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Estimating Expenditures on Children by Families in Canada, 2014 to 2017

by Karen A. Duncan, Kristyn Frank and Anne Guèvremont

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Executive summary

There are almost 5 million families in Canada living with a child aged younger than 25 years (Statistics Canada, 2022), with 37% living with one child, 43% living with two children, and 20% living with three or more children. Caring for children is among the key functions of families and the larger society. In Canada, the question of affordability issues for families with children has become an increasingly important area of public policy. Also, information on the monetary cost of meeting children's needs for food, shelter, clothing, health care, and education is important for family planning and budgeting decisions made by people raising children. This applies whether the person raising the child is a birth, adoptive, step, or foster parent or whether the child is living with someone who is not their parent. However, generating estimates of the cost of raising a child is complex, and spending on children is highly variable across different types of families. An additional challenge is the growing importance of the costs incurred for adult children who live with their parents, which few studies estimating expenditures on children have examined.

This study uses Survey of Household Spending (SHS) data to produce modelled estimates of Canadian household expenditures on a child in different family types (with different numbers of parents and children) and with different income levels, for families living in the provinces. For this study, pooled data from four cycles of the SHS (2014 to 2017) were used to obtain a large enough sample for analysis. Following the methodology employed by Lino et al. (2017) to examine U.S. data, this study presents estimates for total spending of Canadian families on children (per child), as well as estimates for each of seven categories of spending: child care and education (CCE), clothing, food, health care, housing, transportation, and miscellaneous. Because a single estimate of the amount that families spend on a child would not accurately account for the different situations of families across Canada, estimates were generated separately for one- and two-parent families (including birth, adoptive, step, and foster parents) and by household income level. Estimates were also generated by region for two-parent families.

Among two-parent families with two children (the most common family type), the estimated total predicted expenditures for a child from birth to age 17 were \$238,190, \$293,000, and \$403,910 (in 2017 dollars) for households in the lower-income (before-tax household income less than \$83,013 in 2016), medium-income (before-tax household income from \$83,013 to \$135,790 in 2016), and higher-income (before-tax household income above \$135,790 in 2016) groups, respectively. When the estimated total expenditures for children from birth to age 22 still living at home were considered, they were \$308,710, \$378,900, and \$521,270 for the respective income groups.

For one-parent families with two children, the estimated total predicted expenditures for a child from birth to age 17, in 2017 dollars, were \$231,260 and \$372,110 for households in the lower-income (before-tax household income below \$83,013 in 2016) and medium-high-income (before-tax household income of \$83,013 or above in 2016) groups, respectively. When the total predicted expenditures for a child from birth to age 22 still living at home were considered, they were \$299,180 and \$479,830 for the respective income groups.

For two-parent and one-parent households, including children aged 18 to 22 years increased the total expenditures by 29% compared with those for children aged 0 to 17 years. This increase is attributable to more years of expenses and to higher education costs (likely for postsecondary education tuition).

Across expenditure categories, housing accounted for the largest share (27% to 32%) of expenditures on a child from birth to age 22 across all household types. Transportation was the next largest expense for a child in a two-parent family. Transportation accounted for a higher share of expenditures for two-parent families (18% to 20%) compared with one-parent families (11% to 15%), likely because two-parent families often have two cars. Food was the second-

largest expense for one-parent families (18% to 20%) and the third-largest expense for two-parent families (16% to 18%). CCE was also a relatively large expense for families, accounting for 13% to 17% of the estimated total expenditures for a child. Clothing and health care each accounted for less than 10% of expenditures for both two-parent and one-parent families.

Some regional differences were also observed. Two-parent families with children in the Prairies and western provinces (Manitoba, Saskatchewan, Alberta, and British Columbia) had the highest expenditures for children, about 8% to 15% higher than those in the Atlantic provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and New Brunswick). The expenditures on children among two-parent families with children in the central provinces (Quebec and Ontario) were about 5% to 9% higher than those in the Atlantic provinces, suggesting that the cost of living in the Atlantic provinces is lower than in the other provinces.

Some data limitations are important to note for this study. First, several years of SHS data (2014 to 2017) were pooled to obtain a sufficient sample size to produce reliable estimates; therefore, the expenditures may represent a mix of spending patterns over the years pooled. Additionally, because expenditures were largely reported at the household level, decisions were made regarding the proportion of expenditures to assign to children, which may have resulted in an over- or underestimation of expenditures associated with children. Lastly, decisions were also made regarding which expenditure items were included or excluded in the estimates. These decisions were primarily made to reflect costs that are generally applicable to most families in Canada; however, these decisions may have resulted in more conservative estimates. Also, it is important to note that the territories were not included in this analysis, primarily because territorial data were unavailable for each of the four years studied.

This study contributes to the literature by providing the first nationally representative (excluding the territories) estimates of expenditures on children (per child) by families in Canada in over a decade. It also extends the estimates to account for adult children aged 18 to 22 years living in the household. The findings provide insight into family expenditures on children by household composition and income level and show the variability in both total spending and spending by expenditure category.

1. Introduction

There are almost 5 million families in Canada living with at least one child younger than 25, with 37% living with one child, 43% living with two children, and 20% living with three or more children (Statistics Canada, 2022). Caring for children is among the key functions of families and the larger society. Although the decision to become a parent is personal, it has individual and social consequences. Notably, choices regarding whether to have children and when to have them influence labour force participation, in particular among women. In Canada, the question of affordability issues for families with children has become an increasingly important area of public policy; recent developments include increases to the Canada Child Benefit (CCB) as a result of the COVID-19 pandemic and funding for a national early learning and child care system (ESDC, 2021). Further, society has an interest in the development and education of children; both the rights and the particular vulnerability of children are recognized in the United Nations Convention on the Rights of the Child (UNCRC), which Canada ratified in 1991 (Government of Canada, 2017).

Meeting their children's needs for food, shelter, clothing, health care, education, and inclusion in society is one of the important ways families care for children, and children have rights under the UNCRC to have these needs met. Information on the monetary cost of meeting these needs is important for parents, who are usually the primary providers, as well as for others who may be raising children (such as extended family) and may use this information for family planning and budgeting decisions. The majority of non-parenting men and women (75% of whom reported wanting to have children) cited financial security as a factor in the timing of childbearing (Tough et al., 2007). This information may also be useful for informing public policies related to child support, funding for foster parents, or addressing child poverty or family supports.

Yet generating estimates of the cost of raising a child is a surprisingly complex endeavour. Practically, spending on children is highly variable and influenced by the tastes and preferences of parents and whether children have specific needs (e.g., because of a disability) (Burton & Phipps, 2009; Duncan et al., 2017). Spending is also constrained by family income and circumstances such as geographic location (Coley et al., 2016; Lino et al., 2017). For example, it was estimated that the cost of living in Canada's northern territories was about 1.46 times higher than elsewhere in Canada during the period from 1997 to 2009 (Daley et al., 2015). Conceptually, there is also lack of agreement as to what is meant by the question, "How much does it cost to raise a child?" (Browning, 1992). These different meanings make it important to distinguish between methods that estimate how much families **are spending** on children and those that estimate how much families **must spend** on children at a particular standard of living.

An additional challenge is the growing importance of considering the costs incurred for adult children who live with their parents. Over the past 40 years, Canada has seen an increase in the proportion of young adults living with at least one parent; results from the 2017 General Social Survey showed that 90% of young adults aged 18 to 19 years and 68% of those aged 20 to 24 years were living with a parent (Statistics Canada, 2019). Few studies on the cost of raising children have included estimates for the costs of adult children living in the household.

The purpose of this study is to use Survey of Household Spending (SHS) data to provide the first nationally representative (excluding the territories) estimates of expenditures on a child for a number of different family types in over a decade. The study also extends the estimates provided in previous studies by accounting for adult children aged 18 to 22 years living in the household.

Estimates are generated separately for one- and two-parent families by household income level and by region for two-parent families. The method used is modelled after that employed by the United States Department of Agriculture (USDA) (Lino et al., 2017), which has produced estimates of expenditures on children for several decades. The study follows the 2017 USDA report by using household expenditure data to provide estimates for the amount Canadian families

spend on children in total (per child). It also examines expenditures across seven categories: CCE, clothing, food, health care, housing, transportation, and miscellaneous.

2. Previous literature

Estimates of the cost of raising children have been generated in a number of countries. Across academic studies and reports from private and public organizations, a variety of methods have been used. The most commonly used methods can be categorized as the **budget standard approach**, the **expenditure survey approach**, and the use of **equivalence scales**. Each method relies on different assumptions and has different advantages and disadvantages. In budget standard approaches, detailed baskets of goods and services needed to raise a child at a particular living standard in a particular location are designed and priced to arrive at the cost of raising a child (e.g., Manitoba Agriculture, 2004; Saunders & Bedford, 2018). By contrast, both expenditure survey and equivalence scale approaches generate estimates of the spending on children from household expenditure data (e.g., Lino et al., 2017; Selim & Kaya 2018). Expenditure survey and equivalence scale approaches are appropriate for determining how much families are spending on children, whereas budget standard approaches are appropriate for determining how much families must spend at a particular living standard (Duncan et al., 2017).

It is important to note that most studies examining the cost of raising children focus on direct or out-of-pocket costs. Families will also incur indirect costs, such as income forgone by parents when time is spent caring for children instead of participating in paid labour, and intangible costs, which are the physical and emotional costs of raising children. Although these costs are relevant, studies that estimate indirect costs rely on data other than those collected on direct costs; it is difficult to link data that allow the estimation of indirect costs with data that allow the estimation of direct costs. Intangible costs such as time strain and financial stress (Buddelmeyer et al., 2018) have no market price at which "values" are determined. Intangible costs are personal and affect individuals differently. Therefore, intangible costs are rarely estimated in research studies. Regardless of the approach used to estimate the direct costs of raising children, there is general agreement in this literature that the relevant categories of spending on children include food, clothing, shelter, child care, education, health care, personal care, and transportation (Duncan et al., 2017).

2.1 Spending on children in Canada

Early Canadian research used complete demand systems—an equivalence scale approach that estimates the amount of additional income a household needs to be as well off as a similar household without children—to estimate household spending on children with data from the Survey of Family Expenditures (the precursor to the SHS). Douthitt and Fedyk (1990) generated detailed estimates by income level, age and number of children, and region of the country. Phipps (1998) focused on the social welfare aspect of the cost of raising a child, asking how much income a family with children needs to have the same standard of living compared with a family without children. This research found that, for example, couples with one child needed about 1.16 times the income of couples without children to be as well off and demonstrated economies of scale in having children. MoneySense used a variety of data sources, including household expenditure data, to generate its estimates of the cost of raising children, concluding that the average cost to raise a child from birth to age 18 was \$243.660 in 2011 (Cornell, 2011).

The budget standard approach—which estimates how much a family needs to achieve a particular standard of living—was used by the Home Economics Section at Manitoba Agriculture to estimate the cost of raising a child at what would be considered a modest level of living in Manitoba (Manitoba Agriculture, 2004). The cost of raising a child from birth to age 18 was last estimated at just under \$167,000 in 2004. The Fraser Institute (Sarlo, 2013) also generated cost estimates

by using the Manitoba Agriculture data. However, these estimates excluded the costs of shelter and child care and minimized transportation costs, resulting in estimates that were very low compared with similar studies. Over the past decade, academic studies have focused on the costs incurred when children have specific long-term health conditions or disabilities (e.g., Castro et al., 2022; Genereaux et al., 2016; Tsimicalis et al., 2013).

2.2 International studies

Internationally, estimates of the cost of raising children are often published in Australia, the United Kingdom, and the United States. In both Australia and the United Kingdom, the budget standard approach is used to estimate the cost of raising a child. When a minimum standard to meet basic needs was used, the cost of raising a child from birth to age 18 was estimated at £160,692 (or CAN\$277,097) for two-parent families and £193,801 (or CAN\$334,190) for one-parent families in 2021, 3.6% and 3.3% increases, respectively, in total costs over the previous year (Hirsch & Lee, 2021). In Australia, the standard is set at "a minimal level of outlays," and the cost was estimated at AU\$140 to AU\$170 (CAN\$131 to CAN\$160) per week in 2018 (Saunders & Bedford, 2018). In Europe, there has been increasing interest in using the budget standard approach as a policy tool for estimating family living costs and developing comparability across countries (Deeming, 2020; Goedemé et al., 2015).

There is a long history in the United States of generating estimates of the expenditures of families on children. The USDA has published estimates since 1960 using the expenditure survey approach (Lino et al., 2017). The most recent USDA study employs household expenditure data from the 2011 to 2015 Consumer Expenditure Survey, examining expenses for one child in two-child, married-couple families and one-parent families, and presents results by family income level, age of child, and region of residence. Although this dataset provides detailed information on household spending, in many expenditure categories it is not possible to directly identify spending on children. In these cases, assumptions are made regarding how much spending to allocate to children. The cost of raising a child from birth to age 17 in the United States was estimated at US\$212,300 (CAN\$286,298) for married-couple families in 2015 (Lino et al., 2017). Generally, Lino et al. (2017) found that housing was the largest expenditure, accounting for 26% (for the highest income group) to 33% (for the lowest income group) of child-rearing expenses, with food, transportation, and health care also accounting for large shares of expenditures on children by families in the United States.

3. Information gaps addressed by this study

This study contributes to the literature by providing the first nationally representative estimates of the expenditures on children by families¹ in Canada's provinces in over a decade and by extending the estimates to account for adult children aged 18 to 22 years living in the household. Families in this study include two-parent families (either married or common law, of any gender) and one-parent families living with birth, adopted, step, or foster children. Using pooled SHS data from 2014 to 2017, this study answers the following questions:

- 1. How much did Canadian one- and two-parent families spend on children, on average, from 2014 to 2017?
- 2. How much did Canadian one- and two-parent families spend on children from 2014 to 2017 in each of the following categories of expenditures: CCE, clothing, food, health care, housing, transportation, and miscellaneous?
- 3. How did child expenditures vary by household income level, age of the child, and region of the country, from 2014 to 2017?

In the next sections, the methodology of the study is described and the estimates for Canada are presented. In the concluding section, the findings are summarized, the limitations of the study are discussed, and directions for future research are suggested.

4. Methods

4.1 Data source

The SHS was used to model parental expenditures on children by families. It is a cross-sectional survey that collects detailed spending information, primarily at the household level, as well as selected information on dwelling characteristics and household equipment. The SHS combines a questionnaire administered through an in-person interview and a daily expenditure diary. The questionnaire collects information on expenses using recall periods based on the type of expenditure (last month or last 4 weeks, last 3 months, last 12 months, or last payment). A subsample of households (approximately 50%) is selected to complete the daily expenditure diary for a two-week period following the interview. Collection is carried out on a continuous monthly basis from January to December of the survey year. Expenditure data collected through the interview with a recall period of less than 12 months, as well as amounts reported in the two-week diary, are annualized so that they cover 12 months.²

For this study, pooled data from four cycles of the SHS (2014 to 2017) were used to obtain a large enough sample for analysis, as these years were the most recent files available with a large enough sample size to support the modelling used in this study.³ Survey weights were calibrated so that the records in all four years combined were representative of the Canadian population in the 10 provinces in 2017. The three Canadian territories were not included, because the sample for the northern region was not available for every year from 2014 to 2017 and differences in the sampling and estimation methodology made the estimates for the territories not comparable to those for the 10 provinces. Expenditure values have been converted to 2017 constant dollars using the Consumer Price Index (CPI) with category-specific inflation adjustments for 2014 to 2016 spending (the specific inflation adjustments used are available upon request).

