# Working for a Living Wage

Making Paid Work Meet Basic Family Needs in Metro Vancouver

The 2017 Living Wage update and original 2008 full report are available at policyalternatives.ca/livingwage2017

## Calculation Guide

A technical appendix to the report Working for a Living Wage, updated for 2017, for those seeking to calculate the living wage in their own communities.

Note: While this guide is most appropriate for BC, its methodology could be adapted fairly easily for other communities.

Prepared by Iglika Ivanova and Pamela Reaño

April 2017







### Introduction

THE PURPOSE OF THIS GUIDE is to assist others to calculate a living wage for their own communities, using the method developed by the CCPA and First Call to calculate Metro Vancouver and Greater Victoria living wages in 2008, which now serves as the model for living wage calculations across the country. It will be most useful for the calculation of the living wage in communities in BC. The method can be applied in other provinces and territories, however, the government transfer and tax information would need to be adjusted accordingly.

This guide serves as an updated technical appendix to the report *Working for a Living Wage: Making Paid Work Meet Basic Family Needs in Metro Vancouver* updated for 2017. The report presents the concept of a living wage and the arguments in favour of its adoption by employers and can be downloaded at policyalternatives.ca/livingwage2017.

This detailed, step-by-step guide explains how you can calculate the amount of a living wage for your community using the Living Wage Calculation Spreadsheet that accompanies it (which can be downloaded at policyalternatives.ca/livingwage2017).

Working for a Living Wage focuses on the living wage for a two-parent family with two children.

As a caution, the living wage amount is based on ever-changing information regarding family expenses and government transfers and taxes. Therefore, the information provided is accurate as of the date of this writing. Bear in mind that the living wage calculation must be revised annually to ensure its accuracy.

Finally, the living wage amount is an estimate based on the assumptions outlined below and summarized on pages 23 to 33 of *Working for a Living Wage 2008*. The precise expenses of any given family will obviously vary. The purpose of the family expenses calculation is to ensure that the family has the income to:

- Feed, clothe and provide shelter for their family;
- Promote healthy child development;
- Participate in activities that are an ordinary element of life in a community; and
- Avoid the chronic stress of living in poverty.

To ensure that the calculation continues to reflect the realities of low income families in Metro Vancouver, we convened a roundtable of social policy experts and community advisors to review the methodology in the fall of 2014, followed by two focus groups with low wage parents. The review resulted in two changes in the calculation in 2015 and later years:

Adding the costs of full-time care for the seven-year-old child during school breaks, since this care
is not covered under the regular monthly fees for before- and after-school care unlike care during
PD days (which typically is covered). These costs had previously not been included.

• Claiming the federal and provincial Children's Fitness and Arts Tax Credits. We assume that the Metro Vancouver living wage family spends \$500 per child (\$1,000 total) on eligible sports and arts programs. The funds come from the "Other Household and Social Participation Expenses" amount.

Since the last methodological review, we have been hearing from communities around the province that most low wage parents use cell phones instead of a landline phone and that Internet access at home has become a requirement for participating in community life, accessing government services and education, particularly in small towns where government offices have closed and in-person education opportunities are not easily available.

Data from the Canadian Radio-television and Telecommunications Commission (CRTC) confirms a steady shift away from landlines towards cell phones across Canada with slightly more families having cell phone access (86 per cent) than landlines (76 per cent) in 2015.<sup>2</sup> While many families have both a landline and cell phones, CRTC finds that lower-income families (in the bottom 40 per cent of income) are more likely to give up their landline entirely in favour of cell phones. CRTC data also confirms that the majority of Canadian households (84 per cent) had Internet subscriptions at home. The 2017 living wage calculation reflects these changes.

If you or your organization uses our methodology to calculate a living wage for your community, we would very much appreciate hearing from you.

<sup>1</sup> The maximum amounts that can be claimed in tax year 2016 (\$500 per child for fitness programs and \$250 for arts programs) are clearly outside the budget of the living wage family. Note that these tax credit are scheduled to be eliminated as of tax year 2017.

The statistics in this paragraph are from CRTC, 2016, Canada's Communication System: An Overview for Canadians. Section 2.0. http://www.crtc.gc.ca/eng/publications/reports/policymonitoring/2016/cmr2.htm#a2

## Calculating the Living Wage

#### OVERVIEW OF THE CALCULATION PROCESS

The calculation of the living wage can be quite complex in its details. As you work through the steps, keep in mind the following stages.

- Stage 1: Calculating Family Expenses;
- Stage 2: Calculating Government Transfers: CCB, GST credits, BCLICATC, etc.;
- Stage 3: Calculating Government Deductions and Taxes;
- Stage 4: Determining the Living Wage Amount;
- Stage 5: Calculating the BC Child Care Subsidy; and
- Stage 6: Verifying the Calculations.

The living wage is calculated by using the Excel spreadsheet that accompanies this guide (and which is also available for download at policyalternatives.ca/livingwage2017). In addition, there are numerous sources you will need to consult in regard to family expense amounts, and formulas for government transfers and taxes. Whenever possible, these are identified in the guide.

The method of calculating the living wage remains constant. However, the following will change and require updating.

- FAMILY EXPENSES: Require the most recent data sources and CPI (Consumer Price Index) data.
- GOVERNMENT TRANSFERS: The CCB, the GST credit and the BCLICATC amounts remain the same from July of one year to June of the next. However, the formulas may change each July.
- GOVERNMENT TAXES: The tax rules and formulas change for each tax (calendar) year.

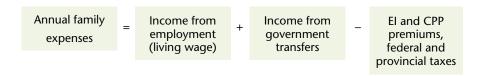
If you are calculating the living wage in a BC community, you need to make adjustments only to family expenses to reflect the costs in your community (skipping Stages 2 and 3 as outlined in the next section). However, if you are calculating the living wage in a community in another province or territory, you will need to make changes to the government transfer and tax formulas as well.

The provincial child care subsidy (PCCS) program requires specific mention. The Excel spreadsheet contains the living wage calculation for the two-parent, two-child family based on expenses in Metro Vancouver. These expenses are sufficiently high that the income level of the family precludes the PCCS. However, if the family expenses in your community are significantly less, your family may be eligible for the PCCS. This will be the case if there are positive values in Cells H39 or H40 of the Excel spreadsheet. If this is the case, after completing the following steps you will need to consult Appendix A on page 25 of this guide.

