

# Estimating the Economic Value of Unpaid Household Work in Canada, 2015 to 2019

Amanda Sinclair (Statistics Canada, Canada) amanda.sinclair@statcan.gc.ca

Sandy Besporstov (Statistics Canada, Canada)

Paper prepared for the 37th IARIW General Conference August 22-26, 2022 Session 2D-1, Advancing Measurement and Valuation in the System of National Accounts I Time: Tuesday, August 23, 2022 [16:00-17:30 CEST] Latest Developments in the Canadian Economic Accounts

Estimating the economic value of unpaid household work in Canada, 2015 to 2019



Release date: March 17, 2022



Statistics Statistique Canada

# Canada

#### How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, www.statcan.gc.ca.

You can also contact us by

#### Email at infostats@statcan.gc.ca

Telephone, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following numbers:

- Statistical Information Service
- 1-800-263-1136 · National telecommunications device for the hearing impaired 1-800-363-7629 • Fax line 1-514-283-9350

#### **Depository Services Program**

- Inquiries line
- Fax line

#### Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "Contact us" > "Standards of service to the public".

#### Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

1-800-635-7943

1-800-565-7757

Published by authority of the Minister responsible for Statistics Canada

© Her Majesty the Queen in Right of Canada as represented by the Minister of Industry, 2022

All rights reserved. Use of this publication is governed by the Statistics Canada Open Licence Agreement.

An HTML version is also available.

Cette publication est aussi disponible en français.

# **Table of contents**

Abstract	4
Introduction	4
Definition of unpaid household work and types of activities included	5
Valuation methods	6
Data sources and methods	7
Comparability with previous studies in Canada and internationally	8
Summary and analysis of the main findings	9
Regional findings	11
Unpaid household work by age group and activity	11
Presence of a partner and/or children in the home	13
Replacement cost wage rates and the contribution to unpaid household work activities by sex	14
Sensitivity of the value of household work estimates	14
Conclusion	15
Appendix A – Activities and occupations used to estimate the value of unpaid household work	16
Appendix B – Comparing the value of unpaid household work with the 1992 study	19
Appendix C — Data tables	20
Appendix D – Unpaid household work categories and activities	25
Glossary	26
References	26

# Estimating the economic value of unpaid household work in Canada, 2015 to 2019

#### **Acknowledgements**

The following study and paper were prepared by Sandy Besporstov and Amanda Sinclair from the National Economic Accounts Division at Statistics Canada and was funded by Women and Gender Equality Canada (WAGE). The authors would like to thank WAGE as well as the following teams and people for their contributions to this study: Janet Fast and Norah Keating (University of Alberta), Jane Badets, Brenda Bugge, Wulong Gu, Patricia Houle, Ryan MacDonald, Karen Wilson, and the Centre for Gender, Diversity and Inclusion Statistics.

## Abstract

There is no doubt that the day to day tasks that people do, such as cleaning, cooking, and caring for dependent children and adults, are productive activities. However, assigning economic importance to such activities can be challenging as they are often done outside of the market economy and therefore do not have an observable monetary value. Taking effort to estimate monetary value for the unpaid household activities that we all do each day is important for understanding the true economic output or performance of a country and for highlighting inequalities within the society, such as pay gaps and differences in the contribution of various domestic and caregiving activities between sexes, which are often invisible to the broader society.

The following paper provides estimates of the economic value of unpaid household work in Canada for 2015 to 2019. This study was completed by the National Economic Accounts Division at Statistics Canada, and was funded by Women and Gender Equality Canada (WAGE).

According to this study, the economic value of unpaid household work in Canada was between \$516.9 billion and \$860.2 billion in 2019 depending on the valuation method used. These values amounted to between 25.2% and 37.2% of Canada's nominal gross domestic product (GDP) in 2019, which is more than the contribution of all the manufacturing, wholesale and retail industries combined.<sup>1</sup>

In addition to providing aggregate estimates of the economic value of unpaid household work, this study also shows that although women continue to perform the majority of household work, in terms of hours spent doing various household tasks, the economic value of their effort remains below that of men, primarily because of persistent differences in the average wages of men and women in Canada.

By providing timely estimates of the economic value of unpaid household work, this study aids the discussion surrounding inclusive economic performance and inequalities in the assigned economic value of certain people, jobs and activities in our society.

## Introduction

Measuring the economic performance or well-being of a country is not a simple task. While core economic measures, like Gross Domestic Product (GDP) and labour productivity often get a lot of attention in the news, researchers and economists have long been advocating for more comprehensive and nuanced measures that take into account issues such as income and wealth inequality, pay gaps, and the contribution of unpaid productive activities, like household work.<sup>2</sup>

While there is no doubt that the day-to-day tasks that people do, such as cleaning, cooking, and caring for dependent children and adults, are productive activities, assigning economic value to such activities can be challenging as they are often done outside of the market and therefore do not have an observable monetary value. Taking effort to estimate monetary value for the unpaid household activities that we all do each day is important

<sup>1.</sup> This is based on the industries' contribution to total gross value added based on the 2018 Supply and Use Tables.

<sup>2.</sup> Stiglitz et al., 2007

for understanding the true economic output or performance of a country and for highlighting the degree to which inequalities may exist within society, such as pay gaps and differences in the contribution of various domestic and caregiving activities between sexes.

The COVID-19 pandemic has heightened the need for quantifying the value of unpaid household work, highlighting how important these activities are to the overall functioning of the Canadian society and economy, and to the well-being of Canadians. The way we spend our time, the division of household work, as well as the balancing of work and caregiving activities has changed since the start of the pandemic. Although this study does not include estimates of the value of unpaid household work during the pandemic period, it can serve as a good baseline for making comparisons with the post-pandemic period, once those estimates are available.

This study provides estimates of the economic value of unpaid household work in Canada for 2015 to 2019. The first few sections of the paper summarize the concepts, sources and methods used within the study while the final section provides an overview and analysis of the main findings. Complete definitions and data tables can be found within the appendices at the end of the paper.

By providing timely estimates of the economic value of unpaid household work, this study provides valuable input to the discussion surrounding inclusive economic performance and inequalities in the assigned economic value of certain people, jobs and activities in our society.

# Definition of unpaid household work and types of activities included

The concept of unpaid household work used in this study, which is consistent with international recommendations, includes two key elements: 1) services produced for 'own final use'; and 2) the third party criterion.

The concept of services produced for 'own final use' is important because it distinguishes between services that individuals perform for themselves or other members of their household, and those performed through volunteer work, the latter of which are performed outside of the household. While volunteer work performed by households, both formal and informal, can generate both social and economic benefits, they are excluded from this study since they are not included within the definition of unpaid household work. However, Statistics Canada does measure the importance of volunteering in the Satellite Account of Non-profit Institutions and Volunteering.<sup>3</sup>

The second important element of the definition of unpaid household work is the third party criterion which is described by Hawrylyshyn as: "those economic services produced in the household and outside the market, but which could be produced by a third person hired on the market without changing their utility to the members of the household".<sup>4</sup>The third party criterion distinguishes activities related to work, or productive activities, from those related to leisure. Productive activities are defined as those which could be delegated to another person, such as cleaning, cooking, or providing care to other household members. In contrast, activities benefit only the person performing them, such as watching a movie or sleeping, are not considered productive activities and are therefore excluded.<sup>5</sup> A full list of unpaid household work activities and their corresponding occupational equivalency groups can be found in Appendix A.

Following the key principles of the definition of unpaid household work, included in this study are four broad categories of activities: 1) Household chores and maintenance; 2) Caring for children; 3) Caring for adults; and, 4) Shopping. The full list of activities included within each category can be found in Appendix D.

It is important to note that while caring for children and adults are included in unpaid household work they do not amount to the complete definition or value of caregiving. Not only does caregiving encompass a variety of other activities excluded from the definition of unpaid household work such as caring for members outside of their household, experts in the field of measuring caregiving have indicated that the data used in the study, namely the General Social Survey on Time Use, are not the preferred source for measuring caregiving.<sup>6</sup> Nevertheless,

<sup>3.</sup> Statistics Canada, Record Number 5510.

<sup>4.</sup> Hawrylyshyn, 1978.

<sup>5.</sup> United Nations Economic Commission for Europe, 2017, para 73.