^{1.} The terms "families" and "households" are used interchangeably in the context of this paper. However, estimates are representative of only the subset of families and households that is specified in the study.

^{2.} This information is representative of the SHS from 2014 to 2017 and does not necessarily reflect the current SHS.

^{3.} Additionally, after 2017, the SHS has been conducted every two years rather than annually.

Sample

Households were included in the study if they consisted of one or two parents (of any gender and including common-law couples) living with children aged 0 to 22 years (including birth, adopted, step, and foster children). Students who were away at school but regarded the parental household as their "main" or "usual" place of residence were included as part of the household. Families were excluded if other related or unrelated individuals lived in the household and if children older than 22 years lived in the household. Thus, multi-generational families were not included. Households with more than six children were also excluded (representing an extremely small proportion of the sample).

There were 9,989 two-parent and 2,303 one-parent households included, with approximately one-third (3,647 two-parent and 760 one-parent households) completing the two-week expenditure diary. Refer to Appendix Table A.1 for detailed information on the expenditure items that were included in and excluded from the analysis.

Definitions

Income: Data on income were obtained mainly from the Individual Income Tax Return (T1) administrative data files from the Canada Revenue Agency and correspond to the income associated with the calendar year preceding the survey year. For example, for households who responded to the survey in 2014, the income reported is from the 2013 calendar year. For all years, income was converted for all households to constant 2016 dollars to reflect income associated with the last survey year studied (2017) using the CPI for all items.

Income was defined as the total household income before taxes, which includes the income of any household members aged 16 or older. It includes employment and investment income, as well as government transfers such as the CCB and the goods and services tax credit. Income was divided into low, medium, and high categories using the distribution of income of two-parent families with one to four children to determine the cut-off points. Two-parent households with income lower than the 33.33rd percentile (\$83,013) were categorized as "lower income." Two-parent households with income from the 33.33rd to the 66.66th percentiles (\$135,790) were categorized as "medium income." Two-parent households with income higher than the 66.66th percentile were categorized as "higher income." Mean incomes for two-parent families were \$54,630 for the lower-income, \$107,770 for the medium-income, and \$218,540 for the higher-income groups. For data quality reasons, the medium-and high-income groups were collapsed for the one-parent households to form the medium-high-income group. The average incomes for one-parent families were \$42,240 for the lower-income and \$126,190 for the medium-high-income groups.

Region: Geographic regions were defined according to the province of residence of the household: Atlantic provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and New Brunswick), central provinces (Quebec and Ontario), and the Prairies and western provinces (Manitoba, Saskatchewan, Alberta and British Columbia). The territories were not included in the study because of territorial data being unavailable in each of the four years studied and the small sample size when territorial data were available. Weights were adjusted to be representative of the Canadian population in the 10 provinces in 2017.

Age groups: The definitions of age groups were based on the age of the child in years at the time of the interview (0 to 5, 6 to 12, 13 to 18, and 19 to 22). The ages of the youngest and oldest children in the household were considered, separately, to allow for comparisons and the derivation of adjustment factors to account for families with older children or different numbers of children.

Types of expenditures

Expenditures were included if they were for items or expenses for things used by all family members or the children of the family. Expenditures for items solely for the parents⁴ (e.g., alcohol, tobacco, and games of chance) were excluded. The inclusions and exclusions in each category are closely aligned with those used by Lino et al. (2017) given their established methodology and the similarities between the SHS data and the household expenditure data used in the U.S. study. The main objective of the study is to produce estimates that are generally applicable to most families in Canada. Additionally, household items not directly associated with expenditures on children (e.g., pet expenses, garden supplies and services) were excluded. Refer to Appendix Table A.1 for detailed information on the items that were included and excluded in the analyses.

Child care and education: Includes child care in the home and outside the home, as well as tuition fees, textbooks, and school supplies. While younger children contribute more to child care expenditures and older children to education expenditures (e.g., postsecondary tuition), both expenses may be applicable to children in the middle years (ages 6 to 17). Therefore, CCE expenditures were combined into one category.

Clothing: Includes clothing, footwear, and accessories. Clothing services (laundry, dry cleaning and alteration services) were excluded because they could not be assigned to individual household members, whereas the other clothing expenditures could be assigned solely to the children in the family.

Food: Includes all food purchased from stores and restaurants.

Health care: Includes prescribed and non-prescribed medicines and pharmaceutical products, health care practitioners, eyewear, dental services, private health insurance plan premiums, and provincial health insurance premiums. Health care expenses include only direct (out-of-pocket) costs paid by the household net of the expenditures reimbursed.

Housing: Includes shelter costs (rent or mortgage, repairs, taxes, insurance, and expenses associated with buying or selling a home), utilities, communication expenditures (landline, cell phone, and Internet), household operations (e.g., cleaning supplies), and household furnishings and equipment. Down payments on all property purchases (as they are a large one-time expense) were excluded, as were expenditures on other accommodations (including owned secondary residences and accommodations away from home), pets, lawn and garden supplies, and snow removal tools. As in Lino et al. (2017), expenses for yard maintenance (lawn and garden supplies and snow removal) were excluded as the analytical approach is not meant to account for the purchase of a home with a yard (or a larger yard).

Transportation: Includes expenses to purchase and operate (registration, gas, insurance, repair, and parking) private-use automobiles, vans, and trucks, as well as expenses for public transportation (local bus and train; taxi; and intercity airplane, bus, and train). Household moving, storage and delivery services were excluded as they are not expenses that occur frequently or regularly.

Miscellaneous: Includes expenses on personal care goods (e.g., soap, hair care products, feminine hygiene products, and disposable diapers), personal care services, recreation equipment, and related services (sports equipment, children's toys, computers, and video game systems), home entertainment equipment and services (audio and video equipment), and reading material. Expenses on outdoor play equipment and accessories⁵ were excluded, as were those

^{4.} However, with the inclusion of households with children aged 18 to 22 years in this study, it is possible that in some cases less than 100% of these expenditures were only for the parents.

^{5.} This exclusion is attributable to the analytical approach not assuming that households have a yard (see explanation in the Housing section above).

on wearable electronic devices, musical instruments, camping supplies, package trips, children's camps, recreational vehicles and associated services, tobacco and alcoholic beverages, and games of chance; income taxes; personal insurance payments and pension contributions; gifts of money; support payments; and charitable contributions.

4.2 Analysis

The analytical approach for this study follows the methodology used by Lino et al. (2017), who studied household expenditure data from the United States. A series of general linear models were analyzed, with the outcomes being household expenditures for each of the seven categories examined: CCE, clothing, food, health care, housing, transportation, and miscellaneous. The predictors for the models included the income group, number of children in the household, and age of the youngest child or oldest child (depending on the model). These models were run at the national level. The region variable was added to the two-parent models to assess expenditures in different regions; however, regional analysis was not possible for the one-parent group because of small sample sizes.

For housing, a different method was used, which estimated the cost of having an additional bedroom in the dwelling. This was based on the rationale that the presence of a child would affect the number of bedrooms in a home, but not necessarily the number of rooms in the rest of the dwelling. This method is similar to the method used by Lino et al. (2017) and assumed that the cost of an additional bedroom was half of the difference (increase) in the cost of housing for a four-bedroom dwelling versus a dwelling with two or fewer bedrooms. However, when the exact approach of Lino et al. (2017) was used with the Canadian data, the cost of an additional bedroom appeared to be either zero, negative, or decreased with increasing income. These results were not intuitive, and further examination showed that the average number of bedrooms was only slightly higher for families with two children versus those with one child. As well, spending on housing seemed to be more associated with the level of income than the number of bedrooms. Given the strong influence of income groups on housing expenditures, it was decided to model the housing expenditures as a function of the number of bedrooms and the income group. resulting in more intuitive estimates. One-quarter (25%) of the income parameter was added to the predicted expenditure to estimate the increase in housing spending for different income levels, as shown in the following equation:

$$prediction_{child} = \frac{4bdrm - 2bdrm}{2} + 0.25*inc_level$$

where 4bdrm and 2bdrm are the model parameters associated with four bedrooms and two or fewer bedrooms, respectively, and inc_level is the parameter associated with the medium- or higher-income groups for two-parent households with children and the medium-high-income group for one-parent households with children. One-quarter was selected, because for a family of four (the most common family size), 25% would be the increased expenditure for one member (the child) of a four-person family.

More information about the models is available upon request.

Share of household expenses allocated to children

Since expenses on the SHS are reported at the household level, decisions were made to determine what proportion of expenses in each category to assign to the children in the household. These decisions were informed by the methodology used by Lino et al. (2017), whose data source also reported most expenditures at the household level. To address this issue, Lino et al. (2017) assigned child-specific expenses in the data to children according to each expenditure category and allocated a proportion of household-level expenditures based on

findings from previous research or on a per capita basis. These proportions determined by Lino et al. (2017) were used as a starting point, with adjustments made for the Canadian context. When expenditures were divided among the children in the family, the families with four to six children—a very small proportion—were included in the group with three children for modelling purposes. More information about how the shares assigned to children were decided is available upon request.

Child care and education: For this category, only households who had CCE expenditures were included (78% of households). Since a portion of postsecondary tuition and expenses for "other courses or lessons" (e.g., music or dance lessons, courses related to arts and crafts or hobbies) is spent on the parents, 90% of the CCE expenditures were assigned to children in the household.⁶ Among children, these expenditures were equally allocated to each child. It is known that this is not necessarily true, as expenditures for child care are higher for younger children than for older children, but it was assumed to hold true on average. It should also be noted that expenses for postsecondary education are higher for older children.

Clothing: Spending on clothing for children is available directly at the person level in the SHS, and no assumption about the percentage of household spending associated with children is required. However, because the analysis estimates household expenditures, a decision still had to be made about the percentage of expenditures to assign to each child. The total clothing expenditures on children were equally allocated to each child in the family. Since most families have children who are relatively close in age (e.g., few families have very young children and adult children), it is assumed that clothing costs are relatively equal. No adjustments were made for the gender or age of the child.

Food: Lino et al. (2017) used the 2015 USDA food plans to determine the proportion of household food expenditures to attribute to children. In Canada, Health Canada's national nutritious food basket (Health Canada, 2020), which represents a nutritious diet consistent with the food purchases of Canadian households, can be used to estimate the cost of food for adults and children of different ages. The cost of food varies by city and region, so no one cost can be used nationally. Therefore, the guide is intended to be used and adapted by municipalities and provinces to prepare food cost plans for their residents. Estimates for Alberta were used for comparison, as a table of costs by age and gender was provided (Alberta Health Services, 2015). The food items used for the Alberta food costs and the data table obtained from Health Canada were very similar; therefore, custom tabulations from Health Canada were not required.

The proportions of food spending on children of different ages based on the Alberta estimates were then compared with the proportions used by Lino et al. (2017). Because the numbers were very similar, the proportions used by Lino et al. (2017) were used for the current study. The percentages assigned per child ranged from 15% of household food spending for a 0- to 5-year-old child in a two-parent family with three children to 52% of household food spending for a 13- to 22-year-old child in a one-child, one-parent family. The complete table of proportions and details of the comparative analysis are available upon request.

Health care: Canada has a universal health care system, but there are still health care costs that are covered by the household, including prescribed and non-prescribed medicines and pharmaceutical products, health care practitioners, eyewear, dental services, private health insurance plan premiums, and provincial health insurance premiums. Lino et al. (2017) determined the proportions of household health care expenditures spent on children using the U.S. 2012 Medical Expenditure Panel Survey. An equivalent source for Canada does not exist to establish similar proportions; however, the proportions used by Lino et al. (2017) were compared with the provincial and territorial average spending on different age groups (CIHI, 2021), and

^{6.} Authors' calculations using 2016 Census of Population data also indicated that about 8% of parents with children aged 0 to 24 years were enrolled in postsecondary education; this percentage was higher among those with children aged 0 to 5 years, at 11%.

these proportions aligned. Therefore, in the absence of directly applicable Canadian data, the proportions used by Lino et al. (2017) were applied. The percentage of health care spending assigned per child ranged from 13% of household health care spending in a two-parent family with three children to 35% of household health care spending in a one-child, one-parent family. The complete table of proportions is available upon request.

Housing: As described above, rather than assign a percentage of housing costs to each child in the family, the cost of having an additional bedroom in a house was estimated. The housing models result in five different values of housing costs, one for each of the family type and income groups (i.e., two-parent families in the lower-, medium- and higher-income groups, and one-parent families in the lower- and medium-high-income groups). The cost of an additional bedroom was the same regardless of the age of the child.

Transportation: As in Lino et al. (2017), 75% of all transportation expenditures were considered to be family-related. This proportion was determined based on results from the U.S. 2009 National Household Travel Survey (Santos et al., 2011) and verified with data from the 2009 Canadian Vehicle Survey (Statistics Canada, 2010). Among these family-related transportation expenses, half was assigned to the parents and the remaining half was divided equally among the children in the family.

Miscellaneous: As in Lino et al. (2017), it was assumed that miscellaneous expenditures are shared equally among family members. Many of the expenditures in this category are for items such as personal care items and recreational equipment, which are assumed to be shared by all family members.

5. Results

5.1 Overall expenditures

The total predicted expenditures per child aged 0 to 17 years, in 2017 dollars, were \$238,190, \$293,000, and \$403,910 for two-parent households with two children in the lower-, medium- and higher-income groups, respectively (Table 1). The predicted expenditure figures represented a 23.0% increase in spending when going from the lower- to the medium-income group, and a 37.9% increase when going from the medium- to the higher-income group. There was an overall increase of about 69.6% when comparing the lower-income group with the higher-income group. When expenditures on children up to age 22 (who are still living at home) are considered, predicted expenditures were \$308,710, \$378,900 and \$521,270 for the respective income groups. In each case, there was an increase of about 29% in spending when including the expenditures for young adult children aged 18 to 22 years compared with including only the expenditures for children aged 0 to 17 years. This increase is attributable to more years of expenses and higher education costs (likely for postsecondary education tuition).