#### **BACKGROUND INFORMATION**

The primary determinants of the living wage are income from employment and family expenses. However, the calculation also factors in the income the family receives from government transfers and deductions from income for statutory contributions (EI and CPP) and taxes. Thus, the living wage is the hourly rate of pay at which a household can meet its expenses once government transfers have been added and government deductions have been subtracted.

The living wage is calculated using the following formula.



The Excel spreadsheet integrates the information regarding family expenses with the calculations for government transfers and deductions from income, as indicated in this formula.

#### The Question of Timing

Because all the elements of the calculation of the living wage (family expenses, government transfers, and government deductions and taxes) are frequently changing, you need to make decisions regarding the point in time at which you fix expenses, transfers and taxes.

For our calculations for the living wage for 2017, we chose:

- Family expenses amounts at December 2016
- Government transfer amounts:
  - CCB, GST credit and BCLICATC for the July 2016 to June 2017 time period;
  - BC early childhood tax benefit for the calendar year 2017; and
- Government deductions and taxes for the 2016 tax year

#### THE MECHANICS OF THE EXCEL SPREADSHEET

The spreadsheet has three tabs: "First time LW calculation", "Using last year's LW income" and "Family expenses". Use the "Family expenses" tab to manually enter the correct amounts for expenses in your community in the shaded cells. Cells that are not shaded contain provincial-level data and do not need to be changed. Built-in formulas will use the numbers you enter to update the monthly or annual family expense for each of the ten expense categories (bolded in the tab) and automatically enter them in the correct cell of Table I in both of the first two tabs of the spreadsheet. Which of the first two tabs you use for the living wage calculation depends on whether this is the first time the living wage for your community has been calculated, as explained in the spreadsheet.

The first two tabs of the Excel spreadsheet are structured as follows:

Table I: Family Expenses;

Table II: Non-Wage Income (Government Transfers);

Table III: Family Income Less Family Expenses;

Table IV: The Living Wage and Government Deductions and Taxes; and

Table V: Family Income less Government Deductions and Taxes plus Government Transfers.

Table I, II and IV each calculate one element of the formula presented above. Table III compares family income with family expenses, and based upon this the wage in Table IV is adjusted to calculate the living wage. The details of this are as follows.

- Cell C20 in Table I is the amount of the family's total annual expenses.
- Cell C32 in Table II is the total annual amount of government transfers received by the family.
- Cells B46 and C46 in Table IV are the hours per week of employment for each parent.
- Cells B47 and C47 in Table IV are the hourly wages for each parent. These are set to be equal.
- Cells B49 and C49 in Table IV are the annual incomes from employment for each parent.
- Cell D57 in Table IV is the total annual amount of income available for the family after government deductions and taxes have been subtracted.
- Cell C38 in Table III is the family's total annual income: the sum of government transfers and employment income after government deductions and taxes.
- Cell C39 in Table III reproduces the family's total annual expenses.
- Cell C40 in Table III indicates the gap between the family's annual income and its annual expenses.
- Cells 139, 140 and 141 contain the amount of the adjustment for income tax purposes, including the
  provincial child care subsidy, if the family receives this subsidy. Appendix A explains when and how
  this affects the living wage calculation.

Table V summarizes the family's overall finances, presenting its income from employment, total government taxes and total government transfers, and its annual net surplus.

## Stage 1: Family Expenses

Calculating the living wage requires deciding upon the characteristics of the family listed in Table 1. The table presents the assumptions used in the living wage calculation for Metro Vancouver.

Table 1: Family Characteristics and Assumptions in the Living Wage 2017 Calculation					
Family Characteristics	Metro Vancouver Living Wage Assumptions				
Parents					
Number	2				
Gender	1 female, 1 male				
Age	between 31 and 50				
Number of parents in paid work	2				
Hours of paid work for each parent	35 hours each				
Hourly wage	equal for both				
Children					
Number	2				
Gender	1 male, 1 female				
Age	boy aged 7, girl aged 4				

#### THE CATEGORIES OF FAMILY EXPENSES

Family expenses are divided into ten categories. The first five categories are from Human Resources and Skills Development Canada's Market Basket Measure (MBM). The living wage calculation uses the MBM amounts for the following three expenses: Clothing and Footwear, Transportation and Other. For Food, Shelter, Child Care, Parent Education and Transportation, data providing local amounts was used.

- 1. Food;
- 2. Clothing and Footwear;
- 3. Shelter;
- 4. Transportation;
- 5. Other Household Expenses;
- 6. Child Care;
- 7. MSP Premiums;
- 8. Non-MSP Medical Expenses;
- 9. Parent Education; and
- 10. A Contingency Amount.

For each family expense, the following sections explain the source of the data, provide links to the data sources when available, and present the calculation formula used. Some family expenses are calculated on a monthly basis, and the others are calculated on an annual basis.

The family expenses are based on conservative or lower than average family expense amounts. The reason is that the purpose of the living wage is to provide an adequate level of well-being based on what a family requires. This is accomplished in part by adopting the Market Basket Measure (MBM) amounts, as the MBM was developed to provide a perspective on low income in Canada. The MBM expenses of Food, Clothing and Footwear, and Shelter are based on median expenditures, and Transportation and Other expenses are based on less than median expenditures. Median family expenditures are almost invariably less than average family expenditures. The reason for this is that average expenditures are pulled upward by elevated incomes and expenditures of higher income families. To be consistent with this approach, when possible use median expenses when incorporating expense amounts from other sources.

#### CALCULATING FACH OF THE FAMILY EXPENSES

The information in this section explains how each of the family expenses is calculated.

#### 1. Food

INFORMATION NEEDED: The report of the Provincial Health Services Authority, *Food Costing in BC 2015*, available at phsa.ca/population-public-health-site/Documents/2015%20Food%20Costing%20in%20BC%20-%20 FINAL.pdf, and the Consumer Price Index for food in British Columbia, available at http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ09k-eng.htm.

Food Costing in BC 2015 calculates the cost of food in each provincial health authority based on a random sample of grocery stores and on the federal government's standardized food costing tool, the National Nutritious Food Basket 2008, which is based on the Canada Food Guide. The report provides monthly food costs for both adults and children by gender and age categories.