<sup>6.</sup> Fast et al., 2020.

the estimates presented in this study provide some insight into the value of unpaid caregiving, within the broader context of unpaid household work, as much as these caregiving activities are captured in the Time Use Survey.

## Valuation methods

One of the most important issues to consider when estimating the value of unpaid household work is which valuation method(s) to use. Because household work is performed outside of the market, there are no directly observable prices or monetary values to assign to the activities. Therefore one must infer or impute value using one of two general approaches: the output-based method, which assigns a purchase price to the final services being performed, or the input-based method, which values the labour costs (i.e., wage rates) required to perform the tasks.

Due to a number of factors, including the lack of available of data as well as the need to provide insight into the characteristics of the households and individuals performing unpaid work, this study uses the input-based valuation method. The input-based valuation method consists of imputing a monetary value to the labour inputs directly.<sup>7</sup> In other words, the time spent doing unpaid household activities is valued using market-based wage rates.

Once an input-based method is chosen, it is important to consider the two types of valuations that can be used: 1) the opportunity cost; and, 2) the replacement cost.

### **Opportunity cost**

The opportunity cost approach assumes that when an individual performs unpaid household activities they are forgoing other activities along with all of the associated monetary and non-monetary benefits. For the purposes of this study, however, it is assumed that only the monetary benefits of paid work are foregone in order to perform unpaid household activities. Therefore, opportunity costs are calculated using the wage rates of the actual people performing the unpaid household activities. In this study annual average hourly wage rates by sex, age group and province of residence are applied to the time spent doing all unpaid household work for each corresponding year.

Opportunity costs can be estimated in both gross (before tax) and net (after tax) forms. The gross opportunity cost can be viewed as the 'social opportunity cost' of unpaid household work, as society loses potential market output when individuals forgo paid work to perform unpaid household activities. On the other hand, the net opportunity cost reflects a 'private cost' as it measures the forgone earnings of the individual. This study includes both the gross and net opportunity cost valuations, where the annual average wage rate by sex, age group and province of residence are applied to the annual hours of unpaid household work. Both full-time and part-time wage rates are included, which are weighted by the hours worked and number of employees within each category. The net opportunity cost is derived by applying effective tax rates, by age group, sex and province of residence to the gross wage rates.<sup>8</sup> Any underlying inequalities in wages that exist, such as the pay gap between men and women are reflected in the opportunity cost valuations. The impact of such inequalities are discussed further with the results of this study below.

#### **Replacement cost**

The replacement cost is intended to reflect the value of unpaid household activities had they been performed in the market by hiring someone to complete these activities. Rather than using the wage rates of the individuals doing the unpaid activities, they are valued at the average wage rates of equivalent occupations in the market. The main assumption with this approach is that household members and their market-based 'replacements' are equally productive.

Determining which occupations to use for estimating replacement costs can be challenging. While there is currently no set standard for which occupations should be used, there are two general approaches to consider. The first is the

<sup>7.</sup> Statistics Canada, (1995).

<sup>8.</sup> Statistics Canada, special tabulation, December 2021.

generalist approach, where the wage rate of a general labourer or service provider is used. The second approach takes a specialist lens using the wage rates for specific occupations related to the household activities being performed. In this study, a form of the specialist approach is applied whereby the earnings for people employed in national occupations classifications (NOCs) within each equivalency group—defined groups of occupations that could be hired to do the household activities—are used. The NOCs included within each equivalency group, which are matched to the relevant household activities are shown in Appendix A.

In the estimation of the replacement cost, it is assumed that household activities could be provided by any equivalent replacement regardless of their age or sex. For example, there is no distinction that a woman in a specific NOC would be hired over a man in the same NOC. The only distinction that is made is for the province of residence, as the study assumes a household in Saskatchewan would hire a replacement from the same province. Therefore, within each province the earnings are weighted within each NOC by sex and full-time and part-time status using the number of people employed within the NOC. Then each NOC is weighted within each equivalency group by the number of people employed in each occupation. The result is an average wage rate for each equivalency group that take into account differences in hourly wage rates between men and women, as well as full-time and part-time workers in various occupations.

## Data sources and methods

There are two main data inputs into estimating the value of unpaid household work, 1) a time use survey; and, 2) data on wage rates for the population and for specific occupations.

### **General Social Survey: Time use**

In Canada, time use data are collected every five to seven years via the General Social Survey (GSS). The GSS on Time Use collects information on how non-institutionalized persons 15 years of age or older, living in the 10 provinces, manage their time and perform their daily activities. The survey uses a retrospective 24-hour time diary to collect information on an individual's participation in and time spent on a wide variety of day-to-day activities. The survey also collects a variety of socio-demographic characteristics.<sup>9</sup> While some unpaid household work may be carried out simultaneously with other activities, its impact is quite small. In 2015, unpaid household work was roughly estimated to be less than 5% and less than 2% as a first or second simultaneous activity, respectively. Options to explore hours of unpaid household work as a simultaneous activity may be included in future studies.

The most recent iteration of the GSS on Time Use used in this study to estimate the total hours of unpaid household work is for reference year 2015. Unpaid work hours are disaggregated by type of activity, sex, age group, presence of a partner and/or children in the home, and province of residence.

### Labour Force Survey

The Labour Force Survey (LFS) is the main data source used to derive wage rates for use in this study. The LFS is a monthly household survey that in addition to key unemployment indicators, provides information on the wage rates for employees broken down by a number of employment and socio-demographic characteristics.<sup>10</sup>

While there are a number of limitations with the wage rate data from the LFS, such as inconsistency with wages from T4 tax data, they do provide the most timely and most detailed account of wage rates for various individuals and occupations.

### Deriving economic valuations for unpaid household work

In order to derive economic valuations of unpaid household work, hours of unpaid work from the General Social Survey (GSS) on Time Use for 2015 are multiplied by various wage rates from the Labour Force Survey (LFS). As shown in the formulas below, each hour spent doing unpaid household work is valued at the hourly wage rate of

<sup>9.</sup> Statistics Canada, Record Number 4503.

<sup>10.</sup> Statistics Canada, Record Number 3710.

either the person doing the unpaid activities (for the opportunity cost approach) or the occupation that could be hired as a replacement for the specific household activity (for the replacement cost approach).

It is important to note that the GSS on Time Use is designed to capture average estimates of the time spent on certain activities for a typical day. The survey sample is stratified by day of the week and month of the year. For use in this study, hours of unpaid household work for a typical day were multiplied by 365 in order to extrapolate the average annual hours spent on unpaid household work.

Opportunity cost valuation

= hours of unpaid household work (by sex, age group, province of residence)

×

hourly wage rate (by sex, age group, province of residence)

Replacement cost valuation

hours of unpaid household work (by activity, province of residence)

×

hourly wage rate (by occupation equivalency group, province of residence)

While the latest GSS on Time Use is for the reference year 2015 there is interest in having more up-to-date estimates of the value of unpaid household work. To achieve more timely estimates this study applied wage rates for each reference year between 2015 and 2019, based on the LFS, to the 2015-time use estimates. This approach assumes that the time spent on various household activities did not change significantly between 2015 and 2019, nor did the allocation of activities change between men and women or different age groups. Despite this assumption, there is a benefit in having more timely estimates of the value of unpaid household work. Specially, the extra years of data highlight changes in the wage gap between men and women as well as the economic contribution of specific types of occupations within the economy.

Estimates for the value of unpaid household work were not attempted beyond 2019, as the significant changes in household behaviour that occurred due to the COVID-19 pandemic make the above assumption on time use unreasonable. In the future, Statistics Canada aims to explore the feasibility of estimating the hours of unpaid household work during and following the pandemic, which began in March 2020.

## Comparability with previous studies in Canada and internationally

The concepts, sources and methods used in this study follow international guidelines and proposals for estimating the economic value of unpaid household work.<sup>11</sup> They are also aligned with the measurement approaches used within the System of National Accounts (SNA)<sup>12,13</sup> and therefore can be compared with estimates from other countries as well as with other core economic measures, such as Gross Domestic Product (GDP).