Table 1
Predicted annual expenditures for one child in two-child families, based on the age of the youngest child, Canada

| | Child care and | <u> </u> | | • | | | |
|--|------------------------|----------|--------|-------------|-----------------------|---|--------------------|
| Family characteristics and age of the youngest child (years) | education ¹ | Clothing | Food | Health care | Housing | Miscellaneous ² Transportation | Grand total |
| | | | | 2017 cons | 2017 constant dollars | | |
| Two-parent families | | | | | | | |
| Lower-income group (before-tax household income less than \$83,013) | | | | | | | |
| 0 to 5 | 2,210 | 720 | 1,730 | 330 | 4,120 | 920 2,300 | 12,330 |
| 6 to 12 | 1,270 | 1,090 | 2,610 | 410 | 4,120 | 1,290 2,440 | 13,230 |
| 13 to 18 | 1,590 | 1,270 | 2,900 | 470 | 4,120 | 1,180 2,790 | 14,320 |
| 19 to 22 | 2,370 | 1,070 | 2,710 | 370 | 4,120 | 870 2,540 | 14,050 |
| Total from ages 0 to 17 | 30,100 | 18,300 | 43,150 | 7,200 | 74,160 | 20,450 44,830 | 238,190 |
| Total from ages 0 to 22 | 41,170 | 23,850 | 56,890 | 9,150 | 94,760 | 25,110 57,780 | 308,710 |
| Medium-income group (before-tax household income from \$83,013 to \$135,790) | | | | | | | |
| 0 to 5 | 2,730 | 760 | 1,980 | 570 | 4,730 | 1,410 3,120 | 15,300 |
| 6 to 12 | 1,790 | 1,130 | 2,950 | 660 | 4,730 | 1,780 3,260 | 16,300 |
| 13 to 18 | 2,110 | 1,310 | 3,270 | 740 | 4,730 | 1,660 3,600 | 17,420 |
| 19 to 22 | 2,890 | 1,110 | 3,080 | 610 | 4,730 | 1,350 3,350 | 17,120 |
| Total from ages 0 to 17 | 39,460 | 19,020 | 48,880 | 11,740 | 85,140 | 29,220 59,540 | 293,000 |
| Total from ages 0 to 22 | 53,130 | 24,770 | 64,470 | 14,920 | 108,790 | 36,280 76,540 | 378,900 |
| Higher-income group (before-tax household income above \$135,790) | | | | | | | |
| 0 to 5 | 4,250 | 1,060 | 2,570 | 810 | 6,200 | 2,430 3,970 | 21,290 |
| 6 to 12 | 3,310 | 1,430 | 3,750 | 910 | 6,200 | 2,800 4,110 | 22,510 |
| 13 to 18 | 3,630 | 1,600 | 4,140 | 1,000 | 6,200 | 2,690 4,460 | 23,720 |
| 19 to 22 | 4,410 | 1,410 | 3,950 | 850 | 6,200 | 2,380 4,210 | 23,410 |
| Total from ages 0 to 17 | 66,820 | 24,370 | 62,370 | 16,230 | 111,600 | 47,630 74,890 | 403,910 |
| Total from ages 0 to 22 | 88,090 | 31,610 | 82,310 | 20,630 | 142,600 | 59,840 96,190 | 521,270 |
| One-parent families | | | | | | | |
| Lower-income group (before-tax household income less than \$83,013) | | | | | | | |
| 0 to 5 | 2,230 | 980 | 1,880 | 340 | 4,190 | 1,150 1,390 | 12,160 |
| 6 to 12 | 1,900 | 1,100 | 2,510 | 440 | 4,190 | 1,270 1,290 | 12,700 |
| 13 to 18 | 1,990 | 1,100 | 3,130 | 620 | 4,190 | 1,350 1,500 | 13,880 |
| 19 to 22 | 2,220 | 1,030 | 2,890 | 590 | 4,190 | 950 1,640 | 13,510 |
| Total from ages 0 to 17 | 36,630 | 19,080 | 44,500 | 8,220 | 75,420 | 22,540 24,870 | 231,260 |
| Total from ages 0 to 22 | 47,500 | 24,300 | 59,190 | 11,200 | 96,370 | 27,690 32,930 | 299,180 |
| Medium-high-income group (before-tax household income of \$83,013 or above) | • | • | , | • | • | , | • |
| 0 to 5 | 2,820 | 1,380 | 2,790 | 820 | 6,710 | 2,160 3,140 | 19,820 |
| 6 to 12 | 2,490 | 1,500 | 3,620 | 940 | 6,710 | 2,270 3,040 | 20,570 |
| 13 to 18 | 2,580 | 1,500 | 4,310 | 1,140 | 6,710 | 2,360 3,240 | 21,840 |
| 19 to 22 | 2,810 | 1,420 | 4,070 | 1,110 | 6,710 | 1,960 3,390 | 21,470 |
| Total from ages 0 to 17 | 47,250 | 26,280 | 63,630 | 17,200 | 120,780 | 40,650 56,320 | 372,110 |
| Total from ages 0 to 22 | 61,070 | 33,460 | 84,220 | 22,780 | 154,330 | 50,850 73,120 | 479,830 |
| Includes only families with child care and education expenses. | , | ,:-3 | , | , 30 | | | , |

^{1.} Includes only families with child care and education expenses.

Note: Totals from ages 0 to 17 are calculated for comparison purposes with other studies (e.g., Lino et al., 2017).

^{2.} Includes personal care, recreation equipment, entertainment and reading materials. See Appendix Table A.1 for more details.

For one-parent families with two children, the total predicted expenditure for one child from birth to age 17, in 2017 dollars, was \$231,260 and \$372,110 in the lower- and medium-high-income groups, respectively. The predicted expenditure figures represented a 61% increase in spending when comparing the lower- with the medium-high-income group. When children from birth to age 22 (who are still living at home) are considered, predicted expenditures for one child were \$299,180 and \$479,830 for the respective income groups. Similar to two-parent households, there was an increase of about 29% in spending when including the expenditures for young adult children aged 18 to 22 compared with including only the expenditures for children aged 0 to 17 years.

5.2 Annual expenditures

The estimated average annual expenditures on the younger child⁷ in two-parent, two-child households increased as the income level rose (Table 1). Annual expenditures ranged from \$12,330 to \$14,320 for the lower-income group (households with before-tax incomes less than \$83,013), from \$15,300 to \$17,420 for the medium-income group (households with before-tax incomes from \$83,013 to \$135,790) and from \$21,290 to \$23,720 for the higher-income group (households with before-tax incomes over \$135,790), depending on the age group of the child.

For one-parent families, estimated annual expenditures also increased as the income level rose (Table 1). Depending on the age group of the child, annual expenditures ranged from \$12,160 to \$13,880 for the lower-income group (households with before-tax incomes less than \$83,013) and from \$19,820 to \$21,840 for the medium-high-income group (households with before-tax incomes of \$83,013 or above).

On average, two-parent households in the lower-income group spent more of their annual before-tax income on a child (25%) than those in the middle-income group (15% of annual before-tax income) and those in the higher-income group (10% of annual before-tax income). By comparison, one-parent households in the lower-income group spent, on average, 31% of their annual before-tax income on a child, and those in the medium-high group spent 17%.

5.3 Expenditures by category

Table 1 showed the predicted annual expenditures for each category of expenditures for families with two children in Canada. Chart 1 illustrates the shares of each expenditure category for the youngest child in the five different types of families included (i.e., two-parent families in the lower, medium- and higher-income groups, and one-parent families in the lower- and medium-high-income groups). Shares were calculated using the total expenditures for each category from birth to age 22, as a percentage of the grand total of expenditures from birth to age 22.8 All expenditures reported in this section represent expenditures for one child for families with two children. Expenditures for families with one child or three children are provided in tables 2 and 3.

^{7.} Estimates are primarily reported based on the youngest child to follow the methodology used by Lino et al. (2017). However, model estimates were produced based on both the youngest and oldest child, and there were no large differences between the estimates. Therefore, to simplify the presentation of results, estimates based on the youngest child are the primary focus. Estimates based on the oldest child are presented in Appendix Table A.2 and are discussed below.

^{8.} Expenditure shares for each category from birth to age 17 were similar and can be found in Appendix Chart A.1.

Chart 1 Expenditure shares for one child in two-child families, based on the youngest child from birth to age 22,

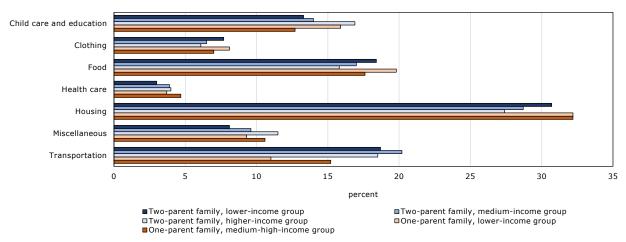


Table 2 Predicted annual expenditures for one child in one-child families, by child age, Canada

| | Child care and | | | | | | | |
|--|------------------------|----------|---------|-------------|-------------|----------------------------|----------------|--------------------|
| Family characteristics and age of the child (years) | education ¹ | Clothing | Food | Health care | Housing | Miscellaneous ² | Transportation | Grand total |
| | | | | 2017 const | ant dollars | | | |
| Two-parent families | | | | | | | | |
| Lower-income group (before-tax household income less than \$83,013) | | | | | | | | |
| 0 to 5 | 3,430 | 660 | 1,700 | 350 | 4,120 | 830 | 3,870 | 14,960 |
| 6 to 12 | 1,560 | 1,410 | 2,900 | 440 | 4,120 | 1,320 | 4,160 | 15,910 |
| 13 to 18 | 2,200 | 1,750 | 3,280 | 520 | 4,120 | 1,170 | 4,850 | 17,890 |
| 19 to 22 | 3,760 | 1,360 | 3,030 | 390 | 4,120 | 750 | 4,350 | 17,760 |
| Total from ages 0 to 17 | 42,500 | 22,580 | 46,900 | 7,780 | 74,160 | 20,070 | 76,590 | 290,580 |
| Total from ages 0 to 22 | 59,740 | 29,770 | 62,300 | 9,860 | 94,760 | 24,240 | 98,840 | 379,510 |
| Medium-income group (before-tax household income from \$83,013 to \$135,790) | | | | | | | | |
| 0 to 5 | 4,470 | 750 | 2,000 | 640 | 4,730 | 1,470 | 5,500 | 19,560 |
| 6 to 12 | 2,590 | 1,490 | 3,350 | 750 | 4,730 | 1,970 | 5,790 | 20,670 |
| 13 to 18 | 3,230 | 1,830 | 3,770 | 840 | 4,730 | 1,810 | 6,480 | 22,690 |
| 19 to 22 | 4,790 | 1,440 | 3,520 | 690 | 4,730 | 1,400 | 5,980 | 22,550 |
| Total from ages 0 to 17 | 61,100 | 24,080 | 54,300 | 13,290 | 85,140 | 31,660 | 105,930 | 375,500 |
| Total from ages 0 to 22 | 83,490 | 31,670 | 72,150 | 16,890 | 108,790 | 39,070 | 136,330 | 488,390 |
| Higher-income group (before-tax household income above \$135,790) | | | | | | | | |
| 0 to 5 | 7,500 | 1,330 | 2,700 | 950 | 6,200 | 2,840 | 7,210 | 28,730 |
| 6 to 12 | 5,630 | 2,070 | 4,400 | 1,070 | 6,200 | 3,330 | 7,500 | 30,200 |
| 13 to 18 | 6,270 | 2,420 | 4,920 | 1,180 | 6,200 | 3,180 | 8,190 | 32,360 |
| 19 to 22 | 7,830 | 2,030 | 4,670 | 1,000 | 6,200 | 2,760 | 7,690 | 32,180 |
| Total from ages 0 to 17 | 115,760 | 34,570 | 71,600 | 19,090 | 111,600 | 56,250 | 136,710 | 545,580 |
| Total from ages 0 to 22 | 153,350 | 45,110 | 95,200 | 24,270 | 142,600 | 70,470 | 175,660 | 706,660 |
| One-parent families | | | | | | | | |
| Lower-income group (before-tax household income less than \$83,013) | | | | | | | | |
| 0 to 5 | 3,540 | 1,080 | 2,010 | 270 | 4,190 | 1,500 | 2,810 | 15,400 |
| 6 to 12 | 2,870 | 1,320 | 2,980 | 410 | 4,190 | 1,670 | 2,590 | 16,030 |
| 13 to 18 | 3,060 | 1,320 | 4,000 | 640 | 4,190 | 1,810 | 3,010 | 18,030 |
| 19 to 22 | 3,510 | 1,180 | 3,630 | 600 | 4,190 | 1,200 | 3,300 | 17,610 |
| Total from ages 0 to 17 | 56,630 | 22,320 | 52,920 | 7,690 | 75,420 | 29,740 | 50,040 | 294,760 |
| Total from ages 0 to 22 | 73,730 | 28,360 | 71,440 | 10,730 | 96,370 | 36,350 | 66,250 | 383,230 |
| Medium-high-income group (before-tax household income of \$83,013 or above) | | | | | | | | |
| 0 to 5 | 4,710 | 1,870 | 3,220 | 900 | 6,710 | 3,020 | 6,310 | 26,740 |
| 6 to 12 | 4,040 | 2,120 | 4,610 | 1,070 | 6,710 | 3,190 | 6,090 | 27,830 |
| 13 to 18 | 4,230 | 2,110 | 5,810 | 1,340 | 6,710 | 3,320 | 6,510 | 30,030 |
| 19 to 22 | 4,680 | 1,970 | 5,440 | 1,290 | 6,710 | 2,720 | 6,800 | 29,610 |
| Total from ages 0 to 17 | 77,690 | 36,610 | 80,640 | 19,590 | 120,780 | 57,050 | 113,040 | 505,400 |
| Total from ages 0 to 22 | 100,640 | 46,600 | 108,210 | 26,090 | 154,330 | 71,250 | 146,750 | 653,870 |
| 1. Includes only families with child care and education expenses. | | | | | | | | |

^{1.} Includes only families with child care and education expenses.

Note: Totals from ages 0 to 17 are calculated for comparison purposes with other studies (e.g., Lino et al., 2017).

^{2.} Includes personal care, recreation equipment, entertainment and reading materials. See Appendix Table A.1 for more details.