- Step 1: Calculate the family's monthly expense based on the "Average monthly cost of the 2015 food basket in BC for different age and gender groups" table (Table 5 on page 11 of *Food Costing in BC 2015*), based on the number, gender and age of the parents and children.
- Step 2: Consult the map (page 7 of *Food Costing in BC 2015*) to determine the average monthly food expense for the reference family of four ("BC Average").
- Step 3: Consult the maps in the Appendix of *Food Costing in BC 2015* (pages 14 to 18) to determine the average monthly food expense for the reference family for the health service delivery area in which your community is located. This is the only number you need to update in the Food section of the "Family expenses" tab of the calculation spreadsheet.
- Step 4: Calculate the monthly food expense with the formula:

Amount from Step 1 x Amount from Step 3
Amount from Step 2

Step 5: Adjust 2015 food expenses to 2016 prices using the Consumer Price Index for "Food."

Note: Metro Vancouver is unique in BC, as parts are located in two health authorities, Fraser Health and Vancouver Coastal Health, and span multiple health service delivery areas. To reflect this, in Step 3 we used a weighted average of the sample family's food expense amounts for the health service delivery areas of Fraser North (\$953), Fraser South (\$979), Richmond (\$946), Vancouver (\$1,011) and North Shore/Coast Garibaldi (\$991) with each weighted by their respective populations. For North Shore/Garibaldi, we used the population of the local health areas of North Vancouver and West Vancouver – Bowen Island only, as the rest of the health service delivery area falls outside Metro Vancouver. Population estimates by health authority, health service delivery area and local health areas are available from BC Stats, bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx.

#### 2. Clothing and Footwear

INFORMATION NEEDED: 1. Statistics Canada's MBM amount for "Clothing" for 2014 from CANSIM Table 206-0093 http://www5.statcan.gc.ca/cansim/a26. 2. CPI for "Clothing and Footwear" for 2014 and 2016 for BC from Statistics Canada, statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ09k-eng.htm.

#### 3. Shelter

The Shelter expense uses the following formula:

Shelter = Rent + Utilities + 2 Cell Phone Plans + Internet + Content Insurance on Possessions

#### Rent

INFORMATION NEEDED: The latest Canada Mortgage and Housing Corporation (CMHC) data on the median rent for three-plus bedroom apartments in your community. The CMHC conducts a regular Rental Market Survey in April and October of each year, and reports both median and average rents for bachelor, one, two and three-plus bedroom apartments by selected municipalities (urban centres with a population over 10,000). The latest statistics can be found on CMHC's Housing Market Information Portal here: cmhc-schl.gc.ca/hmip-pimh/en#.

The calculation for Metro Vancouver is based on the median rent for a three-plus bedroom unit for the family of four.

If you are calculating the living wage for a smaller community which is not included in the CMHC rental market survey, you would need to survey local rental listings to determine the costs of rent for a family of four.

#### Utilities

INFORMATION NEEDED: 1. The Dietitians of Canada, BC Region, The Cost of Eating in BC 2007, dietitians. ca/bccostofeating. 2. CPI for "Water, fuel and electricity" 2007 and 2015 for BC from Statistics Canada, CANSIM Table 326-0021, statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3260021&paSer=&pattern=&stByVal=1&p1=1&p2=-1&tabMode=dataTable&csid=.

The utilities amount is from a Statistics Canada Custom Tabulation, based on the following (see p. 12 of *The Cost of Eating in BC 2007*):

- 2001 Census, 20% sample, for BC urban centre, 500,000 or more population (i.e. Metro Vancouver);
- CPI adjusted to June 2007; and
- Couple with two children, three-bedroom apartment, at 25<sup>th</sup> percentile.

We are not aware of more recent estimates of the utilities expenses of families with children in Metro Vancouver (or BC).

#### Cell Phone Plans and Internet

INFORMATION NEEDED: The least expensive talk and text cell phone plan and Internet provider in your community, including applicable taxes (GST and PST). For Metro Vancouver in 2017, these are the \$39 per month Canada-wide unlimited talk and text plan provided by Rogers and the \$32.95 per month high-speed Internet service provided by TekSavvy (Cable 15). Upfront costs such as activation fees, SIM cards or modems are not included. Also excluded are any short-term promotional discounts for new customers.

#### Contents Insurance

INFORMATION NEEDED: A contents insurance quote from an insurance agent.

We phoned several insurers providing contents insurance. Quotes were approximately \$33.75 per month for Metro Vancouver, and this amount was used for the 2017 calculations.

#### 4. Transportation

INFORMATION NEEDED: 1. Statistics Canada's MBM amount for Transportation for rural communities for 2014 from CANSIM Table 206-0093 http://www5.statcan.gc.ca/cansim/a26 2. CPI data for "Operation of passenger vehicles" for 2014 and 2016 for BC, from Statistics Canada, statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ160k-eng.htm. The formula for the transportation expense is as follows.

Transportation = Vehicle + Public Transit

Vehicle: This is the amount for transportation from the MBM for rural communities in BC (which represents the costs of owning and operating a second-hand car), adjusted by the CPI to 2016 prices.

Public Transit: The Metro Vancouver two-parent family also has the expense of one two-zone bus pass, available at translink.ca/en/Fares-and-Passes/Monthly-Pass.aspx. Note that the parent who takes a regular studies course of three or more credit hours at any Metro Vancouver public college qualifies for a discounted U-Pass for the duration of the course (typically, a four-month semester), which reduces the family's public transit expenses considerably (almost by half). The 2017 calculation is based on eight months of U-Pass eligibility and four months of two-zone bus passes.

#### 5. Other Household and Social Participation Expenses

INFORMATION NEEDED: Automatically calculated in the spreadsheet.

The MBM calculates the Other expense at 75.4% of the combined expense for Food and Clothing and Footwear. This amount is intended to cover toiletries and personal care, furniture, household supplies, laundry, school supplies and fees, bank fees, some reading materials, minimal recreation and entertainment, family outings (for example to museums and cultural events), birthday presents, modest family vacation and some sports and/or arts classes for the children. We assume that \$1,000 per year out of this budget (\$500 per child) is spent on sports and/or arts programs eligible for the Children's Fitness and Arts Tax Credits, for example on swimming lessons, dance classes, team sports or music lessons.

#### 6. Child Care

INFORMATION NEEDED: Estimates of local child care expenses.