The estimates produced in this study are also broadly consistent with previous studies done by Statistics Canada to measure unpaid household work.<sup>14,15</sup> While it would have been beneficial to maintain historical comparability with previous Statistics Canada studies, this study did make some modifications to the valuation approaches used

<sup>11.</sup> United Nations Economic Commission for Europe, 2017.

<sup>12.</sup> United Nations Statistics Division (UNSD), Advisory Expert Group on National Accounts

<sup>13.</sup> van de Ven, P., et al., (2018).

<sup>14.</sup> Statistics Canada, (1995).

<sup>15.</sup> Statistics Canada, (1994).

in order to improve the alignment with international guidelines and to include a comprehensive representation of wage rates in the country.

The first set of modifications made in this study relate to the opportunity cost valuation. In contrast to the assumptions applied in the 1992 Statistics Canada study, this study includes part-time workers in the estimation of average wage rates. This study also applies wage rates by sex, age group and province of residence to the hours of unpaid household work, whereas these factors were not accounted for in previous studies. The purpose of this change was to better reflect differences in wage rates as well as the amount and type of unpaid household activities for different age groups.

In addition to factoring in age, this study also included part-time workers in the estimation of average wage rates, something that was not done in the 1992 study. The addition of part-time workers enhances the representativeness of the opportunity cost valuation, because it reflects a more realistic economic value based on the full range of employed persons.

The second set of changes implemented with this study affect the replacement cost valuation. It must be noted that while there are international guidelines on how to estimate the value of unpaid household work, there is not an agreed set of occupations to use when deriving replacement cost valuations. This study modified the occupations included within the equivalency groups used to value specific household activities. This change was made to better align the equivalency groups with the third party criterion, which assumes that a market replacement can be hired without changing the utility of the household members. It was determined that the equivalency groups used in the 1992 study were very broadly defined, and included occupations that would not fit the third party criterion.

For purposes of comparability, this study has included an impact analysis of the changes to the equivalency groups on the estimation of replacement cost. In general, the modifications to the equivalency groups lowered the average wage rates used in this study relative to those used in the1992 study. Lower wage rates were derived in this study because some high-paid occupations, such as teachers, nurses and parole officers, were excluded from this study on the basis that they did not meet the third party criterion. For example, it is not realistic that a registered nurse or parole officer can be hired to replace certain caregiving activities without changing the utility of the household members. A summary of the changes in occupations used and the impact on the average wage rates can be found in Appendix B.

## Summary and analysis of the main findings

The value of unpaid household work in 2015 was \$778.2 billion based on a gross opportunity cost (G.O.C.) and \$682.8 billion based on a net opportunity cost (N.O.C.). These values represented between 39% and 34% of nominal gross domestic product (GDP) and between 69% and 60% of household disposable income (HDI). The average annual G.O.C. of unpaid household work was \$31,100 per person, while for the N.O.C. it was \$27,280 per person. These values can be seen as the forgone income of society and individuals as the result of doing unpaid household work rather than paid work.

The value of unpaid household work based on replacement cost (R.C.) was \$516.9 billion in 2015, representing 26.0% of nominal GDP and 45.7% of HDI. The average annual R.C. of unpaid household work was \$20,650 per person, which represents the cost of having unpaid household activities done by replacements in the market.

Compared to the G.O.C. and N.O.C., the value of unpaid household work based on R.C. is lower because the average wage rates of occupations that could be hired as replacements for household activities tend to be less than the average wage rates for all employees in Canada. For example, since the opportunity cost measures reflect substituting paid work for unpaid household activities, the wage rates of doctors, engineers and corporate executives are included in the G.O.C. and N.O.C. These high-paying jobs are, however, not included in the R.C. measure as it reflects the cost of hiring a person in the market to do the specific household tasks. A detailed list of the replacement occupations matched to each household activity is presented in Appendix A.

Estimates of the value of unpaid household work by method are summarized in Table 1. Since the most recent General Social Survey (GSS) on Time Use is for reference year 2015, this study assumes that the hours spent on

unpaid household work, the distribution of time among the activities, and the demographics of the people carrying out the activities, have not changed significantly between 2015 and 2019. This assumption was used in order to build a time series from 2015 to 2019 using average wage rates from the Labour Force Survey (LFS) for each year. Estimates of nominal GDP and HDI are also included for comparison purposes.

#### Table 1

Summary statistics on the value of unpaid household work by method, Canada, 2015 to 2019

	2015	2016	2017	2018	2019
			millions of dollars		
Comparative statistics					
Household disposable income (HDI)	1,129,880	1,132,758	1,189,367	1,224,918	1,283,163
Gross domestic product (GDP)	1,990,441	2,025,535	2,140,641	2,235,675	2,311,294
			millions of hours		
Hours of unpaid household work	31,592	31,592	31,592	31,592	31,592
			millions of dollars		
Value of unpaid household work					
Net opportunity cost	682,823	702,577	713,848	732,662	754,943
Gross opportunity cost	778,238	798,884	810,958	834,383	860,150
Replacement cost	516,915	530,857	543,506	571,181	581,645
			percent		
Value of unpaid household work as a percentage of GDP					
Net opportunity cost	34.3	34.7	33.3	32.8	32.7
Gross opportunity cost	39.1	39.4	37.9	37.3	37.2
Replacement cost	26.0	26.2	25.4	25.5	25.2
Value of unpaid household work as a percentage of HDI					
Net opportunity cost	60.4	62.0	60.0	59.8	58.8
Gross opportunity cost	68.9	70.5	68.2	68.1	67.0
Replacement cost	45.7	46.9	45.7	46.6	45.3
			dollars		
Value of unpaid household work per capita					
Net opportunity cost	27,280	28,070	28,520	29,270	30,160
Gross opportunity cost	31,100	31,920	32,400	33,340	34,370
Replacement cost	20,650	21,210	21,720	22,820	23,240

Source: Statistics Canada, Tables 36-10-0221-01 and 36-10-0224-01, special tabulation, "Measuring the economic value of unpaid household work in Canada, 2015 to 2019," Latest Developments in the Canadian Economic Accounts (13-605-X), 2022.

Although women (60.1% of hours) continued to do the majority of unpaid household work compared to men, their share of the total value of unpaid household was less than their share of hours. Women's share of the total value, based on G.O.C. was between 56.4% in 2015 and 56.9% in 2019. This disproportionately lower value of women's share of unpaid household work is attributable to the wage gap between men and women. For example, based on this study women made \$0.86 to every dollar that men made in 2015. This wage gap did shrink slightly to \$0.88 per dollar in 2019. These results are consistent with other wage gap studies in Canada.<sup>16</sup>

Table 2 summarizes the value of unpaid household work by method and by sex and includes the women's share of hours and value.

<sup>16.</sup> Pelletier, et al., 2019.

	2015	2016	2017	2018	2019
			millions of hours		
Women					
Hours of unpaid household work	19,001	19,001	19,001	19,001	19,001
			millions of dollars		
Net opportunity cost	392,489	405,754	412,406	424,386	437,447
Gross opportunity cost	439,247	453,028	459,920	474,510	489,736
Replacement cost	302,730	311,155	318,847	335,667	341,336
			millions of hours		
Men					
Hours of unpaid household work	12,591	12,591	12,591	12,591	12,591
			millions of dollars		
Net opportunity cost	290,334	296,823	301,442	308,276	317,496
Gross opportunity cost	338,991	345,856	351,038	359,873	370,414
Replacement cost	214,185	219,702	224,658	235,514	240,310
			percent		
Women's share of total					
Hours of unpaid household work	60.1	60.1	60.1	60.1	60.1
Net opportunity cost	57.5	57.8	57.8	57.9	57.9
Gross opportunity cost	56.4	56.7	56.7	56.9	56.9
Replacement cost	58.6	58.6	58.7	58.8	58.7

# Table 2 Summary statistics on the value of unpaid household work by method and sex. 2015 to 2019

Source: Statistics Canada, special tabulation, "Measuring the economic value of unpaid household work in Canada, 2015 to 2019," Latest Developments in the Canadian Economic Accounts (13-605-X), 2022.