Table 3 Predicted annual expenditures for one child in three-child families, based on the age of the youngest child, Canada

| | Child care and | | | | | | | |
|--|------------------------|----------|--------|-------------|-------------|----------------------------|----------------|-------------|
| Family characteristics and age of the youngest child (years) | education ¹ | Clothing | Food | Health care | Housing | Miscellaneous ² | Transportation | Grand total |
| | | | | 2017 const | ant dollars | | | |
| Two-parent families | | | | | | | | |
| Lower-income group (before-tax household income less than \$83,013) | | | | | | | | |
| 0 to 5 | 1,890 | 860 | 1,810 | 290 | 4,120 | 780 | 1,570 | 11,320 |
| 6 to 12 | 1,260 | 1,110 | 2,520 | 360 | 4,120 | 1,070 | 1,670 | 12,110 |
| 13 to 18 | 1,480 | 1,220 | 2,700 | 420 | 4,120 | 980 | 1,900 | 12,820 |
| 19 to 22 | 2,000 | 1,090 | 2,550 | 320 | 4,120 | 730 | 1,730 | 12,540 |
| Total from ages 0 to 17 | 27,560 | 19,030 | 42,000 | 6,360 | 74,160 | 17,070 | 30,610 | 216,790 |
| Total from ages 0 to 22 | 37,040 | 24,610 | 54,900 | 8,060 | 94,760 | 20,970 | 39,430 | 279,770 |
| Medium-income group (before-tax household income from \$83,013 to \$135,790) | | | | | | | | |
| 0 to 5 | 2,230 | 890 | 2,040 | 480 | 4,730 | 1,170 | 2,120 | 13,660 |
| 6 to 12 | 1,610 | 1,140 | 2,800 | 550 | 4,730 | 1,460 | 2,210 | 14,500 |
| 13 to 18 | 1,820 | 1,250 | 3,000 | 620 | 4,730 | 1,370 | 2,440 | 15,230 |
| 19 to 22 | 2,340 | 1,120 | 2,850 | 510 | 4,730 | 1,120 | 2,280 | 14,950 |
| Total from ages 0 to 17 | 33,750 | 19,570 | 46,840 | 9,830 | 85,140 | 24,090 | 40,390 | 259,610 |
| Total from ages 0 to 22 | 44,930 | 25,300 | 61,240 | 12,490 | 108,790 | 29,940 | 51,950 | 334,640 |
| Higher-income group (before-tax household income above \$135,790) | | | | | | | | |
| 0 to 5 | 3,240 | 1,080 | 2,560 | 700 | 6,200 | 1,990 | 2,690 | 18,460 |
| 6 to 12 | 2,620 | 1,330 | 3,460 | 780 | 6,200 | 2,280 | 2,780 | 19,450 |
| 13 to 18 | 2,830 | 1,450 | 3,700 | 850 | 6,200 | 2,190 | 3,010 | 20,230 |
| 19 to 22 | 3,350 | 1,320 | 3,550 | 730 | 6,200 | 1,940 | 2,840 | 19,930 |
| Total from ages 0 to 17 | 51,930 | 23,040 | 58,080 | 13,910 | 111,600 | 38,850 | 50,650 | 348,060 |
| Total from ages 0 to 22 | 68,160 | 29,770 | 75,980 | 17,680 | 142,600 | 48,800 | 65,020 | 448,010 |
| One-parent families | | -, | -, | , | , | -, | ,- | -,- |
| Lower-income group (before-tax household income less than \$83,013) | | | | | | | | |
| 0 to 5 | 1,470 | 870 | 1,860 | 230 | 4,190 | 900 | 820 | 10,340 |
| 6 to 12 | 1,240 | 950 | 2,270 | 320 | 4,190 | 990 | 750 | 10,710 |
| 13 to 18 | 1,310 | 950 | 2,700 | 470 | 4,190 | 1,050 | 890 | 11,560 |
| 19 to 22 | 1,460 | 900 | 2,530 | 450 | 4,190 | 750 | 990 | 11,270 |
| Total from ages 0 to 17 | 24,050 | 16,620 | 40,550 | 5,970 | 75,420 | 17,580 | 14,620 | 194,810 |
| Total from ages 0 to 22 | 31,200 | 21,170 | 53,370 | 8,240 | 96,370 | 21,630 | 19,470 | 251,450 |
| Medium-high-income group (before-tax household income of \$83,013 or above) | 31,200 | 22,270 | 33,373 | 3,2 .0 | 30,373 | 22,000 | 25, | 201, 100 |
| 0 to 5 | 1,860 | 1,140 | 2,590 | 610 | 6,710 | 1,660 | 1,990 | 16,560 |
| 6 to 12 | 1,640 | 1,220 | 3,110 | 710 | 6,710 | 1,740 | 1,920 | 17,050 |
| 13 to 18 | 1,700 | 1,220 | 3,570 | 870 | 6,710 | 1,810 | 2,060 | 17,940 |
| 19 to 22 | 1,850 | 1,170 | 3,400 | 850 | 6,710 | 1,510 | 2,160 | 17,650 |
| Total from ages 0 to 17 | 31,140 | 21,480 | 55,160 | 12,980 | 120,780 | 31,190 | 35,680 | 308,410 |
| Total from ages 0 to 17 Total from ages 0 to 22 | 40,240 | 27,380 | 72,330 | 17,250 | 154,330 | 39,040 | 46,380 | 396,950 |
| 1. Includes only families with child care and education expenses. | 40,240 | 27,300 | 12,330 | 17,230 | 154,550 | 33,040 | 40,560 | 330,330 |

^{1.} Includes only families with child care and education expenses.

Note: Totals from ages 0 to 17 are calculated for comparison purposes with other studies (e.g., Lino et al., 2017).

^{2.} Includes personal care, recreation equipment, entertainment and reading materials. See Appendix Table A.1 for more details.

Child care and education

For the CCE category, annual expenditures were highest among two-parent families for a child aged 19 to 22 years (likely because of postsecondary tuition fees), next highest for a child aged 0 to 5 years (likely because of child care fees), and lowest for a child aged 6 to 12 years and a child aged 13 to 18 years. For one-parent families, CCE expenditures were highest for a child aged 0 to 5 years, although average annual expenditures were very similar for children aged 19 to 22 years.

CCE annual expenditures ranged from \$1,270 for a child aged 6 to 12 years in two-parent, lower-income families to \$4,410 for a child aged 19 to 22 years in two-parent, higher-income families (Table 1). For two-parent families, the share of total expenditures for a child aged 0 to 22 years ranged from 13% (lower income) to 17% (higher income). In one-parent households, CCE expenditures accounted for about 16% in the lower-income group and 13% in the medium-high-income group. As noted previously, CCE expenditures are solely based on households with such expenditures (78% of households); therefore, the shares are only applicable to such households.¹⁰

Clothing

Clothing expenditures generally increased with the age of the youngest child and with income. The highest expenditures for clothing were for teenagers (aged 13 to 18 years), with slightly lower expenditures for children aged 19 to 22 years and those aged 6 to 12 years, and the lowest expenditures for those aged 0 to 5 years. Expenditures ranged from \$720 annually for a child aged 0 to 5 years in two-parent, lower-income families to \$1,600 for a child aged 13 to 18 years in two-parent, higher-income families (Table 1). Clothing represented the second-smallest share of total expenditures for all types of households and income groups considered in this study. For two-parent families, as a share of total expenditures for a child aged 0 to 22 years, clothing shares ranged from 6% (two-parent households in the higher-income group) to about 8% (two-parent households in the lower-income group). Among one-parent households, clothing expenditures accounted for 8% of total expenditures for households in the lower-income group and 7% of total expenditures for those in the medium-high-income group. For one- and two-parent households, the share of total expenditures spent on clothing tended to decrease as income increased.

Food

Food expenditures generally increased as income and the age of the child increased. The highest expenditures for food were for teenagers (aged 13 to 18 years), with slightly lower expenditures for children aged 19 to 22 years and aged 6 to 12 years, and the lowest expenditures for children aged 0 to 5 years. Annual expenditures on food ranged from \$1,730 for a child aged 0 to 5 years in two-parent, lower-income families to \$4,310 for a child aged 13 to 18 years in one-parent, medium-high-income families (Table 1). As a share of total expenditures for a child aged 0 to 22 years, food expenses were the third-largest expenditures for two-parent families in the lowest-and medium-income groups and the fourth-largest expenditures for two-parent families in the highest-income group. Among one-parent families, food expenses were the second-largest

^{9.} For CCE expenditures, the per capita method was used. This method splits household-level expenses in this category evenly among children in the household. It may result in lower CCE expenses on average for children aged 0 to 5 years or those aged 19 to 22 years and higher-than-average expenses for children aged 6 to 18 years. For example, families that have a child aged 0 to 5 years may have child care expenses specific to that child; however, if the household also includes an older child with lower or no child care costs, the division of expenses between the two children would make the CCE expenditure value lower than the actual amount for the youngest child and higher than the actual amount for the oldest child.

^{10.} The shares for other categories are based on households that have CCE expenses. These shares could also be estimated by removing CCE expenses to obtain the share for families that do not have these expenses (which make up 22% of all in-scope families).

expenditure. Food represented a share varying from 16% (two-parent households in the higher-income group) to 20% (one-parent households in the lower-income group) of total expenditures.

Health care

Health care represented the smallest annual expenditure and the smallest share of total spending for all types of households and income groups. Annual health care expenditures ranged from \$330 (for a child aged 0 to 5 years in the two-parent, lower-income group) to \$1,140 (for a child aged 13 to 18 years in the one-parent, medium-high-income group, Table 1). For two-parent families, as a share of total expenditures for a child aged 0 to 22 years, health care shares varied from 3% (lower-income group) to 4% (higher-income group). One-parent households spent 4% (lower-income group) to 5% (medium-high-income group) of total expenditures on health care.

Housing

The category with the highest expenditures for every age group and family type was housing. As described previously, housing expenditures were not modelled on age and are therefore the same for all children within a family type. For two-parent families with two children, housing expenditures ranged from \$4,120 annually for a child in a lower-income family to \$6,200 annually for a child in a higher-income family (Table 1). Housing also accounted for the largest share of total child-rearing expenditures for one- and two-parent households and all income groups. As a share of total expenditures for a child aged 0 to 22 years, expenditures on housing represented 27% (for two-parent, higher-income households) to 32% (for one-parent, lower- and medium-high-income households) of total child-rearing expenditures.

Transportation

Transportation was associated with a larger share of expenditures in two-parent households than one-parent households, because, on average, more of these households made use of two cars (in the SHS, 67% of two-parent families had two or more cars, compared with 20% of one-parent families). For two-parent families, annual expenditures ranged from \$2,300 (for a child aged 0 to 5 years in lower-income families) to \$4,460 (for a child aged 13 to 18 years old in higher-income families, Table 1). For one-parent families, annual expenditures ranged from \$1,290 (for a child aged 6 to 12 years in lower-income families) to \$3,390 (for a child aged 19 to 22 years in medium-high-income families, Table 1). For two-parent families, as a share of total expenses for a child aged 0 to 22 years, transportation represented about 19% (higher-income group) to 20% (medium-income group) of total expenditures. For one-parent families, shares were 11% (lower-income group) and 15% (medium-high-income group).

Miscellaneous

Miscellaneous expenditures also tended to rise as income increased. Annual expenditures in the miscellaneous category ranged from \$870 (for a child aged 19 to 22 years in the two-parent, lower-income group) to \$2,800 (for a child aged 6 to 12 years in the two-parent, higher-income group, Table 1). For two-parent families, as a share of total expenditures for a child aged 0 to 22 years, the miscellaneous expenditure share varied from 8% (lower-income group) to about 12% (higher-income group).

5.4 Regional-level results

The regional comparisons include only two-parent families, because the sample size associated with one-parent households did not allow for regional breakdowns. Tables 4, 5 and 6 give the equivalent of tables 1, 2 and 3 for families with two children, one child and three children for the three regions examined in this study: Atlantic provinces, central provinces, and Prairies and western provinces.

Table 4 Predicted annual expenditures for one child in two-child, two-parent families, based on the age of the youngest child, by region