#### Our assumptions:

- The four year old is in full-time day care (licensed group child care).
- The seven year old is in before- and after-school care during the school year, with three weeks of full-time care during winter and spring breaks, and in six weeks of full-time summer care.

Estimates for child care expenses are often available from regional child care referral centres, which conduct surveys of child care providers in the areas they serve. Fee survey information for licensed group child care in Vancouver was obtained from the Westcoast Child Care Resource Centre, wstcoast.org/parents/fees.html. The 2016 "city-wide" median value for child care fees was used. As the Westcoast Child Care Resource Centre no longer provides information for before- and after-school and summer care we surveyed local child care centres and calculated the median fees (\$380 per month for before- and after-school care, monthly summer care fees at \$625 per month and weekly summer care fees at \$185 per week). Note that many summer care providers only charge weekly without a discount for monthly care.

In Metro Vancouver, monthly fees for before- and after-school care typically include full-day care on days when schools are closed for professional development (PD). This may not be the same in your community, in which case you will need to include costs for full-time care on PD days during the school year. Check with your regional child care referral centre or inquire with your local child care providers (make sure you call a number of providers to get a sense of the range of policies and fees charged in your community, and use the median child care fees for calculating your community's living wage).

#### 7. MSP Premiums

MSP premiums are mandatory contributions (a tax/fee) to the provincial health program. BC is the only province that charges individual/household health care premiums at a flat rate regardless of income for all but the lowest-income families who qualify for premium assistance.

As of January 2017, MSP premiums are based on the number of adults in the family. Children under the age of 19 are not charged an additional fee. However, this change does not result in any savings for the living wage family because the MSP premium for two adults was increased to match the rate previously charged to two-parent families with children. MSP premium assistance is based on "net adjusted income," which is the family's net income for income tax purposes, less \$3,000 for the spouse and each dependant child plus one half of the family's child care expenses claimed as an expense on their income tax forms, less the Universal Child Care Benefit reported on income tax returns. Premium assistance was expanded slightly as of January 2017 to provide at least partial subsidy to families with net adjusted income lower than \$42,000 and full subsidy to those with an adjusted net income below \$24,000.

The Excel spreadsheet contains the formula for calculating the correct MSP amount based on family income in Cell B17 of the first two tabs, so you will not need to modify this cell. At the living wage income in Metro Vancouver, the family pays the maximum \$150/month.

#### 8. Non-MSP Health Care Expenses

INFORMATION NEEDED: The estimate for non-MSP covered health care expenses assumes that the family's health care expenses are equivalent to the cost of purchasing private health insurance. The amount for this has been obtained from the expense of purchasing Pacific Blue Cross insurance (pac.bluecross.ca/pdf-bin/370/34-70-210\_rates.pdf), under the following terms and circumstances:

• Plan:

Blue Choice, Family

Age group of oldest person: 35 to 44

Coverage:

Extended Health Care Plan: YesPrescription Drug Option: Yes

Dental Option: Yes

This amount is \$145/month for the Metro Vancouver family of four in 2017.

Note that if the family used this amount to purchase Blue Cross Insurance, it would still face the costs for the non-insured portions of medical expenses.

#### 9. Parent Education

INFORMATION NEEDED: The expense from a local college for the following costs for two regular studies courses of three units each, including:

- Tuition
- Textbooks
- Student fees

For Metro Vancouver this amount was estimated at \$1,116.80/year, based on the information in Table 2. This information was obtained online for Douglas College at; douglascollege.ca/study-at-douglas/fees-and-related-information/tuition-fee-charts.

Table 2: Estimates for the Elements of the Parent Education Expense				
Expenses	Douglas College			
Course tuition	\$109.55/credit <sup>1</sup>			
Incidental fees	\$104.75/term			
Books and other materials	\$125/course			
Note: <sup>1</sup> Average between tuition fees for lower division courses and upper division courses, assumes one of each is taken during the year.				

#### **10. Contingency Amount**

The Contingency Amount provides some cushion for unexpected events like the serious illness of a family member, transition time between jobs etc. It is provided as an expense for each parent and is calculated at:

The living wage amount x hours worked per week x 2 weeks.

## Stage 2: Government Transfers

This information is calculated in Table II of the Excel spreadsheet.

Government transfers reduce the amount of the living wage by providing a source of income for family expenses. The possible transfers for 2017 are:

- Canada Child Benefit (CCB);
- BC Early Childhood Tax Benefit;
- GST Credit;
- BC Low Income Climate Action Tax Credit (BCLICATC);
- BC Rental Assistance Program (RAP); and
- BC Child Care Subsidy.

The CCB, BCLICATC and the GST credit are based on formulas set in July of each year and the amount remains the same until the following June.

The amounts of government transfers that a family receives each year are calculated based on the family's income from the previous tax year. If the living wage for your community has been calculated previously, we suggest that you use last year's living wage family income to determine the government transfers that the family would be eligible for. The Excel spreadsheet includes a tab titled "Using last year's LW income" that contains all the formulas you will need—just enter last year's living wage family income, government deduction and taxes in Table IIa. This will automatically calculate the correct amount of government transfers in Table II. This method was used to calculate the Metro Vancouver 2017 living wage.

If this is the first time the living wage is being calculated for your community, use this year's family income to determine the government transfers amounts for the family. The tab titled "First time LW calculation" in the Excel spreadsheet uses this method.

If you are calculating the living wage for a BC community, the Excel spreadsheet includes formulas to automatically calculate the correct government transfers and taxes so you can skip Stages 2 and 3 (though you may still want to read through them to see what is included). You will still need to consult Appendix A on page 25 to determine whether the family is eligible for the provincial child care subsidy and, if so, how to incorporate this into the living wage calculation.

If you are calculating the living wage for a community in another province or territory, you will need to make changes to the government transfer and tax formulas.

#### A. THE CANADA CHILD TAX BENEFIT (CCB)

This is a new non-taxable government transfer to families with children, which replaced the old Child Tax Benefit (CCTB) and the Universal Child Care Benefit (UCCB) as of July 1st, 2016.

INFORMATION SOURCES: 1. The Canada Revenue Agency guide "Canada Child Benefits," for the period from July 2016 to June 2017, cra-arc.gc.ca/benefits/#CCB.

The CCB is an income-tested benefit received for children under 18 years of age. The amount is affected by three factors:

Number of children under six;

Number of children six and older; and

Family's net income.