# **Regional findings**

Across the five regions of Canada used in this study, the share of unpaid household work performed by women was similar, ranging from a low of 58.7% in British Columbia to a high of 61.3% in Ontario (see Table C1). Between 2015 and 2019, wages on an R.C. basis grew most significantly for both men (+15.3%) and women (+15.7%) in Ontario. When valued using G.O.C., wages grew at the quickest pace for both men (+13.6%) and women (+13.1%) in Quebec. Nonetheless, Quebec was the only region where the growth in men's wages outpaced women's regardless of the method of valuation. Women's wages in all other regions experienced greater growth than those of men.

The slowest wage growth based on R.C. was observed in Atlantic Canada at 6.9% for men and 7.4% for women, from 2015 to 2019. However, on a G.O.C. basis, the Prairies experienced the lowest wage growth -6.7% for men and 8.8% for women. Table C1 provides a breakdown of unpaid household work by sex and region.

Consistent with previous studies, the value of household work relative to nominal gross domestic product (GDP) was lowest in the Prairies for all methods of valuation, ranging from a low of 21.8% with the R.C. to a high of 33.2% by G.O.C. In comparison, the value of household work relative to nominal GDP in the other four regions of Canada had an average share of 28.5% by R.C. and 41.7% by G.O.C.

# Unpaid household work by age group and activity

In looking at the share of unpaid household work between men and women by age group, a larger share was carried out by women in all age groups, ranging from a low of 57.7% for people aged 55 to 64 years, to a high of 61.3% for those aged 25 to 54 years. A split of unpaid household work by sex and age group is summarized in Table C2.

To account for the impacts of population composition, hours spent doing unpaid household work can be analyzed on a per-person basis by sex. Graph 1 shows that while the average hours per woman remained relatively similar in the three oldest age groups, the average hours of unpaid household work per man increased gradually in each subsequent age group. As a result, the difference in unpaid household work hours between men and women is smaller in the two oldest age groups.





Source: Statistics Canada, special tabulation, "Measuring the economic value of unpaid household work in Canada, 2015 to 2019," Latest Developments in the Canadian Economic Accounts (13-605-X), 2022.

One reason that may contribute to the larger discrepancy in hours of unpaid household work between men and women under 55 years of age could be that women are often the primary caregivers for dependent children or adults in the household. Persons in these age groups are more likely to have younger children that require more care and attention. Men however, based on the 2015 Time Use data, contribute less to caregiving activities in general.

Although men spent less time doing unpaid household work for all activities, their allocation of time spent on each activity is similar to women. Compared to women, men spent a slightly larger proportion of time on the "household chores or maintenance" category, and a smaller proportion of time caring for children and adults in the home (Graph 2). A breakdown of unpaid household work by type of activity and sex is shown in Table C4.



#### Chart 2 Share of total unpaid household work hours by activity and sex, 2015

Source: Statistics Canada, special tabulation, "Measuring the economic value of unpaid household work in Canada, 2015 to 2019," Latest Developments in the Canadian Economic Accounts (13-605-X), 2022.

# Presence of a partner and/or children in the home

Another interesting perspective is to look at the value of unpaid household work by sex and the presence of a partner and/or children in the home. Average hours of unpaid household work per person were analyzed to account for the varying sizes of these groups. Interestingly, even in single households with no children, women tended to do more household work compared to men, averaging 820 hours and 540 hours, respectively (Chart 3). Several external studies looking into the reasons why women do more housework than men, suggest that the differences are not due to men and women having different preferences or perceptions of cleanliness but rather are driven by societal expectations placed on women to have clean homes.<sup>17,18</sup> Nonetheless, single fathers spent double the amount of time on unpaid household work compared to single men. When the presence of children is looked at for partnered households (households with two adults), the gap between men's and women's share of household work widens—from women contributing an average of 57.4% of hours without the presence children in the home, and increasing to 60.5% with children. Note that households with same sex partners accounted for 1.1% of total partnered households in 2015. Table C3 summarizes the hours and value of unpaid household work by sex and the presence of a partner and/or children in the home.

<sup>17.</sup> Thébaud S. et al., (2021).

<sup>18.</sup> Auspurg, K. et al., (2017).





**Note:** Same sex partners comprised 1.1% of partnered households.

Source: Statistics Canada, special tabulation, "Measuring the economic value of unpaid household work in Canada, 2015 to 2019," Latest Developments in the Canadian Economic Accounts (13-605-X), 2022.

# Replacement cost wage rates and the contribution to unpaid household work activities by sex

While replacement cost is calculated on a per-person basis – hiring someone to do a household work activity regardless of their sex – differences remain between men and women based on the activities that they carry out. Out of the 20 unpaid household work activities listed in Appendix A, men completed the majority of hours spent on the following three activities: outdoor maintenance; repair, painting or renovation; and taking out garbage, recycling, compost, and unpacking goods. The weighted average replacement cost for these activities was \$21.79 per hour in 2015, while the replacement cost for all other activities in which women completed the larger share was \$15.60 per hour. This indicates that occupations within the caregiving domain and tasks that women generally do more of in the home, are paid less in the market economy, as compared to the tasks or jobs more often performed by men in the home and in the economy. This again signals a fundamental difference in the value of unpaid work done by women in the household, but also to a market wage gap between jobs done more by women than by men.

### Sensitivity of the value of household work estimates

Sensitivity estimates, shown in Table 3, can further illustrate the impact of wage rate gaps between men and women. For example, if the total hours of unpaid household work were valued using only men's wage rates, the total value of the G.O.C. would increase 9.6% in 2015. If the reverse was done and only women's wage rates were used, the total value of unpaid household work would have been 6.3% lower than the base estimates.

The sensitivity of the R.C. estimates was also tested by comparing the value of unpaid household work using the average wage rates to the lowest and highest paid occupations within each equivalency group. For example, using the lowest wage rate, the R.C. valuation was \$433.3 billion, while using the maximum wage rate gave \$796.9 billion in 2015. This indicates that within the equivalency groups used in this study there is variation in the average wage rates. It is therefore important to be aware of the occupations used to estimate R.C. valuations of unpaid household work and to track impacts of any changes made. A summary of average, minimum, and maximum replacement cost wage rates for Canada are presented in Table C5, while the occupational equivalency groups by household activity are listed in Appendix A.

# Table 3 Sensitivity of the estimates of unpaid household work, Canada, 2015

	Estimate	Unpaid household work as a percentage of gross domestic product	Deviation from base
	millions of dollars	percent	
Base estimates			
Net opportunity cost	682,823	34.3	0.0
Gross opportunity cost	778,238	39.1	0.0
Replacement cost	516,915	26.0	0.0
Net opportunity cost			
Net opportunity cost of men	729,934	36.7	6.9
Net opportunity cost of women	651,720	32.7	-4.6
Gross opportunity cost			
Gross opportunity cost of men	852,757	42.8	9.6
Gross opportunity cost of women	729,226	36.6	-6.3
Replacement cost			
Minimum rate per person	433,258	21.8	-16.2
Maximum rate per person	796,927	40.0	54.2

Source: Statistics Canada, special tabulation, "Measuring the economic value of unpaid household work in Canada, 2015 to 2019," *Latest Developments in the Canadian Economic Accounts* (13-605-X), 2022.

# Conclusion

Unpaid household work are productive activities not typically captured by the standard measures of a country's economic performance despite them being fundamental to the overall functioning of society, the economy, and the well-being of Canadians. This study offers a significant step forward in estimating the value of unpaid household work in Canada, and understanding the differences between men and women in their contribution to these activities and their associated economic value—both from a societal and personal opportunity cost, as well as a market replacement cost. All three valuation methods were fine-tuned in this paper compared to previous studies by incorporating part-time wages, and accounting for differences in earnings by age group for the opportunity cost valuations. Due to changes in occupational classifications between studies, the occupations included within the activity equivalency groups were refined in this paper to better align with the third party criterion of the replacement cost valuation.

While women continued to do the majority of unpaid household work, their share of the total value of unpaid household work was less than men, and this difference is attributable to the market wage gap between men and women. However, a small decline in the wage gap between men and women was observed over the reference period of this study. Despite there being a market wage gap between men and women, used in the opportunity cost valuation, the activities that men typically do more of in the home, are also valued higher in the market as seen in the replacement cost method.

This study highlights the importance of unpaid household work, and is one step forward in response to calls for indicators beyond the traditional measures of a market economy. At the same time, the estimates presented contribute insights into inequality between sexes in Canada and provide policymakers with information to help improve certain aspects of Canadian society now and in the future.