| Predicted annual expenditures for one child in two-child, tv | Child care | arrilles, be | iseu on ti | ie age oi | the young | gest cilia, by | region | |
|---|------------------------|------------------|-----------------|------------------|------------------|----------------------------|-----------------|-------------------|
| | and | | | Health | | | | Grand |
| Region, income group, and age of the youngest child (years) | education ¹ | Clothing | Food | care | Housing | Miscellaneous ² | Transportation | total |
| region, income group, and age of the youngest child (years) | euucation | Clothing | roou | | onstant doll | | Hansportation | totai |
| Atlantic provinces | | | | 2027 0 | onstant don | u.5 | | |
| Lower-income group (before-tax household income less than \$83,013 |) | | | | | | | |
| 0 to 5 | 2,070 | 730 | 1,610 | 240 | 4,170 | 820 | 2,470 | 12,110 |
| 6 to 12 | 1,130 | 1,100 | 2,460 | 320 | 4,170 | 1,190 | 2,620 | 12,990 |
| 13 to 18 | 1,450 | 1,270 | 2,730 | 380 | 4,170 | 1,080 | 2,970 | 14,050 |
| 19 to 22 | 2,220 | 1,080 | 2,550 | 270 | 4,170 | 770 | 2,750 | 13,810 |
| Total from ages 0 to 17 | 27,580 | 18,430 | 40,530 | 5,580 | 75,060 | 18,650 | 48,010 | 233,840 |
| Total from ages 0 to 22 | 37,910 | 24,020 | 53,460 | 7,040 | 95,910 | 22,810 | 61,980 | 303,130 |
| Medium-income group (before-tax household income from \$83,013 | | | | | | | | |
| to \$135,790) | 3 500 | 770 | 1 060 | 450 | 4 740 | 1 200 | 2.250 | 14.060 |
| 0 to 5 6 to 12 | 2,590 1,650 | 770 1,140 | 1,860 2,790 | 450 540 | 4,740 4,740 | 1,300 1,670 | 3,250 3,400 | 14,960 15,930 |
| 13 to 18 | 1,030 | 1,310 | 3,100 | 620 | 4,740 | 1,560 | 3,750 | 17,050 |
| 19 to 22 | 2,750 | 1,120 | 2,910 | 500 | 4,740 | 1,250 | 3,530 | 16,800 |
| Total from ages 0 to 17 | 36,940 | 19,150 | 46,190 | 9,580 | 85,320 | 27,290 | 62,050 | 286,520 |
| Total from ages 0 to 22 | 49,910 | 24,940 | 60,930 | 12,200 | 109,020 | 33,850 | 79,920 | 370,770 |
| Higher-income group (before-tax household income above \$135,790) | , | , | • | , | | ŕ | , | , |
| 0 to 5 | 4,130 | 1,060 | 2,450 | 680 | 6,220 | 2,320 | 4,100 | 20,960 |
| 6 to 12 | 3,190 | 1,430 | 3,590 | 780 | 6,220 | 2,690 | 4,260 | 22,160 |
| 13 to 18 | 3,510 | 1,610 | 3,970 | 870 | 6,220 | 2,580 | 4,610 | 23,370 |
| 19 to 22 | 4,280 | 1,410 | 3,780 | 720 | 6,220 | 2,270 | 4,380 | 23,060 |
| Total from ages 0 to 17 | 64,660 | 24,420 | 59,680 | 13,890 | 111,960 | 45,650 | 77,470 | 397,730 |
| Total from ages 0 to 22 | 85,290 | 31,670 | 78,770 | 17,640 | 143,060 | 57,310 | 99,600 | 513,340 |
| Central provinces | | | | | | | | |
| Lower-income group (before-tax household income less than \$83,013) | | 720 | 1 710 | 220 | F 0C0 | 000 | 2 120 | 12 170 |
| 0 to 5 | 2,310 | 730 | 1,710 | 330 | 5,060 | 900 | 2,130 | 13,170 |
| 6 to 12 13 to 18 | 1,370 1,690 | 1,100 1,270 | 2,590 2,880 | 400 470 | 5,060 5,060 | 1,270 1,160 | 2,290 2,640 | 14,080 15,170 |
| 19 to 22 | 2,460 | 1,080 | 2,690 | 360 | 5,060 | 850 | 2,420 | 14,920 |
| Total from ages 0 to 17 | 31,900 | 18,430 | 42,790 | 7,130 | 91,080 | 20,090 | 42,010 | 253,430 |
| Total from ages 0 to 22 | 43,430 | 24,020 | 56,430 | 9,040 | 116,380 | 24,650 | 54,330 | 328,280 |
| Medium-income group (before-tax household income from \$83,013 | ., | , | , | -,- | -, | , | ,,,,,, | , |
| to \$135,790) | | | | | | | | |
| 0 to 5 | 2,830 | 770 | 1,960 | 560 | 5,640 | 1,380 | 2,910 | 16,050 |
| 6 to 12 | 1,890 | 1,140 | 2,920 | 650 | 5,640 | 1,750 | 3,070 | 17,060 |
| 13 to 18 | 2,210 | 1,310 | 3,240 | 730 | 5,640 | 1,640 | 3,420 | 18,190 |
| 19 to 22 | 2,980 | 1,120 | 3,060 | 600 | 5,640 | 1,330 | 3,190 | 17,920 |
| Total from ages 0 to 17 | 41,260 | 19,150 | 48,400 | 11,560 | 101,520 | 28,730 | 56,050 | 306,670 |
| Total from ages 0 to 22 | 55,390 | 24,940 | 63,880 | 14,690 | 129,720 | 35,690 | 72,230 | 396,540 |
| Higher-income group (before-tax household income above \$135,790) | | | | | | | | |
| 0 to 5 | 4,370 | 1,060 | 2,550 | 800 | 7,110 | 2,400 | 3,760 | 22,050 |
| 6 to 12 | 3,430 | 1,430 | 3,720 | 900 | 7,110 | 2,770 | 3,920 | 23,280 |
| 13 to 18 | 3,740 | 1,610 | 4,110 | 990 | 7,110 | 2,660 | 4,270 | 24,490 |
| 19 to 22 Total from ages 0 to 17 | 4,520 68,930 | 1,410 24,420 | 3,930 61,890 | 840 16,050 | 7,110 127,980 | 2,350 47,090 | 4,050 71,350 | 24,210 417,710 |
| Total from ages 0 to 17 Total from ages 0 to 22 | 90,750 | 31,670 | 81,720 | 20,400 | 163,530 | 59,150 | 91,820 | 539,040 |
| Prairies and western provinces | 30,730 | 31,070 | 01,720 | 20,400 | 103,330 | 33,130 | 31,820 | 333,040 |
| Lower-income group (before-tax household income less than \$83,013) | 1 | | | | | | | |
| 0 to 5 | 2,010 | 710 | 1,790 | 370 | 5,470 | 1,010 | 2,660 | 14,020 |
| 6 to 12 | 1,070 | 1,080 | 2,700 | 440 | 5,470 | 1,380 | 2,810 | 14,950 |
| 13 to 18 | 1,390 | 1,250 | 3,000 | 510 | 5,470 | 1,270 | 3,160 | 16,050 |
| 19 to 22 | 2,170 | 1,060 | 2,810 | 400 | 5,470 | 960 | 2,940 | 15,810 |
| Total from ages 0 to 17 | 26,500 | 18,070 | 44,640 | 7,850 | 98,460 | 22,070 | 51,430 | 269,020 |
| Total from ages 0 to 22 | 36,570 | 23,560 | 58,880 | 9,960 | 125,810 | 27,180 | 66,350 | 348,310 |
| Medium-income group (before-tax household income from \$83,013 | | | | | | | | |
| to \$135,790) | | | | | | | | |
| 0 to 5 | 2,540 | 750 | 2,040 | 610 | 6,040 | 1,480 | 3,440 | 16,900 |
| 6 to 12 | 1,600 | 1,120 | 3,030 | 700 | 6,040 | 1,860 | 3,590 | 17,940 |
| 13 to 18 | 1,920 | 1,290 | 3,360 | 780 650 | 6,040 | 1,750 | 3,940 | 19,080 |
| 19 to 22 Total from ages 0 to 17 | 2,690 36,040 | 1,100 | 3,180 50,250 | 650 12.460 | 6,040 108,720 | 1,440 30,650 | 3,720 65,470 | 18,820 322,380 |
| Total from ages 0 to 17 | 48,720 | 18,790 24,480 | 66,330 | 12,460 15,840 | 138,920 | 38,160 | 84,290 | 416,740 |
| Higher-income group (before-tax household income above \$135,790) | 70,720 | 2-7,400 | 00,330 | 13,040 | 130,320 | 30,100 | 04,230 | 710,740 |
| 0 to 5 | 4,070 | 1,050 | 2,630 | 850 | 7,520 | 2,510 | 4,290 | 22,920 |
| 6 to 12 | 3,130 | 1,420 | 3,830 | 950 | 7,520 | 2,880 | 4,440 | 24,170 |
| 13 to 18 | 3,450 | 1,590 | 4,230 | 1,040 | 7,520 | 2,770 | 4,790 | 25,390 |
| 19 to 22 | 4,230 | 1,390 | 4,050 | 900 | 7,520 | 2,460 | 4,570 | 25,120 |
| Total from ages 0 to 17 | 63,580 | 24,190 | 63,740 | 16,950 | 135,360 | 49,070 | 80,770 | 433,660 |
| Total from ages 0 to 22 | 83,950 | 31,340 | 84,170 | 21,590 | 172,960 | 61,680 | 103,840 | 559,530 |
| Includes only families with child care and education expenses. | | | | | | | | |

Includes only families with child care and education expenses.
 Includes personal care, recreation equipment, entertainment and reading materials. See Appendix Table A.1 for more details.
 Source: Statistics Canada, Survey of Household Spending, 2014 to 2017.

Table 5 Predicted annual expenditures for one child in one-child, two-parent families, by region

| Predicted annual expenditures for one child in one-child, tv | | amilies, b | y region | | | | | |
|---|------------------------|------------------|------------------|------------------|--------------------|--------------------------------|--------------------|-------------------|
| | Child care and | | | Haalah | | | | C |
| Pagian income group and ago of the child (years) | education ¹ | Clothing | Food | Health care | Housing M | liscellaneous ² Tra | ncnortation | Grand total |
| Region, income group, and age of the child (years) | education | Clothing | roou | | nstant dollar | | insportation | total |
| Atlantic provinces | | | | 2017 00 | notant donar | - | | |
| Lower-income group (before-tax household income less than \$83,013) |) | | | | | | | |
| 0 to 5 | 3,130 | 670 | 1,570 | 240 | 4,170 | 690 | 4,190 | 14,660 |
| 6 to 12 | 1,250 | 1,410 | 2,710 | 330 | 4,170 | 1,190 | 4,500 | 15,560 |
| 13 to 18 | 1,880 | 1,760 | 3,060 | 410 | 4,170 | 1,040 | 5,210 | 17,530 |
| 19 to 22 | 3,430 | 1,370 | 2,820 | 280 | 4,170 | 630 | 4,760 | 17,460 |
| Total from ages 0 to 17 | 36,930 | 22,690 | 43,690 | 5,800 | 75,060 | 17,670 | 82,690 | 284,530 |
| Total from ages 0 to 22 | 52,530 | 29,930 | 58,030 | 7,330 | 95,910 | 21,230 | 106,940 | 371,900 |
| Medium-income group (before-tax household income from \$83,013 | | | | | | | | |
| to \$135,790) | 4.400 | 750 | 4.000 | 500 | 4.740 | 4 220 | F 750 | 40.440 |
| 0 to 5 6 to 12 | 4,180 2,290 | 750 1,490 | 1,860 3,140 | 500 610 | 4,740 4,740 | 1,330 1,820 | 5,750 6,060 | 19,110 20,150 |
| 13 to 18 | 2,230 | 1,840 | 3,540 | 700 | 4,740 | 1,670 | 6,760 | 22,180 |
| 19 to 22 | 4,480 | 1,450 | 3,300 | 550 | 4,740 | 1,260 | 6,320 | 22,100 |
| Total from ages 0 to 17 | 55,760 | 24,130 | 50,840 | 10,770 | 85,320 | 29,070 | 110,720 | 366,610 |
| Total from ages 0 to 22 | 76,610 | 31,770 | 67,580 | 13,670 | 109,020 | 35,780 | 142,760 | 477,190 |
| Higher-income group (before-tax household income above \$135,790) | | | | | | | | |
| 0 to 5 | 7,250 | 1,340 | 2,550 | 780 | 6,220 | 2,690 | 7,450 | 28,280 |
| 6 to 12 | 5,360 | 2,080 | 4,190 | 910 | 6,220 | 3,190 | 7,770 | 29,720 |
| 13 to 18 | 6,000 | 2,430 | 4,690 | 1,020 | 6,220 | 3,040 | 8,470 | 31,870 |
| 19 to 22 | 7,550 | 2,040 | 4,450 | 840 | 6,220 | 2,630 | 8,020 | 31,750 537,070 |
| Total from ages 0 to 17 Total from ages 0 to 22 | 111,020 147,220 | 34,750 45,340 | 68,080 90,570 | 16,150 20,530 | 111,960 143,060 | 53,670 67,230 | 141,440 181,990 | 695,940 |
| Central provinces | 147,220 | 43,340 | 30,370 | 20,330 | 143,000 | 07,230 | 181,990 | 033,340 |
| Lower-income group (before-tax household income less than \$83,013) | 1 | | | | | | | |
| 0 to 5 | 3,600 | 670 | 1,680 | 350 | 5,060 | 790 | 3,520 | 15,670 |
| 6 to 12 | 1,720 | 1,410 | 2,880 | 440 | 5,060 | 1,290 | 3,830 | 16,630 |
| 13 to 18 | 2,360 | 1,760 | 3,250 | 520 | 5,060 | 1,140 | 4,530 | 18,620 |
| 19 to 22 | 3,910 | 1,370 | 3,010 | 390 | 5,060 | 730 | 4,090 | 18,560 |
| Total from ages 0 to 17 | 45,440 | 22,690 | 46,490 | 7,780 | 91,080 | 19,470 | 70,580 | 303,530 |
| Total from ages 0 to 22 | 63,440 | 29,930 | 61,780 | 9,860 | 116,380 | 23,530 | 91,470 | 396,390 |
| Medium-income group (before-tax household income from \$83,013 | | | | | | | | |
| to \$135,790) | | | | | | | | |
| 0 to 5 | 4,650 | 750 | 1,970 | 630 | 5,640 | 1,430 | 5,080 | 20,150 |
| 6 to 12 | 2,770 | 1,490 | 3,320 | 740 | 5,640 | 1,920 | 5,390 | 21,270 |
| 13 to 18 19 to 22 | 3,410 | 1,840 | 3,740 | 840 680 | 5,640 | 1,780 | 6,090 | 23,340 |
| Total from ages 0 to 17 | 4,950 64,340 | 1,450 24,130 | 3,490 53,760 | 13,160 | 5,640 101,520 | 1,360 30,920 | 5,640 98,660 | 23,210 386,490 |
| Total from ages 0 to 22 | 87,550 | 31,770 | 71,460 | 16,720 | 129,720 | 38,140 | 127,310 | 502,670 |
| Higher-income group (before-tax household income above \$135,790) | 0.,550 | 51,775 | , 1, 100 | 10,720 | 123,720 | 30,210 | 127,010 | 302,070 |
| 0 to 5 | 7,720 | 1,340 | 2,670 | 930 | 7,110 | 2,790 | 6,780 | 29,340 |
| 6 to 12 | 5,840 | 2,080 | 4,360 | 1,060 | 7,110 | 3,290 | 7,090 | 30,830 |
| 13 to 18 | 6,480 | 2,430 | 4,880 | 1,170 | 7,110 | 3,140 | 7,800 | 33,010 |
| 19 to 22 | 8,020 | 2,040 | 4,640 | 990 | 7,110 | 2,730 | 7,350 | 32,880 |
| Total from ages 0 to 17 | 119,600 | 34,750 | 70,940 | 18,850 | 127,980 | 55,470 | 129,310 | 556,900 |
| Total from ages 0 to 22 | 158,160 | 45,340 | 94,380 | 23,980 | 163,530 | 69,530 | 166,510 | 721,430 |
| Prairies and western provinces | | | | | | | | |
| Lower-income group (before-tax household income less than \$83,013) 0 to 5 | 3,010 | 640 | 1,780 | 390 | 5,470 | 940 | 4,570 | 16,800 |
| 6 to 12 | 1,130 | 1,380 | 3,020 | 490 | 5,470 | 1,430 | 4,880 | 17,800 |
| 13 to 18 | 1,770 | 1,720 | 3,410 | 560 | 5,470 | 1,290 | 5,580 | 19,800 |
| 19 to 22 | 3,320 | 1,330 | 3,170 | 440 | 5,470 | 870 | 5,130 | 19,730 |
| Total from ages 0 to 17 | 34,820 | 22,100 | 48,870 | 8,570 | 98,460 | 22,100 | 89,480 | 324,400 |
| Total from ages 0 to 22 | 49,870 | 29,140 | 64,960 | 10,890 | 125,810 | 26,870 | 115,580 | 423,120 |
| Medium-income group (before-tax household income from \$83,013 | | | | | | | | |
| to \$135,790) | | | | | | | | |
| 0 to 5 | 4,060 | 720 | 2,070 | 680 | 6,040 | 1,580 | 6,130 | 21,280 |
| 6 to 12 | 2,180 | 1,460 | 3,460 | 800 | 6,040 | 2,070 | 6,440 | 22,450 |
| 13 to 18 | 2,820 | 1,800 | 3,890 | 890 | 6,040 | 1,920 | 7,140 | 24,500 |
| 19 to 22 | 4,370 | 1,410 | 3,650 | 740 | 6,040 | 1,510 | 6,690 | 24,410 |
| Total from ages 0 to 17 Total from ages 0 to 22 | 53,720 | 23,540 | 56,090 | 14,130 | 108,720 | 33,570 | 117,560 | 407,330 |
| Higher-income group (before-tax household income above \$135,790) | 74,020 | 30,980 | 74,580 | 17,980 | 138,920 | 41,530 | 151,460 | 529,470 |
| 0 to 5 | 7,130 | 1,310 | 2,760 | 1,000 | 7,520 | 2,940 | 7,830 | 30,490 |
| 6 to 12 | 5,250 | 2,050 | 4,500 | 1,120 | 7,520 | 3,430 | 8,140 | 32,010 |
| 13 to 18 | 5,890 | 2,390 | 5,040 | 1,230 | 7,520 | 3,290 | 8,840 | 34,200 |
| 19 to 22 | 7,440 | 2,000 | 4,790 | 1,050 | 7,520 | 2,870 | 8,400 | 34,070 |
| Total from ages 0 to 17 | 108,980 | 34,160 | 73,260 | 19,990 | 135,360 | 58,100 | 148,160 | 578,010 |
| Total from ages 0 to 22 | 144,630 | 44,550 | 97,460 | 25,420 | 172,960 | 72,870 | 190,600 | 748,490 |
| 1. Includes only families with child care and education expenses. | | · <u> </u> | | | | | | = |

Includes only families with child care and education expenses.
 Includes personal care, recreation equipment, entertainment and reading materials. See Appendix Table A.1 for more details.
 Source: Statistics Canada, Survey of Household Spending, 2014 to 2017.