Table 3 presents the CCB formula—the numbers in bold and underlined vary with the number of children. The maximum benefit amounts and the income thresholds at which benefits get reduced will change each July (typically, they will be adjusted to reflect inflation during the year past).

Table 3: Canada Child Benefit Formula					
CCB by family net income	=	Basic benefit	Benefit reduction		
If (net income – UCCB) is less than \$30,000	=	# of children under 6 x \$6,400 + # of children over 6 x \$5,400	n/a		
If (net income – UCCB) is between \$30,000 and \$65,000	=	# of children under 6 x \$6,400 + # of children over 6 x \$5,400	(net income – UCCB – \$30,000) x <u><b>0.135</b></u>		
If (net income – UCCB) is over \$65,000	=	# of children under 6 x \$6,400 + # of children over 6 x \$5,400	(\$65,000 – \$30,000) x <u>0.135</u> – (net income – UCCB – \$65,000) x <u>0.057</u>		

#### B. BC FARLY CHILDHOOD TAX BENEFIT

This is a tax-free monthly benefit of up to \$55 per month per child under the age of six. BC families with net income under \$100,000 receive the full benefit, which means that families at the living wage are eligible for the full benefit. The benefit is administered by the CRA and the payment is combined with the CCB.

INFORMATION SOURCE: BC Government, Residents, Taxes & Rebates, Income Taxes, BC Early Childhood Tax Benefit for 2017, http://www2.gov.bc.ca/gov/content/family-social-supports/caring-for-young-children/bc-early-childhood-tax-benefit

#### C. GST CREDIT

INFORMATION SOURCES: Canada Revenue Agency GST Credit – Calculation sheet for the July 2016 to June 2017 payments, http://www.cra-arc.gc.ca/bnfts/gsthst/gstcclc15-eng.html.

The GST credit is an income-tested benefit and is affected by three factors:

Whether the parent has a spouse;

Number of children; and

Family's net income.

Table 4 presents the GST/HST Credit formula. All of the numbers, and the formula itself, can change each July.

Table 4: GST Credit Formula						
GST/HST Credit	=	Basic Credit	+	Additional Credits	-	Credit Reduction
GST Credit	=	\$276	+	spouse credit = \$276; children credits = \$145 for each child	-	(net income – UCCB – \$35,926) x 0.05
2 parents and 2 children	=	\$276	+	\$276 + \$145 + \$145	-	(net income – UCCB – \$35,926) x 0.05

For a two-parent, two-child family, the GST credit ceases at a family net income of \$52,766.

#### D. BC LOW INCOME CLIMATE ACTION TAX CREDIT

This tax credit is a payment similar to the GST Credit in that it is paid by the government to individuals below a certain income level. The amount depends upon the size and composition of the family and its income level. The payment is combined with the GST Credit.

INFORMATION SOURCE: BC Government, Residents, Taxes & Rebates, Income Taxes, Low Income Climate Action Tax Credit, gov.bc.ca/gov/topic.page?id=E9258ADE1AE3423080A1B2674F4EAABD.

Table 5: BCLICATC Formula						
BCLICATC	=	Basic Credit	+	Additional Credits	-	Credit Reduction
BCLICATC	=	\$115.50	+	spouse credit = \$115.50; children credits = \$34.50 for each child	-	(net income – \$38,193) x 0.02
2 parents and 2 children	=	\$115.50	+	\$115.50 + \$34.50 + \$34.50	-	(net income – \$38,193) x 0.02

For a two-parent, two-child family, the BCLICATC ceases at a family net income of \$53,193.

#### E. BC RENTAL ASSISTANCE PROGRAM

The provincial rental assistance program provides a monthly payment to families who qualify based on the amount of their rent and the amount of their income. It reimburses a portion of the difference between 30 per cent of the family's total income and its adjusted rent amount. Families are eligible if their gross household income (employment income plus the UCCB) is less than \$35,000. The spreadsheet does not contain the formula because the family's level of income precludes eligibility. Even at the minimum wage, a family of two parents working full-year at 35 hours per week will exceed the total income threshold for the BC rental assistance program.

The formula is:

RAP = (Adjusted Rent Amount - 30% of Gross Income) x

 $(0.35 + 0.01 \times (\$35,000 - Gross Income)/\$25,000/55)$ 

The Adjusted Rent Amount is the lesser of the actual rent (including utilities) or the amount in the following table.

Table 6: Rental Assistance Program Maximum Rent Levels					
Metro Vancouver Other areas of BC					
Family of 3 or less	\$1,055	\$970			
Family of 4 or more \$1,190 \$1,015					

#### F. BC CHILD CARE SUBSIDY

Consult Stage 5 on page 23 and Appendix A on page 25 to determine whether the family is eligible for the provincial child care subsidy and, if so, how to incorporate this into the living wage calculation.

### Stage 3: Government Deductions and Taxes

This information is calculated in Table IV of the Excel spreadsheet.

The government deduction and tax formulas can change each year. For current information consult the following:

- The main Canada Revenue Agency webpage: cra-arc.gc.ca/menu-eng.html
- General Income Tax and Benefit Guide 2016: cra-arc.gc.ca/E/pub/tg/5000-g/5000g-16e.pdf
- Income Tax Forms (2016):
  - T1 General Income Tax and Benefit Return: cra-arc.gc.ca/E/pbg/tf/5010-r/5010-r-16e.pdf
  - Federal Worksheet: cra-arc.gc.ca/E/pbg/tf/5000-d1/5000-d1-16e.pdf
  - Provincial Worksheet: cra-arc.gc.ca/E/pbg/tf/5010-d/5010-d-16e.pdf
  - Schedule 11 (Tuition, Education and Textbook Amounts): cra-arc.gc.ca/E/pbg/tf/5005s11/5005-s11-16e.pdf
  - T778 (Child Care Expenses Deduction): cra-arc.gc.ca/E/pbg/tf/t778/t778-16e.pdf
  - British Columbia Tax (Form BC428): cra-arc.gc.ca/E/pbg/tf/5010-c/5010-c-16e.pdf

#### Table IV includes the following information:

- El Premiums: the El premium rate and formula
- CPP Premiums: the CPP premium rate and formula
- Federal taxes:
  - Basic personal amount
  - Tax rates
  - Tax brackets and corresponding tax rates
  - Tax credits
    - El Premiums
    - CPP Premiums
    - Employment Tax Credit
    - Public Transit Credit (if applicable)
    - Children's Fitness and Arts Tax Credits
    - Tuition, education and textbook amount
    - Medical expenses
- Provincial taxes:
  - Basic personal amount
  - Tax rates
  - Tax brackets and corresponding tax rates
  - Tax credits
    - El Premiums
    - CPP Premiums
    - Back-to-School Tax Credit
    - Children's Fitness and Arts Tax Credits
    - Tuition, education and textbook amount
    - Medical expenses
  - BC Tax Reduction

The Excel spreadsheet allocates federal and provincial tax credits between the parents in the way that is most advantageous to the family. There is a table in each of the first two tabs of the Excel spreadsheet that indicates how these credits have been assigned for the living wage calculation.