# Appendix A – Activities and occupations used to estimate the value of unpaid household work

#### Table A1

#### Activities and occupations used to estimate the value of unpaid household work

Code           3132           5321           5322           5512           5513           5711           5321           5321	Title         Dietitians and nutritionists         Chefs         Cooks         Bartenders         Food and beverage servers         Food counter attendants, kitchen helpers and related support occupations         Food service supervisors
5321 5322 5512 5513 5711 5311 5321	Chefs         Cooks         Bartenders         Food and beverage servers         Food counter attendants, kitchen helpers and related support occupations
5321 5322 5512 5513 5711 5311 5321	Chefs         Cooks         Bartenders         Food and beverage servers         Food counter attendants, kitchen helpers and related support occupations
5322       5512       5513       5711       5311       5321	Cooks         Bartenders         Food and beverage servers         Food counter attendants, kitchen helpers and related support occupations
6512       6513       6711       6311       6321	Bartenders         Food and beverage servers         Food counter attendants, kitchen helpers and related support occupations
5513 5711 5311 5321	Food and beverage servers Food counter attendants, kitchen helpers and related support occupations
6711 6311 6321	Food counter attendants, kitchen helpers and related support occupations
5311 5321	
6321	Food service supervisors
6322	Chefs
	Cooks
6711	Food counter attendants, kitchen helpers and related support occupations
6332	Bakers
4412	Home support workers, housekeepers and related occupations
6731	Light-duty cleaners
6732	Specialized cleaners
6731	Light-duty cleaners
6732	Specialized cleaners
6733	Janitors, caretakers and building superintendents
6742	Other personal service occupations
6731	Light-duty cleaners
6732	Specialized cleaners
6741	Dry cleaning, laundry and related occupations
6342	Tailors, dressmakers, furriers and milliners
7313	Heating, refrigeration and air conditioning mechanics
7321	Automotive service technicians, truck and bus mechanics and mechanical repairers
7332	Appliance servicers and repairers
7322	Motor vehicle body repairers
7445	Other repairers and servicers
7271	Carpenters
7295	Floor covering installers
7441	Residential and commercial installers and servicers
7294	Painters and decorators (except interior decorators)
	332       412       731       732       733       742       731       732       733       742       731       732       733       742       333       342       313       321       332       322       445       295       441

# Table A1 Activities and occupations used to estimate the value of unpaid household work

		National Occupation Classification 2016
	Code	Title
Organizing, planning, paying bills	1226	Conference and event planners
	1241	Administrative assistants
	1311	Accounting technicians and bookkeepers
	1411	General office support workers
	1431	Accounting and related clerks
	1432	Payroll administrators
	1434	Banking, insurance and other financial clerks
	1452	Correspondence, publication and regulatory clerks
Jnpacking groceries, packing and unpacking luggage or travel and/or boxes for a move	6742	Other service support occupations, (NEC1)
Outdoor maintenance (car repair, ground maintenance,	2225	Landscape and horticulture technicians and specialists
snow removal, cutting grass)	7321	Automotive service technicians, truck and bus mechanics and mechanical repairers
	7322	Motor vehicle body repairers
	7445	Other repairers and servicers
	7271	Carpenters
	6732	Specialized cleaners
	6733	Janitors, caretakers and building superintendents
	8255	Contractors and supervisors, landscaping, ground maintenance and horticulture services
	8432	Nursery and greenhouse workers
	8612	Landscaping and grounds maintenance labourers
lanting (picking), maintaining, cleaning garden,	2225	Landscape and horticulture technicians and specialists
aring for house plants	6731	Light-duty cleaners
	8255	Contractors and supervisors, landscaping, ground maintenance and horticulture services
	8432	Nursery and greenhouse workers
	8612	Landscaping and grounds maintenance labourers
Pet care (feeding, walking, grooming, playing)	4412	Home support workers, housekeepers and related occupations
	6563	Pet groomers and animal care workers
Personal care, getting ready for school, supervising	3413	Nurse aides, orderlies and patient service associates
nomework, reading, playing, reprimanding, educational, emotional help (less than 15 years)	4214	Early childhood educators and assistants
······································	4216	Other instructors
	4411	Home child-care providers
	4412	Home support workers, housekeepers and related occupations
	4153	Family, marriage and other related counsellors
Personal care, getting ready for school, supervising	3413	Nurse aides, orderlies and patient service associates
nomework, reading, playing, reprimanding, educational, emotional help (15 to 17 years)	4214	Early childhood educators and assistants
	4216	Other instructors
	4411	Home child-care providers
	4412	Home support workers, housekeepers and related occupations
	4153	Family, marriage and other related counsellors

# Table A1 Activities and occupations used to estimate the value of unpaid household work

		National Occupation Classification 2016
	Code	Title
Accompanying to or from school, bus stops, sports, activities, parent school meetings or appointments	4411	Home child-care providers
(less than 15 years)	4412	Home support workers, housekeepers and related occupations
	7513	Taxi and limousine drivers and chauffeurs
Accompanying to or from school, bus stops, sports,	4411	Home child-care providers
activities, parent school meetings or appointments (15 to 17 years)	4412	Home support workers, housekeepers and related occupations
	7513	Taxi and limousine drivers and chauffeurs
Washing, dressing, care giving, financial management	1434	Banking, insurance and other financial clerks
(adult)	3234	Paramedical occupations
	3413	Nurse aides, orderlies and patient service associates
	4412	Home support workers, housekeepers and related occupations
	6742	Other service support occupations, (NEC1)
Accompanying to or from appointments, shopping	3413	Nurse aides, orderlies and patient service associates
(adult)	3234	Paramedical occupations
	4412	Home support workers, housekeepers and related occupations
Shopping for or buying goods (gasoline, groceries,	4412	Home support workers, housekeepers and related occupations
clothing, car)	6623	Other sales-related occupations
	6742	Other service support occupations, (NEC1)
Shopping for services (legal services, financial	1434	Banking, insurance and other financial clerks
services, vehicle maintenance)	4412	Home support workers, housekeepers and related occupations
	6623	Other sales-related occupations
	6742	Other service support occupations, (NEC1)
Researching for goods or services	1241	Administrative assistants
	1434	Banking, insurance and other financial clerks
	4412	Home support workers, housekeepers and related occupations
	6623	Other sales-related occupations
	6742	Other service support occupations, (NEC1)

1. not elsewhere classified (NEC)

# Appendix B – Comparing the value of unpaid household work with the 1992 study

#### Table B1

Replacement cost valuation comparing the 2015 equivalency groups and the 1992 equivalency groups

	2015 Equivalency groups	1992 Equivalency group
	millions	of dollars
Replacement cost, total value	516,915	578,76
	average wage rate	in dollars per hour
Meal, lunch or snack preparation	13.89	13.9
Preserving foods (baking, freezing, sealing, packing foods)	13.53	14.2
ndoor house cleaning, dish washing, tidying	15.34	15.1
Taking out garbage, recycling, compost, unpacking goods	16.13	16.8
aundry, ironing, folding, sewing, shoe care	15.29	16.73
Repair, painting or renovation	24.44	24.6
Drganizing, planning, paying bills	21.54	21.4
Inpacking groceries, packing and unpacking luggage for travel and/or boxes for a move	13.58	15.1
Dutdoor maintenance (car repair, ground maintenance, snow removal, cutting grass)	20.91	20.2
Planting (picking), maintaining, cleaning garden, caring for house plants	16.18	16.9
Pet care (feeding, walking, grooming, playing)	15.35	16.6
Personal care, getting ready for school, supervising homework, reading, playing, reprimanding, educational,		
emotional help (less than 15 years)	19.73	26.6
Accompanying to or from school, bus stop, sports, activities, parent school meetings or appointments (less		
han 15 years)	15.05	19.6
Personal care, getting ready for school, supervising homework, reading, playing, reprimanding, educational,		
emotional help (15 to 17 years)	19.73	26.6
Accompanying to or from school, bus stop, sports, activities, parent school meetings or appointments (15 to		
17 years)	15.05	19.6
Vashing, dressing, care giving, financial management (adult)	19.94	18.4
Accompanying to or from appointments, shopping (adult)	20.40	21.5
Shopping for or buying goods (gasoline, groceries, clothing, car)	15.07	22.2
Shopping for services (legal services, financial services, vehicle maintenance)	16.08	22.2
Researching for goods or services	17.65	26.3