Table 6

Predicted annual expenditures for one child in three-child, two-parent families, based on the age of the youngest child, by region

| Predicted annual expenditures for one child in three-child, two-parent families, based on the age of the youngest child, by region | | | | | | | | on |
|--|------------------------|------------------|------------------|--------------|-------------------------|------------------|------------------|--------------------|
| | Child care | | | | | | | |
| | and | | | Health | | 2 | | Grand |
| Region, income group, and age of the youngest child (years) | education ¹ | Clothing | Food | | Housing I constant d | | Transportation | total |
| Atlantic provinces | | | | 2017 | oonstant a | 0.1.0.0 | | |
| Lower-income group (before-tax household income less than \$83,013) | | | | | | | | |
| 0 to 5 | 1,800 | 870 | 1,710 | 210 | 4,170 | 700 | 1,690 | 11,150 |
| 6 to 12 | 1,170 | 1,110 | 2,390 | 280 | 4,170 | 990 | 1,790 | 11,900 |
| 13 to 18 19 to 22 | 1,380 1,900 | 1,230 1,100 | 2,570 2,420 | 330 240 | 4,170 4,170 | 900 660 | 2,030 1,880 | 12,610 12,370 |
| Total from ages 0 to 17 | 25,890 | 19,140 | 39,840 | 4,870 | 75,060 | 15,630 | | 213,250 |
| Total from ages 0 to 22 | 34,870 | 24,770 | 52,090 | 6,160 | 95,910 | 19,170 | | 275,340 |
| Medium-income group (before-tax household income from \$83,013 to | | | | | | | | |
| \$135,790) | | | | | | | | |
| 0 to 5 | 2,150 | 890 | 1,930 | 380 | 4,740 | 1,080 | 2,210 | 13,380 |
| 6 to 12 | 1,520 | 1,140 | 2,670 | 460 | 4,740 | 1,370 | 2,310 | 14,210 |
| 13 to 18 | 1,730 | 1,250 | 2,860 | 520 | 4,740 | 1,290 | 2,540 | 14,930 |
| 19 to 22 | 2,250 | 1,120 | 2,710 | 420 8,100 | 4,740 | 1,040 | 2,400 | 14,680 |
| Total from ages 0 to 17 Total from ages 0 to 22 | 32,190 42,920 | 19,570 25,300 | 44,570 58,270 | , | 85,320 109,020 | 22,520 27,970 | 42,130 54,270 | 254,400 328,050 |
| Higher-income group (before-tax household income above \$135,790) | 42,320 | 23,300 | 30,270 | 10,300 | 103,020 | 27,570 | 34,270 | 320,030 |
| 0 to 5 | 3,170 | 1,090 | 2,450 | 580 | 6,220 | 1,900 | 2,770 | 18,180 |
| 6 to 12 | 2,540 | 1,340 | 3,330 | 670 | 6,220 | 2,190 | 2,880 | 19,170 |
| 13 to 18 | 2,750 | 1,450 | 3,560 | 740 | 6,220 | 2,100 | 3,110 | 19,930 |
| 19 to 22 | 3,270 | 1,320 | 3,410 | 620 | 6,220 | 1,860 | 2,960 | 19,660 |
| Total from ages 0 to 17 | 50,550 | 23,170 | 55,810 | | 111,960 | 37,230 | 52,330 | 342,920 |
| Total from ages 0 to 22 | 66,380 | 29,900 | 73,010 | 15,090 | 143,060 | 46,770 | 67,280 | 441,490 |
| Central provinces | | | | | | | | |
| Lower-income group (before-tax household income less than \$83,013) 0 to 5 | 1,960 | 870 | 1,800 | 290 | 5,060 | 760 | 1,460 | 12,200 |
| 6 to 12 | 1,330 | 1,110 | 2,500 | 350 | 5,060 | 1,050 | 1,570 | 12,970 |
| 13 to 18 | 1,540 | 1,230 | 2,680 | 410 | 5,060 | 970 | 1,800 | 13,690 |
| 19 to 22 | 2,060 | 1,100 | 2,540 | 320 | 5,060 | 720 | 1,650 | 13,450 |
| Total from ages 0 to 17 | 28,770 | 19,140 | 41,700 | 6,240 | 91,080 | 16,760 | 28,750 | 232,440 |
| Total from ages 0 to 22 | 38,550 | 24,770 | 54,540 | 7,930 | 116,380 | 20,610 | 37,150 | 299,930 |
| Medium-income group (before-tax household income from \$83,013 | | | | | | | | |
| to \$135,790) | 2 24 2 | 000 | 2.040 | 470 | 5.640 | | 4 000 | 44.440 |
| 0 to 5 | 2,310 | 890 | 2,010 | 470 | 5,640 | 1,140 | 1,980 | 14,440 |
| 6 to 12 13 to 18 | 1,680 1,890 | 1,140 1,250 | 2,780 2,980 | 550 610 | 5,640 5,640 | 1,440 1,350 | 2,090 2,320 | 15,320 16,040 |
| 19 to 22 | 2,410 | 1,120 | 2,830 | 510 | 5,640 | 1,100 | 2,170 | 15,780 |
| Total from ages 0 to 17 | 35,070 | 19,570 | 46,420 | | 101,520 | 23,670 | 38,110 | 274,080 |
| Total from ages 0 to 22 | 46,600 | 25,300 | 60,720 | 12,370 | 129,720 | 29,420 | 49,110 | 353,240 |
| Higher-income group (before-tax household income above \$135,790) | | | | | | | | |
| 0 to 5 | 3,330 | 1,090 | 2,540 | 680 | 7,110 | 1,960 | 2,550 | 19,260 |
| 6 to 12 | 2,700 | 1,340 | 3,440 | 770 | 7,110 | 2,250 | 2,650 | 20,260 |
| 13 to 18 | 2,910 | 1,450 | 3,670 | 840 | 7,110 | 2,160 | 2,890 | 21,030 |
| 19 to 22 Total from ages 0 to 17 | 3,430 53,430 | 1,320 23,170 | 3,520 57,670 | 720 | 7,110 127,980 | 1,920 38,310 | 2,740 48,300 | 20,760 362,530 |
| Total from ages 0 to 22 | 70,060 | 29,900 | 75,420 | | 163,530 | 48,150 | 62,150 | 466,600 |
| Prairies and western provinces | , 0,000 | 25,500 | 75,120 | 17,050 | 200,550 | .0,250 | 02,230 | 100,000 |
| Lower-income group (before-tax household income less than \$83,013 |) | | | | | | | |
| 0 to 5 | 1,760 | 850 | 1,870 | 320 | 5,470 | 840 | 1,810 | 12,920 |
| 6 to 12 | 1,130 | 1,100 | 2,590 | 390 | 5,470 | 1,140 | 1,920 | 13,740 |
| 13 to 18 | 1,350 | 1,220 | 2,780 | 450 | 5,470 | 1,050 | 2,150 | 14,470 |
| 19 to 22 | 1,860 | 1,090 | 2,630 | 350 | 5,470 | 810 | 2,000 | 14,210 |
| Total from ages 0 to 17 Total from ages 0 to 22 | 25,220 34,010 | 18,900 24,480 | 43,250 56,550 | 6,900 | 98,460 125,810 | 18,270 22,560 | 35,050 45,200 | 246,050 317,360 |
| Medium-income group (before-tax household income from \$83,013 | 34,010 | 24,460 | 30,330 | 6,730 | 123,610 | 22,300 | 43,200 | 317,300 |
| to \$135,790) | | | | | | | | |
| 0 to 5 | 2,110 | 880 | 2,090 | 510 | 6,040 | 1,230 | 2,330 | 15,190 |
| 6 to 12 | 1,480 | 1,130 | 2,870 | 590 | 6,040 | 1,520 | 2,440 | 16,070 |
| 13 to 18 | 1,700 | 1,240 | 3,070 | 650 | 6,040 | 1,430 | 2,670 | 16,800 |
| 19 to 22 | 2,210 | 1,110 | 2,920 | 550 | 6,040 | 1,190 | 2,520 | 16,540 |
| Total from ages 0 to 17 | 31,520 | 19,390 | 47,980 | | 108,720 | 25,170 | 44,410 | 287,630 |
| Total from ages 0 to 22 | 42,060 | 25,070 | 62,730 | 13,290 | 138,920 | 31,360 | 57,160 | 370,590 |
| Higher-income group (before-tax household income above \$135,790) | 2 120 | 1 000 | 2 (10 | 720 | 7 520 | 2.040 | 3,000 | 20.010 |
| 0 to 5 6 to 12 | 3,130 2,510 | 1,080 1,320 | 2,610 3,530 | 730 810 | 7,520 7,520 | 2,040 2,340 | 2,900 3,000 | 20,010 21,030 |
| 13 to 18 | 2,720 | 1,320 | 3,530 | 890 | 7,520 7,520 | 2,340 | 3,240 | 21,030 |
| 19 to 22 | 3,230 | 1,310 | 3,620 | 770 | 7,520 | 2,000 | 3,090 | 21,540 |
| Total from ages 0 to 17 | 49,950 | 22,920 | 59,220 | | 135,360 | 39,870 | 54,600 | 376,420 |
| Total from ages 0 to 22 | 65,590 | 29,600 | 77,470 | | 172,960 | 50,120 | 70,200 | 484,410 |
| Includes only families with child care and education expenses. | | | | | | | | |

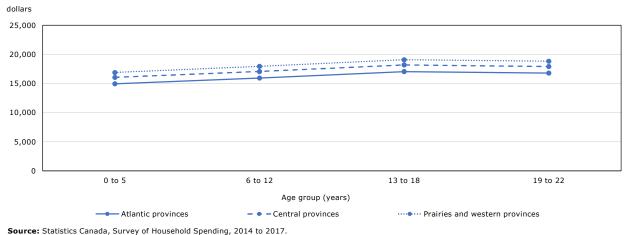
 $^{{\}bf 1.} \ \ {\bf Includes} \ \ {\bf only} \ \ {\bf families} \ \ {\bf with} \ \ {\bf child} \ \ {\bf care} \ \ {\bf and} \ \ {\bf education} \ \ {\bf expenses}.$

 $\textbf{Source:} \ \textbf{Statistics Canada}, \textbf{Survey of Household Spending, 2014 to 2017}.$

^{2.} Includes personal care, recreation equipment, entertainment and reading materials. See Appendix Table A.1 for more details.

Regional child-rearing expenditure patterns closely follow the national-level patterns. In all three regions, child expenditures increased as household income level rose. Overall, child-rearing expenditures in the Prairies and western provinces were about 8% to 15% higher than in the Atlantic provinces, while in the central provinces, they were about 5% to 9% higher than in the Atlantic provinces. Chart 2 provides a visual representation.

Chart 2
Annual household expenditures for one child in two-child, two-parent families in the medium-income group (before-tax household income from \$83,013 to \$135,790), by region and age of the youngest child



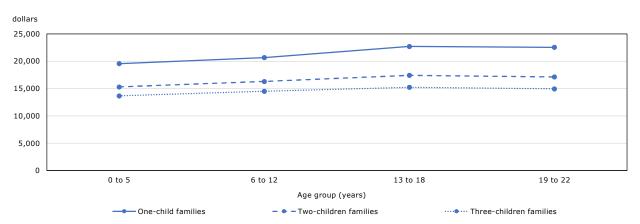
5.5 Adjustments for older children

The tables and graphs so far relate to the expenditures on the youngest child in a two-child household or the youngest child in a three-child household (or the only child in a one-child household). It is possible that the expenditures would be different if the estimates were based on the age of the oldest child rather than the youngest child. To determine the extent of this difference, the methodology used to estimate expenditures on children was repeated using the age of the oldest child rather than the youngest child to determine the child age grouping in the models. The analysis indicated that, overall, total expenditures based on either an older child or a younger child are similar across all five family types (two-parent families in the lower-, medium-and higher-income groups and one-parent families in the lower- and medium-high-income groups). Therefore, no adjustments were necessary for estimating expenditures for the youngest versus the oldest child in a family. Results based on the oldest child for families with two children can be found in Appendix Table A.2. Results for other family types are available upon request.

5.6 Estimates for families with one child or three children

All expenditures reported in the text have been for families with two children. Expenditures for families with one child or three children are presented in tables 2 and 3, respectively, and those for the three regions are shown in tables 5 and 6. Chart 3 provides a visual representation of expenditures for a child in a two-parent family in the medium-income category with one child, two children and three children.

Chart 3
Annual household expenditures for one child in two-parent families in the medium-income group (before-tax household income from \$83,013 to \$135,790), by number of children and age of the youngest child



Source: Statistics Canada, Survey of Household Spending, 2014 to 2017.

Expenditures per child in a family with one child are higher than expenditures per child in a family with two children. Expenditures range from 20% to 38% higher for a child in a one-child, two-parent family compared with a child in a two-child, two-parent family, depending on the age of the child and the income group. Expenditures are 26% to 38% higher for a child in a one-child, one-parent family compared with a child in a two-child, one-parent family.

Expenditures per child in a family with three children are lower than expenditures per child in a family with two children. Expenditures are 8% to 15% lower for a child in a two-parent family with three children compared with expenditures for a child in a two-parent family with two children, depending on the age of the child and the income group. Similarly, expenditures are 15% to 18% lower for a child in a three-child, one-parent family compared with expenditures for a child in a two-child, one-parent family.

Annual estimates for families of different sizes can be calculated. For families with one child, the appropriate age category and income group can be found in Table 2, and no further calculations are required. For example, for a one-child, two-parent family in the lower-income category, with a child aged 16 years, the estimated annual expenditure for the child is \$17,890. For a family with two children, the totals for the expenditures for the two appropriate age groups in Table 1 can be used. For example, for a two-child, two-parent family in the medium-income group with a 5-year-old and a 7-year-old, the respective estimated annual expenditures for the two children are \$15,300 and \$16,300, for an estimated total annual expenditure on the children in the family of \$31,600. For a family with three children, Table 3 can be used. For example, for a three-child, one-parent family in the lower-income group with children aged 5, 8, and 13 years, the respective estimated annual expenditures for the three children are \$10,340, \$10,710, and \$11,560, for an estimated total annual expenditure on the children in the family of \$32,610.

Similarly, overall estimates for the total expenditures on a child from birth to age 22 can be calculated, assuming the household composition (one or two parents) and income group remain constant across children aged 0 to 22 years. This also assumes that spending patterns observed from 2014 to 2017 have remained the same and are applicable throughout the period of ages 0 to 22 for each child.