Table 7 explains the lines in Table IV of the Excel spreadsheet.

Table 7: Tax Calculations	
Line	Explanation
Hours / Week	This is determined by your assumptions (the calculation for Metro Vancouver and Greater Victoria is 35 hours per week)
Wage	This amount is determined after all the tables have been completed
Employment Income	This is total earnings = hourly wage x hours per week x weeks per year
Adjustments	Subtract child care expenses claimed Child care expenses must be claimed by the spouse with the lower income
Net Income	= "Employment Income" plus "Adjustments"
EI Premiums	= "Employment Income" x premium rate (2016: premium rate = 0.0188)
CPP Premiums	= ("Employment Income" – \$3,500) x premium rate (2016: premium rate = 0.0495)
Federal Income Tax	See below
Federal Refundable Tax Credit	See below
Provincial Income Tax	See below
After Tax Income	= "Employment Income" – El Premiums – CPP Premiums – Federal Income Tax – Provincial Income Tax
Monthly After Tax Income	= "After Tax Income" / 12

To calculate the living wage, you need to determine both employment income and net (or taxable) income.

#### CALCULATING TAXABLE INCOME FROM EMPLOYMENT INCOME

The following adjustment is made in calculating Taxable Income from Total or Employment Income.

Child care expenses are deducted from Employment Income.

#### Therefore:

Net (taxable) Income = Employment Income – Child care Expenses.

Regarding this calculation, there are two relevant tax rules (2016):

- The spouse with the lower income must claim the child care expenses.
- The amount of child care expenses that can be claimed is limited as follows:
  - For children born 2010 or later, \$8,000.
  - For children born between 2000 and 2009, \$5,000.

Note that the Excel spreadsheet includes a formula to determine the correct amount of the child care expense to be claimed, based on the actual family expense and the amount of child care subsidy received.

#### FEDERAL INCOME TAX

The structure of the federal income tax calculation is as follows:

Tax = (Taxable Income x tax rate) – (Non-refundable Tax Credits x tax credit rate) – (Refundable Tax Credits x Tax credit rate)

Table 8: Federal Non-refundable Tax Credits (2016)				
Tax Credits	Comments	Claimed by Parent		
Basic Personal Amount	= \$11,474 in 2016	Both		
El Premiums	= B52 or C52 in the Excel spreadsheet	Both		
CPP Premiums	= B53 or C53 in the Excel spreadsheet	Both		
Canada Employment Amount	= \$1,161 in 2016	Both		
Public Transit Credit	= I50 (Amount of monthly bus passes and/or U-Pass costs)	"2"		
Children's Fitness and Arts Tax Credits	= I48 (We assume the family spends \$500 per child on eligible sports or arts programs during the year)	"2"		
Tuition, education and textbook amount	= I51 (\$109.55 average/credit x 3 credits/course x 2 courses) + 120 x 8 (= \$120/month x 8 months in school) + 20 x 8 (= \$20/month x 8 months in school (textbooks))	"2"		
Medical expenses	= Family medical expenses: C16 in the Excel spreadsheet  - Net income (B51 in the Excel spreadsheet) x 0.03  Note: To be eligible to claim medical expenses, the family's annual medical expenses must be greater than 3% of the net income of the person claiming the expenses.	"1"		

Non-refundable tax credits reduce the amount of tax an individual has to pay, but only up to the amount of tax owed. If the amount of non-refundable tax credits exceeds the amount of tax owed, the person does not benefit from these extra tax credits (they either lose the credits or, in some rare cases as with the tuition amount, these can be carried over for future years or transferred to a spouse). Refundable tax credits, as the name suggests, can be refunded by the government if the amount of credits the person is eligible for exceeds the amount of tax owed. The spreadsheets include a separate line in Table IV for refundable tax credits to ensure that non-refundable tax credits do not result in negative tax owing.

Note that only families in communities with a very low cost of living will qualify for the federal non-refundable tax credits.

#### **Federal Refundable Tax Credits**

Table 9: Federal Refundable Tax Credits (2016)				
Tax Credits	Comments	Claimed by Parent		
Working Income Tax Benefit	= 1,972 – (Family Net income – 17,234) x 0.165 Note: To be eligible for the Working Income Tax Benefit, the family's net income minus UCCB must be less than 29,186.	"2"		
Refundable Medical Expense Supplement	= 0.25 x [Family medical expenses (C16 in the Excel spreadsheet)  - Net income (B51 in the Excel spreadsheet) x 0.03] – 0.05 x [Family Net Income – 26,277]  Note: To be eligible to claim the Refundable Medical Expense Supplement, the person must be eligible for the non-refundable medical expenses tax credit, and their family net income must be lower than 50,017.	"1"		

#### **Federal Tax Brackets**

For 2016, the tax rate on taxable income less than \$45,282 is 15 per cent. For taxable income between \$45,282.01 and \$90,563 it is 20.5 per cent. Therefore, if the taxable income of either parent increases above \$45,282, the formula for "Taxable Income x tax rate" becomes:

Taxable Income x tax rate =  $(\$45,282 \times 0.15) + ((Taxable income - \$45,282) \times 0.205)$ 

#### **Provincial Income Tax**

The structure of the provincial income tax calculation is as follows:

Tax = (Taxable Income x tax rate) – (Tax Credits x tax credit rate) + BC Tax Reduction (If available)