# Appendix C – Data tables

#### Table C1

#### Hours and value of unpaid household work by region and sex, 2015 to 2019

	20	15	201	6	201	7	201	8	201	9
	Women	Men								
Atlantic region										
Hours of unpaid household work (millions of hours)	1,320	916	1,320	916	1,320	916	1,320	916	1,320	916
Hours per person (hours)	1,290	940	1,290	940	1,290	940	1,290	940	1,290	940
Net opportunity cost (millions of dollars)	23,520	18,292	25,068	18,677	25,569	19,111	25,942	19,137	26,291	19,810
Gross opportunity cost (millions of dollars)	26,432	21,503	28,117	21,905	28,725	22,459	29,170	22,510	29,610	23,300
Replacement cost (millions of dollars)	19,346	14,544	19,901	14,811	20,533	15,266	20,716	15,510	20,783	15,543
Quebec										
Hours of unpaid household work (millions of hours)	4,286	2,948	4,286	2,948	4,286	2,948	4,286	2,948	4,286	2,948
Hours per person (hours)	1,230	860	1,230	860	1,230	860	1,230	860	1,230	860
Net opportunity cost (millions of dollars)	83,480	61,385	85,417	63,385	88,929	65,462	91,812	66,266	94,414	69,694
Gross opportunity cost (millions of dollars)	94,179	72,413	96,177	74,756	99,569	76,792	103,061	78,115	106,490	82,281
Replacement cost (millions of dollars)	67,047	49,669	69,007	51,287	70,389	52,159	74,076	54,831	74,204	55,168
Ontario										
Hours of unpaid household work (millions of hours)	7,437	4,687	7,437	4,687	7,437	4,687	7,437	4,687	7,437	4,687
Hours per person (hours)	1,260	840	1,260	840	1,260	840	1,260	840	1,260	840
Net opportunity cost (millions of dollars)	157,828	112,002	164,905	113,098	165,964	113,917	170,681	116,120	176,150	120,865
Gross opportunity cost (millions of dollars)	176,226	129,652	183,739	130,909	184,915	131,933	190,902	134,926	197,018	140,129
Replacement cost (millions of dollars)	116,956	77,329	121,654	80,170	123,144	81,196	132,977	87,118	135,317	89,152
Prairies										
Hours of unpaid household work (millions of hours)	3,538	2,340	3,538	2,340	3,538	2,340	3,538	2,340	3,538	2,340
Hours per person (hours)	1,330	860	1,330	860	1,330	860	1,330	860	1,330	860
Net opportunity cost (millions of dollars)	77,230	57,872	79,956	60,571	80,274	60,593	83,155	61,514	84,428	62,439
Gross opportunity cost (millions of dollars)	86,965	68,733	89,579	71,250	89,838	71,317	93,101	72,436	94,590	73,339
Replacement cost (millions of dollars)	59,652	42,732	60,333	43,178	62,608	44,594	64,496	45,575	65,891	46,746
British Columbia										
Hours of unpaid household work (millions of hours)	2,420	1,700	2,420	1,700	2,420	1,700	2,420	1,700	2,420	1,700
Hours per person (hours)	1,200	870	1,200	870	1,200	870	1,200	870	1,200	870
Net opportunity cost (millions of dollars)	50,432	40,784	50,408	41,092	51,670	42,359	52,796	45,239	56,165	44,689
Gross opportunity cost (millions of dollars)	55,445	46,690	55,416	47,035	56,874	48,536	58,275	51,887	62,028	51,365
Replacement cost (millions of dollars)	39,729	29,911	40,261	30,257	42,174	31,444	43,402	32,480	45,140	33,700

# Table C2Hours and value of unpaid household work by age and sex, 2015 to 2019

	20	)15	201	6	201	7	201	8	2019	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Mer
15 to 24 years										
Hours of unpaid household work (millions of hours)	1,242	872	1,242	872	1,242	872	1,242	872	1,242	872
Hours per person (hours)	570	380	570	380	570	380	570	380	570	380
Net opportunity cost (millions of dollars)	16,091	12,031	16,362	12,172	16,736	12,374	17,925	13,198	19,035	14,078
Gross opportunity cost (millions of dollars)	17,051	13,082	17,334	13,191	17,724	13,419	19,059	14,360	20,228	15,272
Replacement cost (millions of dollars)	19,413	14,189	20,021	14,574	20,589	14,942	21,623	15,726	22,068	16,114
25 to 54 years										
Hours of unpaid household work (millions of hours)	10,284	6,498	10,284	6,498	10,284	6,498	10,284	6,498	10,284	6,498
Hours per person (hours)	1,390	880	1,390	880	1,390	880	1,390	880	1,390	880
Net opportunity cost (millions of dollars)	225,377	156,816	230,297	159,784	235,528	162,421	239,706	165,330	249,588	169,974
Gross opportunity cost (millions of dollars)	256,844	188,584	261,829	191,797	267,106	194,773	272,873	198,892	284,362	204,361
Replacement cost (millions of dollars)	167,861	111,106	171,914	113,769	176,288	116,433	185,374	122,005	187,942	124,092
55 to 64 years										
Hours of unpaid household work (millions of hours)	3,260	2,393	3,260	2,393	3,260	2,393	3,260	2,393	3,260	2,393
Hours per person (hours)	1,340	1,000	1,340	1,000	1,340	1,000	1,340	1,000	1,340	1,000
Net opportunity cost (millions of dollars)	69,109	58,924	71,237	60,657	71,520	61,171	74,027	62,779	76,059	63,768
Gross opportunity cost (millions of dollars)	78,552	69,516	80,889	71,382	81,202	71,972	84,179	74,056	86,535	75,222
Replacement cost (millions of dollars)	50,901	41,127	52,595	42,323	53,820	43,192	56,705	45,205	57,885	46,272
65 years and above										
Hours of unpaid household work (millions of hours)	4,215	2,828	4,215	2,828	4,215	2,828	4,215	2,828	4,215	2,828
Hours per person (hours)	1,400	1,100	1,400	1,100	1,400	1,100	1,400	1,100	1,400	1,100
Net opportunity cost (millions of dollars)	81,913	62,563	87,859	64,210	88,622	65,477	92,728	66,968	92,765	69,677
Gross opportunity cost (millions of dollars)	86,800	67,809	92,976	69,486	93,889	70,873	98,399	72,565	98,611	75,559
Replacement cost (millions of dollars)	64,554	47,764	66,625	49,036	68,151	50,091	71,965	52,579	73,440	53,832

#### Table C3 Hours and value of unpaid household work by sex and the presence of a partner or children in the home, 2015 to 2019

	20	15	201	6	201	7	201	8	201	9
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Me
No partner or children in the home										
Hours of unpaid household work (millions of hours)	4,417	2,953	4,417	2,953	4,417	2,953	4,417	2,953	4,417	2,953
Hours per person (hours)	820	540	820	540	820	540	820	540	820	540
Net opportunity cost (millions of dollars)	83,329	62,111	86,561	63,362	87,845	64,374	91,409	66,230	94,037	68,628
Gross opportunity cost (millions of dollars)	91,382	71,827	94,757	73,121	96,125	74,250	100,247	76,554	103,246	79,209
Replacement cost (millions of dollars)	68,316	47,557	70,648	48,961	72,418	50,130	76,296	52,720	77,952	53,941
No partner with children in the home										
Hours of unpaid household work (millions of hours)	1,675	371	1,675	371	1,675	371	1,675	371	1,675	371
Hours per person (hours)	1,380	1,080	1,380	1,080	1,380	1,080	1,380	1,080	1,380	1,080
Net opportunity cost (millions of dollars)	35,165	8,892	36,290	9,114	36,902	9,238	37,930	9,399	39,167	9,700
Gross opportunity cost (millions of dollars)	39,506	10,468	40,682	10,705	41,310	10,842	42,583	11,063	44,035	11,410
Replacement cost (millions of dollars)	26,792	6,260	27,512	6,421	28,152	6,546	29,659	6,880	30,066	7,012
Partner in the home with no children										
Hours of unpaid household work (millions of hours)	5,329	4,170	5,329	4,170	5,329	4,170	5,329	4,170	5,329	4,170
Hours per person (hours)	1,310	970	1,310	970	1,310	970	1,310	970	1,310	970
Net opportunity cost (millions of dollars)	109,006	96,388	113,640	98,605	115,123	100,257	119,051	102,739	121,551	105,624
Gross opportunity cost (millions of dollars)	120,858	110,240	125,709	112,560	127,309	114,400	131,896	117,460	134,893	120,751
Replacement cost (millions of dollars)	83,223	71,492	85,632	73,413	87,822	75,033	92,248	78,509	94,131	80,304
Partner and children in the home										
Hours of unpaid household work (millions of hours)	7,580	5,097	7,580	5,097	7,580	5,097	7,580	5,097	7,580	5,097
Hours per person (hours)	1,710	1,110	1,710	1,110	1,710	1,110	1,710	1,110	1,710	1,110
Net opportunity cost (millions of dollars)	164,989	122,943	169,264	125,741	172,536	127,573	175,996	129,908	182,693	133,544
Gross opportunity cost (millions of dollars)	187,501	146,455	191,881	149,471	195,177	151,546	199,783	154,796	207,562	159,04
Replacement cost (millions of dollars)	124,398	88,876	127,364	90,907	130,455	92,949	137,463	97,405	139,187	99,052

