisact=186 then lmetcode=7.8;
if leisact=187 then lmetcode=2.5;
if leisact=188 then lmetcode=4.0;
if leisact=189 then lmetcode=2.5;
if leisact=191 then lmetcode=4.0;
if leisact=192 then lmetcode=5.0;
if leisact=193 then lmetcode=8.0;
if leisact=194 then lmetcode=11.8;
if leisact=195 then lmetcode=3.5;
if leisact=196 then lmetcode=7.5;
if leisact=197 then lmetcode=10.0;
if leisact=198 then lmetcode=6.0;
if leisact=199 then lmetcode=3.5;
if leisact=200 then lmetcode=2.0;
if leisact=201 then lmetcode=2.5;
if leisact=202 then lmetcode=3.3;
if leisact=203 then lmetcode=3.5;

```

```

data exer3;
set exer2;
array temp (i) dyleis wkleis mthlei yrleis timleis intleis lmetcode;
do over temp;
  if temp<0 or temp=. then temp=0;
end;

```

```

data exer4;
set exer3;
by pridi;

```

```

retain lei_time lei_mets;
if first.prid then do;
  lei_time=0; lei_mets=0;
end;

if sagels=eagels then eagels=sagels+1;
leishrs=(eagels-sagels)*365*dyleis*timleis/52;
leiswks=(eagels-sagels)*52*wkleis*timleis/52;
leismth=(eagels-sagels)*12*mthlei*timleis/52;
leisyr=(eagels-sagels)*yrleis*timleis/52;
if leishrs=. then leishrs=0;
if leiswks=. then leiswks=0;
if leismth=. then leismth=0;
if leisyr=. then leisyr=0;
sumhrs=sum(leishrs, leiswks, leismth, leisyr);
lsummets=sumhrs*lmetcode;

lei_time=lei_time+sumhrs;
lei_mets=lei_mets+lsummets;
if last.prid then output;
label lei_time='Total recreational activity (Hrs/Wk)';
label lei_mets='Total recreational MET activity (MET Hrs/Wk)';

*data exer5;
*set exer4 (obs=35);
*proc print;

data exer6;
set exer4;
keep prid rowspt lei_time lei_mets;

***TOTAL LIFETIME PHYSICAL ACTIVITY;

data activity;
merge occup6 house5 exer6;
by prid;

array temp (i) rowocc occ_time occ_mets rowhous hou_time hou_mets rowspt
  lei_time lei_mets;
do over temp;
  if temp<0 or temp=. then temp=0;
end;

*proc contents position;

data rage1;
set SAS.fdorresp;
proc sort;

```

```

by prid;

data rage2;
set rage1;
keep prid rage pstatus;

data phyage1;
merge activity(in=in1) rage2(in=in2);
by prid;
if in2;

data phyage2;
set phyage1;
avocchrs=occ_time/rage;
avhhhhrs=hou_time/rage;
avleihrs=lei_time/rage;
avoccmets=occ_mets/rage;
avhhmet=hou_mets/rage;
avleimet=lei_mets/rage;

array temp (i) avocchrs avhhhhrs avleihrs avoccmets avhhmet avleimet;
do over temp;
  if temp=. then temp=0;
end;

tothrs=avocchrs + avhhhhrs + avleihrs;
totmets=avoccmets + avhhmet + avleimet;

label avocchrs='Total lifetime occupational activity (Hrs/Wk/Yr)'
      avhhhhrs='Total lifetime household activity (Hrs/Wk/Yr)'
      avleihrs='Total lifetime recreational activity (Hrs/Wk/Yr)'
      avoccmets='Total lifetime occupational MET activity (MET Hrs/Wk/Yr)'
      avhhmet='Total lifetime household MET activity (MET Hrs/Wk/Yr)'
      avleimet='Total lifetime recreational MET activity (MET Hrs/Wk/Yr)'
      tothrs='Total lifetime physical activity (Hrs/Wk/Yr)'
      totmets='Total lifetime physical MET activity (MET Hrs/Wk/Yr)';

*data phyage3;
*set phyage2 (obs=39);
*proc print;

/*
data phyage4;
set phyage2;
proc univariate normal;
var avoccmets avhhmet avleimet totmets;
*var avocchrs avoccmets avhhhhrs avhhmet avleihrs avleimet tothrs totmets;
by pstatus;

```

```

proc means maxdec=1 N nmiss mean std;
var avoccmets avhhmets avleimets totmets;
*var avocchrs avoccmets avhhhrs avhhmets avleihrs avleimets tothrs totmets;
by pstatus;
*/

data SAS.phyactiv;
set phyage2;
keep prid avocchrs avoccmets avhhhrs avhhmets avleihrs avleimets tothrs totmets;
proc contents position;

libname data '/home/qingwang/projects/prostate/sasdata/cleandata';

data baseline; set data.pros8jc;
keep prid avocchrs avoccmets avhhhrs avhhmets avleihrs avleimets tothrs totmets;

proc sql;
create table old as select a.* from SAS.phyactiv a, baseline b where a.prid=b.prid order by prid;
create table new as select a.* from baseline a, SAS.phyactiv b where a.prid=b.prid order by prid;
quit;

proc compare base=old compare=new printall;
run;
endsas;

```