Table 10: BC Provincial Tax Credits (2016)				
Tax Credits	Comments	Claimed by Parent		
Basic Personal Amount	= \$10,027 in 2016	Both		
El Premiums	= B52 or C52 in the Excel spreadsheet	Both		
CPP Premiums	= B53 or C53 in the Excel spreadsheet	Both		
Children's Fitness and Arts Tax Credits	= I48 (We assume the family spends \$500 per child on eligible sports or arts programs during the year)	"2"		
Back-to-School Tax Credit	= 149 (\$250 is available for each school-aged child)	"2"		
Tuition, Education and Textbook Amount	= I51 (\$109.55 average/credit x 3 credits/course x 2 courses) + 60 x 8 (= \$60/month x 8 months in school)	"2"		
Medical Expenses	<ul> <li>= Family medical expenses: C16 in the Excel spreadsheet</li> <li>- Net Income (B51 in the Excel spreadsheet) x 0.03</li> <li>Note: To be eligible to claim medical expenses, the family's annual medical expenses must be greater than 3% of the net income of the person claiming the expenses.</li> </ul>	"1"		

Note that currently there are no refundable BC tax credits that the model living wage family would qualify for.

#### The BC Tax Reduction

The BC Tax Reduction is a non-refundable tax credit which reduces the provincial income tax bill for people with net income less than \$31,647. Unlike other tax credits that can only be claimed by one person in the family, the BC Tax Reduction can be claimed by both parents as long as their individual net income is below the threshold.

It is calculated according to the formula (2016):

In the Metro Vancouver calculation, only Parent "1" is eligible for the BC Tax Reduction. However, if the living wage in your community is below \$17.38 Parent "2" may also be eligible. The Excel spreadsheet will automatically adjust provincial taxes for Parent "2" if that is the case.

#### **Provincial Tax Brackets**

For 2016, the tax rate on taxable income less than \$38,210 is 5.06 per cent. For taxable income between \$38,210.01 and \$76,421, it is 7.7 per cent. Therefore, if the taxable income of either parent increases above \$38,210, the formula for "Taxable Income x tax rate" becomes:

Taxable Income x tax rate =  $(\$38,210 \times 0.0506) + ((Taxable income - \$38,210) \times 0.077)$ 

# Stage 4: Determining the Living Wage Amount

This step is the easiest. Examine Table III in the Excel spreadsheet. Cell C40 is the gap between Available Annual Income and Annual Family Expenses. The living wage amount is the wage at which the gap is as small as possible while still being greater than \$0.

Therefore, if the gap line is negative, increase the living wage amount in Cell B47. If the gap line is positive, reduce the living wage amount in Cell B47 until the gap is negative, and then increase it until the gap line has the lowest possible positive amount.

# Stage 5: Calculating the BC Child Care Subsidy

If the values in Cells H39 or H40 are positive, the family is eligible for the provincial child care subsidy. If this is the case, consult Appendix A. The Metro Vancouver living wage income is too high for the family to receive a child care subsidy.

## Stage 6: Verifying the Calculations

You can verify some of the calculations that are part of the living wage calculation through online calculators.

- CCB, BC early childhood tax benefit, GST credit and BCLICATC: The Canada Revenue Agency
  provides a child and family benefits calculator online at: cra-arc.gc.ca/bnfts/clcltr/cfbc-eng.html.
- RAP: The BC government provides a Rental Assistance Program benefits calculator online at: bchousing.org/programs/RAP/info\_applicants/calculator.

You are finished.

### Sources

The following resources were referenced in the calculation of the living wage for Metro Vancouver.

- Canada Mortgage and Housing Corporation, 2017, Housing Market Information Portal, https://www03.cmhc-schl.gc.ca/hmiportal/en/#Profile/1/1/Canada
- Canada Revenue Agency, 2016 Tax Forms: T1 General 2016, Federal Tax Schedule 1, Schedule 6, Schedule 11, T778 (Child care expense deduction), British Columbia Tax BC428, Provincial Worksheet, BC Tax Schedule 11. cra-arc.gc.ca/formspubs/t1gnrl/bc-eng.html
- Canada Revenue Agency, Canada Child Benefits, July 2016 to June 2017. cra-arc.gc.ca/E/pub/tg/t4114/t4114-e.html
- Canada Revenue Agency, GST/HST Credit, July 2016 to June 2017. cra-arc.gc.ca/E/pub/tg/rc4210/rc4210-e. html
- Canada Revenue Agency, General Income Tax and Benefit Guide 2016. cra-arc.gc.ca/E/pub/tg/5000-g/5000-g-01-16e.html
- Child Care Subsidy Act and the Child Care Subsidy Act Regulations, R.S.B.C. 1997 [includes amendments up to B.C. Reg. 171/2014, Sept 8, 2014]. bclaws.ca/EPLibraries/bclaws\_new/document/ID/freeside/74\_97
- Dietitians of Canada, BC Region, The Cost of Eating in BC 2007, dietitians.ca/bccostofeating
- Government of Canada, Budget 2017, budget.gc.ca/2017/docs/plan/toc-tdm-en.html
- Hatfield, Michael, Wendy Pyper and Burton Gustajtis. First Comprehensive Review of the Market Basket Measure of Low Income. Applied Research Branch paper. Human Resources and Skills Development Canada. June 2010. publications.gc.ca/collections/collection\_2011/rhdcc-hrsdc/HS28-178-2010-eng.pdf
- Pacific Blue Cross, website. pac.bluecross.ca
- Provincial Health Services Authority, 2016, Food Costing in BC 2015, phsa.ca/population-public-health-site/Documents/2015%20Food%20Costing%20in%20BC%20-%20FINAL.pdf
- Quality of Life CHALLENGE, The Calculation of a Living Wage for the Capital Regional District of BC, May 2006.
- Statistics Canada, 2017, Consumer Price Indexes, 2007 to 2016.
- Translink website, Fares and Passes, translink.ca/en/Fares-and-Passes/Monthly-Pass.aspx
- Westcoast Child Care Resource Centre, Westcoast Family Information & Referral Fee Surveys as of September 1, 2016. wstcoast.org/parents/fees.html

## **BC Child Care Subsidy**

An additional factor that may affect your living wage is the provincial child care subsidy (PCCS). This is an income-tested benefit. If the family is eligible for it, the effect is that it increases transfers from the government and thereby reduces the living wage. However, this reduction is lessened because the subsidy generally increases taxable income.