Note: Partners of the same sex comprised 1.1% of partnered households Source: Statistics Canada, special tabulation, "Measuring the economic value of unpaid household work in Canada, 2015 to 2019," *Latest Developments in the Canadian Economic Accounts* (13-605-X), 2022.

# Table C4Hours and value of unpaid household work by sex and activity, 2015 to 2019

	20	15	201	6	201	7	201	8	201	9
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Mer
Household chores and maintenance										
Hours of unpaid household work (millions of hours)	13,279	9,297	13,279	9,297	13,279	9,297	13,279	9,297	13,279	9,297
Hours per person (hours)	880	630	880	630	880	630	880	630	880	630
Net opportunity cost (millions of dollars)	273,023	214,022	282,952	218,906	287,246	222,277	295,980	227,343	304,435	234,155
Gross opportunity cost (millions of dollars)	304,704	249,255	315,048	254,410	319,529	258,193	330,048	264,711	339,939	272,487
Replacement cost (millions of dollars)	202,769	157,957	208,104	161,401	212,955	164,804	224,525	172,651	230,317	177,334
Caring for children in the home (under 15 years)										
Hours of unpaid household work (millions of hours)	2,600	1,311	2,600	1,311	2,600	1,311	2,600	1,311	2,600	1,31
Hours per person (hours)	170	90	170	90	170	90	170	90	170	90
Net opportunity cost (millions of dollars)	56,190	31,212	57,437	31,793	58,716	32,321	59,876	32,964	62,323	33,917
Gross opportunity cost (millions of dollars)	63,869	37,328	65,126	37,964	66,415	38,560	67,969	39,447	70,798	40,566
Replacement cost (millions of dollars)	50,636	25,292	50,725	25,411	52,204	26,098	54,441	27,193	53,770	26,894
Caring for children in the home (15 to 17 years)										
Hours of unpaid household work (millions of hours)	170	66	170	66	170	66	170	66	170	66
Hours per person (hours)	10	4	10	4	10	4	10	4	10	4
Net opportunity cost (millions of dollars)	3,524	1,542	3,601	1,569	3,692	1,597	3,773	1,623	3,925	1,681
Gross opportunity cost (millions of dollars)	3,987	1,831	4,065	1,862	4,158	1,893	4,263	1,929	4,440	1,996
Replacement cost (millions of dollars)	3,159	1,132	3,197	1,174	3,291	1,210	3,437	1,270	3,402	1,249
Caring for adults in the home										
Hours of unpaid household work (millions of hours)	188	68	188	68	188	68	188	68	188	68
Hours per person (hours)	10	5	10	5	10	5	10	5	10	Ę
Net opportunity cost (millions of dollars)	3,978	1,495	4,108	1,520	4,172	1,553	4,297	1,601	4,428	1,648
Gross opportunity cost (millions of dollars)	4,466	1,711	4,604	1,738	4,671	1,775	4,824	1,834	4,977	1,887
Replacement cost (millions of dollars)	3,794	1,371	3,807	1,377	3,947	1,426	4,063	1,469	4,015	1,453
Shopping										
Hours of unpaid household work (millions of hours)	2,764	1,850	2,764	1,850	2,764	1,850	2,764	1,850	2,764	1,850
Hours per person (hours)	180	130	180	130	180	130	180	130	180	130
Net opportunity cost (millions of dollars)	55,774	42,063	57,657	43,035	58,579	43,695	60,461	44,745	62,336	46,095
Gross opportunity cost (millions of dollars)	62,221	48,866	64,186	49,881	65,148	50,618	67,406	51,953	69,582	53,478
Replacement cost (millions of dollars)	42,372	28,433	45,323	30,337	46,450	31,119	49,201	32,930	49,832	33,379

# Table C5Activity replacement cost rates, 2015 to 2019

	2015	2016	2017	2018	2019
			dollars per hour		
Average					
Meal, lunch or snack preparation	13.89	14.14	14.57	15.41	16.08
Preserving foods (baking, freezing, sealing, packing foods)	13.53	13.81	14.14	14.95	15.60
Indoor house cleaning, dish washing, tidying	15.34	15.91	16.24	17.05	17.25
Taking out garbage, recycling, compost, unpacking goods	16.13	16.47	16.61	17.63	18.11
Laundry, ironing, folding, sewing, shoe care	15.29	15.52	15.67	16.53	16.91
Repair, painting or renovation	24.44	24.96	25.05	25.53	26.39
Organizing, planning, paying bills	21.54	22.13	22.30	22.95	23.97
Unpacking groceries, packing and unpacking luggage for travel and/or boxes for a move	13.58	13.63	14.13	15.08	16.04
Outdoor maintenance (car repair, ground maintenance, snow removal, cutting grass)	20.91	21.00	21.42	22.27	22.86
Planting (picking), maintaining, cleaning garden, caring for house plants	16.18	16.49	16.84	17.77	18.04
Pet care (feeding, walking, grooming, playing)	15.35	16.66	17.50	18.19	17.91
Personal care, getting ready for school, supervising homework, reading, playing, reprimanding, educational, emotional help (children less than 18 years)	19.73	19.69	20.22	21.01	20.75
Accompanying to or from school, bus stop, sports, activities, parent school meetings or appointments					
(children less than 18 years)	15.05	16.17	16.80	17.76	17.65
Washing, dressing, care giving, financial management (adult)	19.94	20.12	20.79	21.40	21.10
Accompanying to or from appointments, shopping (adult)	20.40	20.44	21.26	21.76	21.28
Shopping for or buying goods (gasoline, groceries, clothing, car)	15.07	16.14	16.53	17.50	17.57
Shopping for services (legal services, financial services, vehicle maintenance)	16.08	17.30	17.72	18.36	18.61
Researching for goods or services	17.65	19.96	20.42	20.94	22.00
Minimum					
Meal, lunch or snack preparation	12.32	12.63	12.96	14.10	14.69
Preserving foods (baking, freezing, sealing, packing foods)	12.32	12.63	12.96	14.10	14.69
Indoor house cleaning, dish washing, tidying	15.25	15.52	15.65	16.41	16.76
Taking out garbage, recycling, compost, unpacking goods	13.58	13.63	14.13	15.08	16.04
Laundry, ironing, folding, sewing, shoe care	15.25	15.31	15.43	15.68	16.50
Repair, painting or renovation	19.21	21.09	21.05	21.30	21.23
Organizing, planning, paying bills	19.92	21.14	21.07	21.88	22.28
Unpacking groceries, packing and unpacking luggage for travel and/or boxes for a move	13.58	13.63	14.13	15.08	16.04
Outdoor maintenance (car repair, ground maintenance, snow removal, cutting grass)	15.48	14.51	15.49	17.09	17.93
Planting (picking), maintaining, cleaning garden, caring for house plants	15.25	14.51	15.49	16.41	16.76
Pet care (feeding, walking, grooming, playing)	14.60	13.76	14.17	16.19	16.51
Personal care, getting ready for school, supervising homework, reading, playing, reprimanding, educational, emotional help (children less than 17 years)	13.53	14.07	14.29	15.99	15.94
Accompanying to or from school, bus stop, sports, activities, parent school meetings or appointments	10.00	14.07	14.25	10.00	10.04
(children less than 17 years)	13.53	14.07	14.29	15.99	15.94
Washing, dressing, care giving, financial management (adult)	13.58	13.63	14.13	15.08	16.04
Accompanying to or from appointments, shopping (adult)	15.52	17.16	14.15	18.65	18.21
Shopping for or buying goods (gasoline, groceries, clothing, car)	13.52	13.63	14.13	15.08	16.04
Shopping for services (legal services, financial services, vehicle maintenance)	13.58	13.63	14.13	15.08	16.04
Researching for goods or services	13.58	13.63	14.13	15.08	16.04
Maximum	15.50	15.05	14.15	15.00	10.04
Meal, lunch or snack preparation	37.31	34.01	35.18	35.10	36.37
Preserving foods (baking, freezing, sealing, packing foods)	17.70	17.98	18.09	18.48	19.22
Indoor house cleaning, dish washing, tidying	15.52				
Taking out garbage, recycling, compost, unpacking goods		17.16	18.15	18.65	18.21
	17.67	18.07	18.25	19.49	19.94
Laundry, ironing, folding, sewing, shoe care	15.48	15.66	15.96	17.09	17.93
Repair, painting or renovation	29.02	31.60	30.89	32.05	33.67
Organizing, planning, paying bills	23.59	24.39	25.08	26.02	26.93
Unpacking groceries, packing and unpacking luggage for travel and/or boxes for a move	13.58	13.63	14.13	15.08	16.04
Outdoor maintenance (car repair, ground maintenance, snow removal, cutting grass)	25.66	26.34	26.39	26.34	27.81
Planting (picking), maintaining, cleaning garden, caring for house plants	22.73	22.70	24.08	26.07	25.51
Pet care (feeding, walking, grooming, playing)	15.52	17.16	18.15	18.65	18.21
Personal care, getting ready for school, supervising homework, reading, playing, reprimanding, educational, emotional help (children less than 17 years)	28.79	28.49	29.56	31.42	31.23
Accompanying to or from school, bus stop, sports, activities, parent school meetings or appointments	15 50	17 10	10.15	10.05	10.01
(children less than 17 years)	15.52	17.16	18.15	18.65	18.21
Washing, dressing, care giving, financial management (adult)	30.89	31.12	32.13	33.54	32.05
Accompanying to or from appointments, shopping (adult)	30.89	31.12	32.13	33.54	32.05
Shopping for or buying goods (gasoline, groceries, clothing, car)	15.52	17.16	18.15	18.65	18.21
Shopping for services (legal services, financial services, vehicle maintenance)	19.92	21.60	21.95	22.33	22.68
Researching for goods or services	20.33	22.00	22.29	22.81	24.05