For families with one child, the total overall expenditure can be determined from Table 2, based on the income group and number of parents, listed under "Grand total." For example, for a one-child, two-parent family in the lower-income category, the estimated total expenditure from ages 0 to 22 is \$379,510. For a family with two children, the totals for the expenditures in Table 1 can be used. For example, for a two-child, two-parent family in the medium-income group, the estimated

total expenditures would be \$378,900 per child from ages 0 to 22, for an estimated total expenditure on the children in the family of \$757,800. For a family with three children, Table 3 can be used. For example, for a three-child, one-parent family in the medium-high-income group, the estimated total expenditure would be \$396,950 per child from ages 0 to 22, for an estimated total expenditure on all children in the family of \$1,190,850.

6. Discussion

This study represents the first effort to estimate Canadian families' average expenditures on children at the national level in over a decade. The estimates focus specifically on what families are spending rather than on what is required to meet basic needs. Additionally, the results provide the first national-level estimates on child expenditures in Canada that account for children aged 0 to 22 years who live at home. The methodological approach largely followed that of similar research in the United States (Lino et al., 2017), using pooled data from Statistics Canada's SHS (2014 to 2017). Since expenditures on children may vary across different types of households, results were presented by family composition (two-parent households and one-parent households), household income level, the age of children, the number of children, and region (for two-parent families). Results from this study yield several important findings about Canadian families' expenditures on children.

First, for two-parent households with children, direct spending on children represented 33% to 57% of the total set of household expenditures considered in scope for this study, while for one-parent households with children, direct spending on children represented 38% to 64% of in-scope household expenditures. Annual child-related expenditures varied considerably by household income level and generally increased with the age of the youngest child in the household up until that child reached the teen years.

Second, for a two-parent family with two children in the lower-income group (before-tax income less than \$83,013) the estimated expenditures to raise a child from birth to age 22, in 2017 dollars, were \$308,710. By comparison, expenditures on a child in a two-parent, two-child household in the middle-income group (before-tax income from \$83,013 to \$135,790) were \$378,900, and expenditures for a child in a two-parent, two-child household in the higher-income group (before-tax income above \$135,790) were \$521,270. Among one-parent households with two children, the estimated expenditures were \$299,180 for those in the lower-income group (before-tax income less than \$83,013) and \$479,830 for those in the medium-high-income group (before-tax income of \$83,013 or above).

Additionally, housing accounted for the largest share of expenditures on children across all household types and income groups, accounting for 27% to 31% of total expenditures on a child in two-parent, two-child households. Similarly, about one-third of expenditures on a child among one-parent households with two children were for housing. Food, transportation, and CCE (for those with the expense) were the next largest average expenditures on a child across most household types and income levels, followed by expenditures on miscellaneous items, clothing, and health care.

Third, total expenditures on young adults aged 19 to 22 who lived at home were somewhat lower than total expenditures on children aged 13 to 18 years for two- and one-parent households at all income levels. Families that incurred CCE expenditures generally spent more on this category for 19- to 22-year-olds compared with 13- to 18-year-olds, but in most cases families spent more on children aged 13 to 18 years in the other expenditure categories. Further, families' spending on CCE for children aged 0 to 5 years and 19 to 22 years was higher than spending on children aged 6 to 12 years and 13 to 18 years, demonstrating the impact of spending on child care and postsecondary education on Canadian family expenditures.

Some regional differences were also observed. Overall, two-parent, two-child households in the Prairies and western provinces had the highest expenditures on children, about 8% to 15% higher than those in the Atlantic provinces. The expenditures on children among two-parent, two-child households in the central provinces were about 5% to 9% higher than in the Atlantic provinces. However, these results could also indicate that households in the western provinces generally had higher total expenditures than elsewhere in Canada, because much of this difference was linked to housing expenditures.

Some findings from this study were similar to those of the study using U.S. data (Lino et al., 2017). In particular, housing accounted for the highest share of expenditures on children for Canadian and U.S. families, and food also accounted for large shares of expenditures on children in both countries. One notable difference was for the health care category. While health care expenditures represented 9% of total expenditures on children for families in the United States, they represented only 3.8% of total expenditures on children among Canadian families, on average. However, this result is expected given the differences in health care systems between the two countries. While Canada has a national universal health insurance system that includes many services, residents of the United States generally purchase private health insurance (with the exception of certain groups), resulting in higher health care expenditures (Ridic et al., 2012). Because of these differences in the Canadian and U.S. health care systems, future research could focus on developing an alternative approach that considers how some health care expenditures may be specific to the Canadian system.

While this study provides the first national estimates on Canadian families' expenditures on children in over a decade, it should be noted that future data updates may require alternative data strategies; the SHS has moved from annual data collection to collecting data every other year (since 2017), making it impossible to replicate the combination of the four survey cycles of data used here. Because it is not advisable to combine data that span more than four years, a combination of two SHS cycles would be the largest feasible combined sample for future national-level studies on expenditures on children. This approach would likely result in sample sizes that are too small to ensure high-quality estimates for some of the household type subgroups. Additionally, future research on child expenditures may benefit from considering alternative data sources to better inform certain categories of expenditures, which may include administrative data or different types of survey data (e.g., based on interview or diary data).

7. Limitations

Although this study has several strengths, such as using Canadian data representative of the 10 provinces, providing expenditures for different family types and estimating expenditures on children up to age 22, it also has several limitations. These limitations are primarily associated with the data and sample.

First, because of the small sample of families in the SHS in each year of study, the data had to be pooled (i.e., combined for the years 2014 to 2017). While pooling allowed for the production of estimates that would not have been possible with only one year of SHS data, the estimates were based on a mix of the spending patterns associated with each year and are not necessarily representative of the spending patterns of the most recent year (2017). Additionally, although four years of data were combined to reduce sampling variability, allowing for the examination of expenditures on smaller domains, there remain some issues with sampling variability, such as in the one-parent groups, which prevent more detailed analyses. This was especially a limitation for expenditure data collected in the diary (50% of the sample).

The small sample sizes also meant that certain adjustments could not be made. For example, estimates for urban and rural families could not be provided separately. Also, no adjustments

were made for the gender of the child or disability. Previous research showed higher food costs for boys and higher clothing costs for girls, but similar costs overall (Cornell, 2011; Manitoba Agriculture, 2004). Additionally, since data were not gathered in the territories, there was an information gap on the expenditures on children in this region of Canada. Lastly, the sample size was too small to report on any province individually. This issue was especially problematic for the CCE category for Quebec, which had lower child care costs than other provinces for the years of the study (Mcdonald & Friendly, 2017) and also lower postsecondary tuition than all provinces except Newfoundland and Labrador (Statistics Canada, 2016).

Second, because expenditures were reported at the household level and not reported separately for adults and children, decisions on which proportion of expenditures to assign to children in each category were made. For example, given that CCE was modelled as a single category, and in the absence of information on the child care and school attendance of the children in the family, the total expenditures for CCE were divided equally among multiple children in a household. Generally, younger children contributed more to child care expenditures, whereas older children contributed more to education expenditures.

Children's clothing expenditures were also divided equally among the children of the family. However, it may be more appropriate to assign a higher percentage to older children because of their higher clothing costs or a higher percentage to younger children because they grow out of clothing more quickly. It is difficult to determine how exactly to assign the clothing expenditures. Modelling this category separately for the one-child, two-child, and three-child subgroups so that only the expenses on the youngest (or oldest) child were included would likely have resulted in very small sample sizes in some of the groups.

Similarly, assumptions were made about the use of transportation for family purposes based on the minimal information available. These assumptions were verified as much as possible against various data sources, but it is possible that more or less than 75% of transportation expenditures should be assigned to family purposes, and that more or less than 50% of this 75% should be assigned to children.

For health care, a higher proportion of expenditures were assigned to children in medium-high-income families than in the lower-income families. Because of a lack of Canadian data for determining out-of-pocket health care expenses for children, the same proportions applied by Lino et al. (2017) were used. However, given the different health care policies in the United States and Canada, it may not make sense to use the same proportions. Nevertheless, health care expenditures were the lowest percentage of total expenditures of all the categories, so slight adjustments may not affect the total by much.

For housing, the estimate used the extra bedroom approach, similar to that used by Lino et al. (2017), but with an adjustment made for income. This adjustment, which involved adding one-quarter of the income parameter to the housing estimate, may require further exploration to determine whether it is the best approach to use with Canadian data. Future research investigating alternative methods to estimate housing expenditures would be useful.

Lastly, decisions were made on specific expenditures to be included and excluded in this study. For example, clothing services were excluded because it was not specified whether the services were for children or adults, and it was assumed most of these services (such as dry cleaning) were for adults. However, some of these expenditures may have been for children. As well, most vacation expenses (accommodations away from home, package trips) were excluded, as well as outdoor play equipment and accessories and children's camps. This also influenced the estimates. Because of these exclusions, the estimates may be conservative for some families.

8. Conclusion

This study estimated the average household expenditures of Canadian families by family type and income level, providing the first national estimates in over a decade and extending the estimates to older children (up to age 22) living in the household. Overall, the results showed that families' expenditures on children vary by household income level and composition, indicating that a single estimate of the amount that families spend on children would not accurately represent the different choices and situations of families across Canada.

Providing for children's food, shelter, clothing, health, and CCE needs is an important way families and the larger society care for children. Although indirect costs could not be estimated here, these results provide valuable information on the direct costs for families with children.

This study provides insight into family expenditures on children and shows the variability in total spending and by expenditure category. While findings may be informative for issues related to spending on children, they are based on modelled estimates for which several assumptions were made. However, the results may serve as a starting point for understanding expenditures on children in Canada and informing further research on topics related to child care, child benefits and supports, and the budgeting decisions of Canadian families.

Appendix

Appendix Table A.1

Included and excluded expenditure items by category

| Category | Included | Excluded |
|----------|--|--|
| ood | Food purchased from stores Bakery products Cereal grains and cereal products Fruit, fruit preparations and nuts Vegetables and vegetable preparations Dairy products and eggs Meat Fish and seafood Non-alcoholic beverages and other food products (including candies, infant food and formula, snack food, and ready-to-serve prepared food) Food purchased from restaurants | |
| | Restaurant breakfast, lunches and dinners Restaurant snacks and beverages | |
| Housing | Shelter Rented living quarters (including rent, repairs and improvements, insurance premiums and parking) Owned living quarters (including mortgage, repairs, taxes, insurance, and expenses associated with buying or selling a home) Water, fuel and electricity for principal accommodation Communication expenditures Landline telephone services Cell phone and pager services Telephones and equipment (landline and mobile) Internet access services Online services Postal, courier and other communication services | Other owned properties and accommodations away from home (e.g., hotels and motels) Pet expenses Pet food Purchase of pets and pet-related goods Veterinarian and other services Garden supplies and services Flower, plants, seeds Fertilizers, herbicides, insecticides, pesticides, soil and soil containers |
| | Household operations Household cleaning supplies and equipment Paper, plastic and foil supplies Household furnishings and equipment Household furnishings (e.g., furniture, rugs, art, linens, curtains and other furnishings) Appliances Home and workshop tools and equipment Non-electric kitchen and cooking equipment Maintenance, rental, repairs and services of household furnishings and equipment Rental of heating equipment Home security services | Horticultural services, snow and garbage removal Lawn, garden and snow removal tools Power lawn, garden and snow-removal equipment Parts and accessories for garden tools Other lawn, garden and snow removal tools and equipment attachments and accessories |

... not applicable

Appendix Table A.1

Included and excluded expenditure items by category (continued)

| Category | Included | Excluded |
|------------------------------|--|--|
| Child care and education | Child care Child care outside the home Child care in the home (regular and occasional) Education Tuition fees (for kindergarten, elementary, secondary schools, university, and other post-secondary education, and other courses and lessons) Textbooks and school supplies | |
| Clothing | Women's and girls' wear (under age 4) and men's and boys' wear Clothing Footwear Accessories Watches and jewelry Children's wear (under age 4) Clothing and cloth diapers Footwear Gifts of clothing for non-household members Gifts of footwear, clothing, accessories and jewelry | Clothing services Laundry and dry cleaning services Laundromats and self-service dry cleaning Clothing rental, tailoring and alteration services Other clothing services |
| Transportation not applicabl | Gas and other fuels Parking Drivers' licenses and tests, and driving lessons Public transportation City or commuter bus, subway, streetcar and commuter train Taxi (including tips) Other local passenger transportation Airplane Inter-city bus Other inter-city passenger transportation services (train and other) | Household moving, storage and delivery services |

Appendix Table A.1

Included and excluded expenditure items by category (continued)

| Category | Included | Excluded |
|---------------|---|--|
| | Prescribed medicines and pharmaceutical products | Weight control programs, smoking cessation programs and other medical |
| | Non-prescribed medicines, pharmaceutical products, health care supplies and | services |
| | equipment | Hospital care, nursing homes and other residential care facilities |
| | Health care services | |
| | Health care practitioners (in the home and other) | |
| | Health care by general practitioners and specialists | |
| | Eye-care goods and services | |
| 1114 | Prescription eye wear | |
| Health care | Non-prescription eye wear and eye-care goods | |
| | Eye care services (e.g., surgery, exams) | |
| | Dental services | |
| | Private health insurance plan premiums | |
| | Private health care plan premiums | |
| | Dental plan premiums | |
| | Accident or disability insurance premiums | |
| | Provincial health insurance premiums | |
| | Personal care | Outdoor play equipment and accessories |
| | Hair care products | Wearable electronic devices |
| | Makeup, skin care, manicure and fragrance products | Photographic goods and services |
| | Personal deodorants | Digital cameras and accessories |
| | Body soaps | Camcorders |
| | Oral hygiene products | Other cameras and accessories |
| | Disposable diapers | Photographic services |
| Miscellaneous | Electric hair styling and equipment | Musical instruments, parts and accessories |
| | Feminine hygiene products | Camping, picnic equipment and accessories (excluding BBQs) |
| | Other personal care supplies and equipment | Supplies and parts for recreational equipment |
| | Personal care services | Rental, maintenance and repairs of recreational equipment |
| | Hair grooming services | Home entertainment services |
| | Other personal care services | Rental of video media (including DVDs, video games, and rental of home |
| | | entertainment, computer, and communications equipment) |
| not applical | <u> </u> | Maintenance and repairs of electronic and communications equipment |