#### QUESTION 1: DO YOU NEED TO INCORPORATE PCCS INTO YOUR LIVING WAGE?

If there are positive values for either subsidy in Cells H39 or H40 of the Excel spreadsheet, the family is eligible for the PCCS and it will affect the living wage. The total monthly subsidy would be the sum of any positive values in these cells.

#### QUESTION 2: HOW DO YOU FACTOR THE PCCS INTO THE LIVING WAGE CALCULATION?

If the living wage for your community has been calculated previously, use last year's living wage family income to determine the amount of child care subsidy (and other government transfers) that the family would be eligible for. The Excel spreadsheet includes a tab titled "Using last year's LW income" that contains all the formulas you will need—just enter last year's living wage family income, government deduction and taxes in Table IIa. This will automatically calculate the correct amount of child care subsidy for each child in Cell H39 and Cell H40. If one of Cell H39 or Cell H40 has positive values, enter the positive value in Cell B31 (do not subtract the negative value). If both Cell H39 and Cell H40 have positive values, enter the sum of these positive values in Cell B31. If both cells have a negative value, the family does not qualify for the childcare subsidy, so Cell B31 should be set to 0.

If this is the first time that the living wage is being calculated for your community, the subsidy cannot be incorporated directly into the Excel spreadsheet because it creates a circular formula that the Excel spreadsheet cannot calculate. Therefore, the following process should be followed.

The process is based on the family having child care expenses equal to or greater than the maximum child care subsidy. If the actual expenses are less than the maximum, then substitute the actual amounts for the amounts in the "Max. Subs." column under Table III in the spreadsheet.

Step 1: If either or both Cell H39 or Cell H40 have positive values, enter the sum of those with positive values in Cell B31.

Step 2: The formula in Cell B50 will automatically calculate the Adjustments that need to be applied to taxable income based on the child care subsidy received.

#### Step 3:

- 3.A Adjust the living wage amount in Cell B47 to equate Annual Family Income and Expenses (Cell C40).
- 3.B Changing the living wage amount will change the family net income and may change the amount of child care subsidy the family is eligible for. Check Cell H39 and H40. If either or both of these cells have positive values, the sum of those positive values should be equal to the amount in Cell B31. Adjust Cell B31 accordingly.
- 3.C Repeat 3.A and 3.B until both:
  - The gap between annual income and expenses in Cell C40 is the lowest possible positive value, and
  - The amount of child care subsidy in the PCCS Table (the sum of positive values in Cell H39 and Cell H40) and Cell B31 are the same.

#### PCCS SUBSIDY FORMULA

The *Child Care Subsidy Regulation* in section 8 provides the following formula for child care subsidies. The subsidy amount for each child in the family is calculated separately.

PCCS = A - B

A = the lesser of:

- the maximum child care subsidy for the child, or
- the actual amount of the child care expense.

B = Amount of A x . 5 x (family net income – that child's threshold)

Amount of A for all children

In the PCCS Table in the Excel spreadsheet:

- The subsidy amount is set to the maximum because in Metro Vancouver actual average monthly child care expenses are greater than the maximum subsidy;
- The four year old is in licensed group child care and based on his or her age has a maximum subsidy amount of \$550 per month; and
- The seven year old is in "Surrounding School Day" care, and the amount is for "More than 4 Hours Daily or both before- and after-school care provided," which is \$210.00 per month. The amount for "4 Hours or Less Daily" is \$175.00 per month.

The maximum child care subsidies are found in Schedule A of the *Child Care Subsidy Regulation*. Family Net Income is income from employment less federal and provincial taxes and El and CPP contributions. The child's threshold is calculated based on information in section 10 of the *Child Care Subsidy Regulation*.

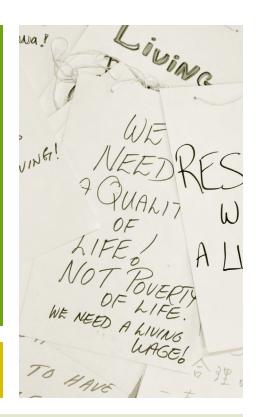


The Living Wage for Families Campaign was formally launched in the fall of 2008 with the publication of Working for a Living

Wage and is guided by an advisory committee made up of representatives from unions, businesses, parents, and immigrant and community groups. Since its inception the campaign has hosted a number of events and engaged in extensive outreach with community, labour, immigrant and faith partners. It has developed a Living Wage Employer recognition process to recognize employers across BC that pay a living wage. It has worked with local partners to encourage local municipalities to pass living wage bylaws.

Contact us at 604.975.3347 or info@livingwageforfamilies.ca.

livingwageforfamilies.ca





First Call: BC Child and Youth Advocacy Coalition is a non-partisan coalition of over 95 provincial and regional organizations who have united their voices to put children and youth first in BC through public education, community mobilization, and public policy advocacy.

#### firstcallbc.org

810-815 West Hastings St. Vancouver, BC V6C 1B4 604.709.6962 info@firstcallbc.org



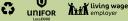
The Canadian Centre for Policy Alternatives is an independent, non-partisan research institute concerned with issues of social, economic and environmental justice. Founded in 1980, it is one of Canada's leading progressive voices in public policy debates.

520 - 700 West Pender Street Vancouver, BC V6C 1G8 604.801.5121 | ccpabc@policyalternatives.ca

policyalternatives.ca







The original living wage research was part of the Economic Security Project, a research alliance led by the CCPA-BC and Simon Fraser University. The ESP was funded primarily by a grant from the Social Science and Humanities Research Council of Canada (SSHRC) through its Community-University Research Alliance program.

Thanks to Tim Richards, Michael Godberg and Seth Klein for their advice and guidance.

#### **ABOUT THE AUTHORS:**

Iglika Ivanova is a Senior Economist and Public Interest Researcher at the CCPA-BC.

Pamela Reaño was a research assistant at the CCPA-BC in the spring of 2017. She is currently completing a Masters of Social Work at the University of British Columbia.

The opinions in this report, and any errors, are those of the authors, and do not necessarily reflect the views of the publishers or their funders, sponsors or supporters.

This publication is available under limited copyright protection. You may download, distribute, photocopy, cite or excerpt it provided it is credited and not used for commercial purposes. Per-mission is required for all other uses.

Layout by Paula Grasdal. Design by Nadene Rehnby and Pete Tuepah, handsonpublications.com

April 2017

ISBN: 978-1-77125-343-7