# Appendix D – Unpaid household work categories and activities

#### Table D1

#### Unpaid household work categories and activities

Category	Activity			
Household chores or maintenance	Meal, lunch or snack preparation			
	Preserving foods Baking, freezing, sealing, packing foods			
	Indoor house cleaning, dish washing, tidying			
	Taking out garbage, recycling, compost, unpacking goods			
	Laundry, ironing, folding, sewing, shoe care			
	Repair, painting or renovation			
	Organizing, planning, paying bills			
	Unpacking groceries, packing and unpacking luggage for travel and/or boxes for a move			
	Outdoor maintenance > Car repair, ground maintenance, snow removal, cutting grass			
	Planting (picking), maintaining, cleaning garden, caring for house plants			
	Pet care> Feeding, walking, grooming, playing			
Caring for a child from your household (less than 15 years)	Personal care, getting ready for school, supervising homework, reading, playing, reprimanding, educational, emotional help			
	Accompanying to or from school, bus stop, sports, activities, parent school meetings or appointments			
Caring for a teenager from your household (15 to 17 years)	Helping with homework, playing, reprimanding, educational, personal care, getting ready for school, emotional help			
	Accompanying to or from school, bus stop, sports, activities, parent school meetings or appointments			
Caring for an adult from your household	Washing, dressing, care giving, financial management			
	Accompanying to or from appointments, shopping			
Shopping for goods or services	Shopping for or buying goods > Gasoline, groceries, clothing, car			
	Shopping for services > Legal services, financial services, vehicle maintenance			
	Researching for goods or services			

## Glossary

UHW - unpaid household work

- N.O.C. net opportunity cost
- G.O.C. gross opportunity cost
- R.C. replacement cost
- Hours hours of unpaid household work
- GDP gross domestic product
- HDI household disposable income
- n.e.c not elsewhere classified

## References

Fast, J., Keating, N., Eales, J., Kim, C. and Lee, Y. (2020), "Trajectories of family care over the lifecourse: evidence from Canada" Published online by Cambridge University Press.

Hawrylyshyn, O. (1978), "Estimating the Value of Household Work in Canada", 1971, Catalogue No. 13-558.

Auspurg, K., Iacovou, M., Nicoletti, C., <u>Housework share between partners: Experimental evidence on gender-specific preferences</u>, Social Science Research, Volume 66, 2017, Pages 118-139, ISSN 0049-089X, https://doi. org/10.1016/j.ssresearch.2017.01.003.

Pelletier, R., Patterson, M., and Moyser, M. (2019), "The gender wage gap in Canada: 1998 to 2018", Labour Statistics: Research Papers, Catalogue No. 75-004-M.

Statistics Canada, (1994), "The Value of Household Work in Canada 1992", Income and Expenditure Accounts technical series, Catalogue No. 13-604-MIB-No.27.

Statistics Canada, (1995), "Households' Unpaid Work: Measurement and Valuation Studies in National Accounting", Catalogue No. 13-603E, No. 3.

Statistics Canada, special tabulations of effective tax rates based on the T1FF, obtained December 2021.

Statistics Canada, Record Number 4503, <u>General Social Survey - Time Use (GSS)</u>, https://www23.statcan.gc.ca/ imdb/p2SV.pl?Function=getSurvey&SDDS=4503

Statistics Canada, Record Number 3710, *Labour Force Survey (LFS)*, https://www23.statcan.gc.ca/imdb/p2SV. pl?Function=getSurvey&SDDS=3701

Statistics Canada, Record Number 5110, <u>Satellite Account of Non-profit Institutions and Volunteering</u>, https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5110

Statistics Canada, Table 36-10-0221-01, Gross domestic product, income-based, provincial and territorial, annual (x 1,000,000).

Statistics Canada, Table 36-10-0224-01, Household sector, current accounts, provincial and territorial, annual.

Stiglitz, J., A. Sen and J.-P. Fitoussi (2007), "<u>Report on the Commission on the Measurement of Economic Performance and Social Progress</u>", Paris: Commission on the Measurement of Economic Performance and Social Progress, Paris. https://ec.europa.eu/eurostat/documents/8131721/8131772/Stiglitz-Sen-Fitoussi-Commission-report.pdf.

Thébaud S, Kornrich S, Ruppanner L. Good Housekeeping, Great Expectations: Gender and Housework Norms. *Sociological Methods & Research*. 2021;50 (3):1186-1214. doi:10.1177/0049124119852395

United Nations Economic Commission for Europe (UNECE), "Guide on Valuing Unpaid Household Service Work", ECE/CES/STAT/2017/3.

United Nations Statistics Division (UNSD), <u>Advisory Expert Group on National Accounts</u>, 14<sup>th</sup> Meeting, October 2020, Virtual meeting, SNA/M1.20/6.7, https://unstats.un.org/unsd/nationalaccount/aeg/2020/M14\_6\_7\_Unpaid\_ HH\_Service\_Work.pdf

van de Ven, P., J. Zwijnenburg and M. De Queljoe (2018), "Including unpaid household activities: An estimate of its impact on macro-economic indicators in the G7 economies and the way forward", OECD Statistics Working Papers, No. 2018/4, OECD Publishing, Paris, https://dx.doi.org/10.1787/bc9d30dc-en.