^{...} not applicable

Appendix Table A.1

Included and excluded expenditure items by category (continued)

| Category | Included | Excluded |
|--------------|--|--|
| | Recreation equipment and related services | Package trips |
| | Sports, athletic and recreation equipment and related services | Children's camps |
| | Children's toys | Other recreational activities and services |
| | Video game systems and accessories (excluding for computers) | Video, pinball and carnival games |
| | Art and craft materials | Other recreational services |
| | Computer supplies and other equipment (including hardware, software, and video game systems, tablet computers, and e-book readers) | Recreational vehicles and associated services Purchase of recreational vehicles (including motorcycles, snowmobiles, all- |
| | Home entertainment equipment and services | terrain vehicles, bicycles [parts and accessories], and other recreational |
| | Audio equipment (portable audio equipment, non-portable audio equipment) | vehicles [tent trailers, travel trailers, truck campers, non-motorized and |
| | Video equipment (Blu-ray players, DVD players and televisions) Home theatre systems | motorized watercraft, motor homes, utility trailers], etc.) Operation of recreational vehicles including insurance, registration fees, |
| | Pre-recorded media, music downloads and blank audio and video media | licenses, parking fees, expenses for rented or leased vehicles, supplies, and |
| | Reading materials and other printed matter | vehicle parts |
| | Newspapers | All tobacco products and alcoholic beverages |
| | Magazines and periodicals | All games of chance expenses |
| | Books and e-books (excluding school books) | Government-run lotteries |
| | Maps, sheet music and other printed matter | Casinos, bingos and gaming machines |
| | Services related to reading materials (e.g., photocopying and library fees) | Non-government lotteries and raffle tickets |
| Miscellaneou | us . | Miscellaneous expenditures |
| | | Service charges for banks and other financial institutions |
| | | Stock and bond commissions |
| | | Brokerage fees and other similar services |
| | | Other financial services |
| | | Forfeit of deposits, fines, and money lost or stolen |
| | | Legal services not related to dwellings |
| | | Dues to unions and professional associations |
| | | Contributions of dues for social clubs and other organizations |
| | | Funeral services |
| | | Government services |
| | | Wholesale/retail memberships |
| | | Discounts and refunds, recycling fees and other environmental fees, other |
| | | Income taxes |
| | | Personal insurance payments and pension contributions |
| | | Gifts of money, support payments and charitable contributions |
| | | Employment insurance premiums |
| | | Quebec parental insurance premiums |

... not applicable

Appendix Table A.2

Predicted annual expenditures for one child in two-child families, based on the age of the oldest child, Canada

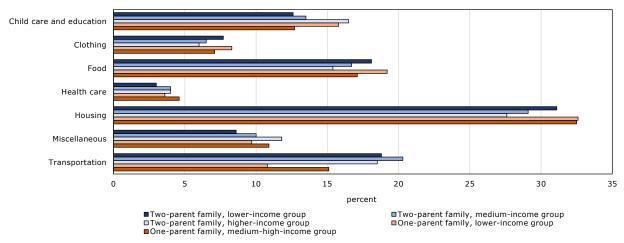
| | Child care and | | | | | | | |
|--|------------------------|----------|--------|-------------|------------|----------------------------|----------------|-------------|
| Family characteristics and age of the oldest child (years) | education ¹ | Clothing | Food | Health care | Housing | Miscellaneous ² | Transportation | Grand total |
| | | | | 2017 consta | nt dollars | | | |
| Two-parent families | | | | | | | | |
| Lower-income group (before-tax household income less than \$83,013) | | | | | | | | |
| 0 to 5 | 2,660 | 680 | 1,700 | 340 | 4,120 | 870 | 2,320 | 12,690 |
| 6 to 12 | 1,560 | 810 | 2,420 | 370 | 4,120 | 1,150 | 2,340 | 12,770 |
| 13 to 18 | 1,190 | 1,260 | 2,960 | 440 | 4,120 | 1,250 | 2,630 | 13,850 |
| 19 to 22 | 2,330 | 1,170 | 2,760 | 420 | 4,120 | 940 | 2,640 | 14,380 |
| Total from ages 0 to 17 | 32,830 | 16,050 | 41,940 | 6,830 | 74,160 | 19,520 | 43,450 | 234,780 |
| Total from ages 0 to 22 | 43,340 | 21,990 | 55,940 | 8,950 | 94,760 | 24,530 | 56,640 | 306,150 |
| Medium-income group (before-tax household income from \$83,013 to \$135,790) |) | | | | | | | |
| 0 to 5 | 3,120 | 740 | 1,960 | 570 | 4,730 | 1,390 | 3,130 | 15,640 |
| 6 to 12 | 2,020 | 870 | 2,780 | 610 | 4,730 | 1,670 | 3,150 | 15,830 |
| 13 to 18 | 1,650 | 1,310 | 3,350 | 700 | 4,730 | 1,770 | 3,440 | 16,950 |
| 19 to 22 | 2,790 | 1,230 | 3,150 | 680 | 4,730 | 1,460 | 3,450 | 17,490 |
| Total from ages 0 to 17 | 41,110 | 17,080 | 47,970 | 11,190 | 85,140 | 28,880 | 58,030 | 289,400 |
| Total from ages 0 to 22 | 53,920 | 23,310 | 63,920 | 14,610 | 108,790 | 36,490 | 75,270 | 376,310 |
| Higher-income group (before-tax household income above \$135,790) | | | | | | | | |
| 0 to 5 | 4,610 | 1,040 | 2,560 | 820 | 6,200 | 2,410 | 4,010 | 21,650 |
| 6 to 12 | 3,510 | 1,170 | 3,590 | 860 | 6,200 | 2,700 | 4,020 | 22,050 |
| 13 to 18 | 3,140 | 1,610 | 4,230 | 960 | 6,200 | 2,790 | 4,320 | 23,250 |
| 19 to 22 | 4,270 | 1,530 | 4,020 | 930 | 6,200 | 2,480 | 4,330 | 23,760 |
| Total from ages 0 to 17 | 67,930 | 22,480 | 61,640 | 15,740 | 111,600 | 47,310 | 73,800 | 400,500 |
| Total from ages 0 to 22 | 88,150 | 30,210 | 81,950 | 20,420 | 142,600 | 60,020 | 95,440 | 518,790 |
| One-parent families | | | | | | | | |
| Lower-income group (before-tax household income less than \$83,013) | | | | | | | | |
| 0 to 5 | 2,440 | 1,010 | 1,950 | 310 | 4,190 | 1,150 | 1,430 | 12,480 |
| 6 to 12 | 2,050 | 1,030 | 2,380 | 390 | 4,190 | 1,310 | 1,370 | 12,720 |
| 13 to 18 | 1,580 | 1,100 | 3,040 | 560 | 4,190 | 1,370 | 1,250 | 13,090 |
| 19 to 22 | 2,350 | 1,100 | 2,820 | 530 | 4,190 | 1,090 | 1,590 | 13,670 |
| Total from ages 0 to 17 | 36,890 | 18,770 | 43,560 | 7,390 | 75,420 | 22,920 | 24,420 | 229,370 |
| Total from ages 0 to 22 | 47,870 | 24,270 | 57,880 | 10,070 | 96,370 | 28,650 | 32,030 | 297,140 |
| Medium-high-income group (before-tax household income of \$83,013 or above) | | | | | | | | |
| 0 to 5 | 3,010 | 1,400 | 2,860 | 800 | 6,710 | 2,140 | 3,210 | 20,130 |
| 6 to 12 | 2,620 | 1,410 | 3,500 | 890 | 6,710 | 2,300 | 3,150 | 20,580 |
| 13 to 18 | 2,150 | 1,490 | 4,230 | 1,080 | 6,710 | 2,360 | 3,030 | 21,050 |
| 19 to 22 | 2,920 | 1,490 | 4,010 | 1,050 | 6,710 | 2,080 | 3,370 | 21,630 |
| Total from ages 0 to 17 | 47,150 | 25,720 | 62,810 | 16,430 | 120,780 | 40,740 | 56,460 | 370,090 |
| Total from ages 0 to 22 | 60,980 | 33,170 | 83,080 | 21,710 | 154,330 | 51,420 | 72,970 | 477,660 |
| Includes only families with child care and education expenses. | | | | | | | | |

^{1.} Includes only families with child care and education expenses.

Note: Totals from ages 0 to 17 are calculated for comparison purposes with other studies (e.g., Lino et al., 2017).

^{2.} Includes personal care, recreation equipment, entertainment and reading materials. See Appendix Table A.1 for more details.

Appendix Chart A.1 Expenditure shares for one child in two-child families, based on the youngest child from birth to age 17, as a percentage of total child-rearing expenditures



References

Alberta Health Services (2015). The cost of healthy eating in Alberta, 2015. Retrieved July 28, 2022, from: https://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-the-cost-of-healthy-eating-in-alberta-.pdf

Browning, M. (1992). Children and household economic behavior. *Journal of Economic Literature*, 30(3), 1434–1475. http://www.jstor.org/stable/2728065

Buddelmeyer, H., Hamermesh, D. S., & Wooden, M. (2018). The stress cost of children on moms and dads. *European Economic* Review, 109, 148–161. http://dx.doi.org/10.1016/j.euroecorev.2016.12.012

Burton, P., & Phipps, S. (2009). Economic costs of caring for children with disabilities in Canada. *Canadian Public Policy*, *35*(3), 269–290. https://doi.org/10.1353/cpp.0.0022

Canadian Institute for Health Information. (2021). Health expenditure data in brief. Ottawa, Ontario: Canadian Institute for Health Information; 2021. Retrieved July 28, 2022, from: https://www.cihi.ca/sites/default/files/document/health-expenditure-data-in-brief-en.pdf

Castro, A. R., Morand, M., Rauch, F., & Tsimicalis, A. (2022). The direct and indirect financial costs sustained by parents of children with osteogenesis imperfecta: A brief report. *McGill Journal of Medicine*, 20(1), 42-47. https://doi.org/10.26443/mjm.v20i1.831

Coley, R. L., Sims, J., & Votruba-Drzal, E. (2016). Family expenditures supporting children across income and urbanicity strata. *Children and Youth Services Review, 70*, 129–142. http://dx.doi.org/10.1016/j.childyouth.2016.09.017

Cornell, C. (2011, June). The real cost of raising kids. *MoneySense*. https://www.moneysense.ca/magazine-archive/the-real-cost-of-raising-kids/

Daley, A., Burton, P., & Phipps, S. (2015). Measuring poverty and inequality in northern Canada. *Journal of Children and Poverty*, *8*, 89–100.

Deeming, C. (Ed.). (2020). *Minimum income standards and reference budgets: International and comparative policy perspectives.* Policy Press. https://academic.oup.com/policy-press-scholarship-online/book/40169

Douthitt, R. A., & Fedyk, J. (1990). The cost of raising children in Canada. Butterworths.

Duncan, K., Frankel, S., & Bazarkulova, D. (2017, May). *Estimating the cost of raising children:*Setting the agenda for Canada. Family Service Toronto and Campaign 2000 End Child & Family Poverty.

https://campaign2000.ca/wpcontent/uploads/2016/03/CostOfRaisingChildren Eng Sep 2017.pdf

Employment and Social Development Canada (ESDC). (2021, July 30). *More support for Canadian families*. Government of Canada. https://www.canada.ca/en/employment-social-development/news/2021/07/more-support-for-canadian-families.html

Genereaux, D., Bansback, N., & Birch, P. (2016). Development and pilot testing of a tool to calculate parental and societal costs of raising a child with intellectual disability. *Journal of Intellectual & Developmental Disability, 41*, 11–20. https://doi.org/10.3109/13668250.2015.1087479

Goedemé, T., Storms, B., Stockman, S., Penne, T., & Van den Bosch, K. (2015) Towards cross-country comparable reference budgets in Europe: First results of a concerted effort. *European Journal of Social Security*, 17(1), 3–30. https://doi.org/10.1177/138826271501700101

Government of Canada. (2017, November 14). *Rights of children*. https://www.canada.ca/en/canadian-heritage/services/rights-children.html

Health Canada (2020). 2019 National Nutritious Food Basket: Reference Guide. Ottawa, Ontario: Health Canada.

Hirsch, D., & Lee, T. (2021). *The cost of a child in 2021*. Child Poverty Action Group. https://cpag.org.uk/policy-and-campaigns/report/cost-child-2021

Lino, M., Kuczynski, K., Rodriguez, N., and Schap, T. (2017). Expenditures on children by families, 2015. Miscellaneous Publication No. 1528-2015. U.S. Department of Agriculture, Center for Nutrition Policy and Promotion.

Manitoba Agriculture. (2004). *Family finance—The cost of raising a child: 2004* (FRM 101-2004). Winnipeg, Manitoba: Home Economics Section, Manitoba Agriculture, Food and Rural Initiatives.

Mcdonald, D., & Friendly, M. (2017). Time out: child care fees in Canada 2017. Ottawa, Ontario: Canadian Centre for Policy Alternatives. https://policyalternatives.ca/timeout

Phipps, S. A. (1998). What is the income "cost of a child"? Exact equivalence scales for Canadian two-parent families. *The Review of Economics and Statistics*, *80*(1), 157–164. https://doi.org/10.1162/003465398557267

Ridic, G., Gleason, S., & Ridic, O. (2012). Comparisons of health care systems in the United States, Germany and Canada. *Materia Socio-medica*, *24*(2), 112–120. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3633404/

Santos, A., McGuckin, N., Nakamoto, H.Y., Gray, D., & Liss, S. (2011). Summary of travel trends: 2009 National Household Travel Survey. U.S. Department of Transportation, Federal Highway Administration.

Sarlo, C. (2013). *The cost of raising children.* Fraser Institute. https://www.fraserinstitute.org/studies/cost-of-raising-children

Saunders, P., & Bedford, M. (2018). "New estimates of the costs of children." *Family Matters*, No. 100, 19–27. https://aifs.gov.au/research/family-matters/no-100/new-estimates-costs-children

Selim, R., & Kaya, G. (2018). The changes of cost of children for Turkey by using incomedependent equivalence scales. *Social Indicators Research*, *139*, 803–824. https://doi.org/10.1007/s11205-017-1722-1

Statistics Canada (2010). Canadian Vehicle Survey. Retrieved July 28, 2022, from: https://www150.statcan.gc.ca/n1/pub/53-223-x/53-223-x2009000-eng.pdf

Statistics Canada (2016). *Tuition fees for degree programs, 2016/2017*. https://www150.statcan.gc.ca/n1/daily-quotidien/160907/dq160907a-eng.htm

Statistics Canada. (2019). *Family Matters:Under the same roof, living with my parents!* https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2019002-eng.htm

Statistics Canada (2022). Census family structure including detailed information on stepfamilies, number of children, average number of children and age of youngest child: Canada, provinces and territories, census metropolitan areas and census agglomerations. (Table 98-10-0124-01). https://doi.org/10.25318/9810012401-eng

Tough, S., Benzies, K., Fraser-Lee, N., & Newburn-Cook, C. (2007). Factors influencing childbearing decisions and knowledge of perinatal risks among Canadian men and women. *Maternal and Child Health Journal*, *11*, 189–198. https://doi.org/10.1007/s10995-006-0156-1

Tsimicalis, A., Stevens, B., Ungar, W. J., McKeever, P., Greenberg, M., Agha, M., Guerriere, D., Naqvi, A., & Barr, R. (2013). A mixed method approach to describe the out-of-pocket expenses incurred by families of children with cancer. *Pediatric Blood & Cancer*, 60, 438–445. https://doi.org/10.1002/pbc.24324