

Working for a Living Wage

Making Paid Work Meet Basic Family Needs in Metro Vancouver

Calculation Guide

A technical appendix to the report *Working for a Living Wage*, updated for 2014, 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.

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The 2014 Living Wage update and original 2008 full report are available at policyalternatives.ca/livingwage2014

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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 Vancouver and Victoria living wages in 2008. 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 a public report that promotes the concept of a living wage and the arguments in favour of its adoption by employers: *Working for a Living Wage 2008: Making Paid Work Meet Basic Family Needs in Vancouver and Victoria* (released in September 2008 by CCPA–BC, First Call, and the Victoria Community Council). *Working for a Living Wage 2008* presented the amounts of the living wages (using data as of the end of 2007) for Vancouver and Victoria and summarized the assumptions in the calculation, the formula that calculates the living wage, and how the family expenses were calculated. The original 2008 full report, as well as the *Living Wage Update 2014* report, can be downloaded at policyalternatives.ca/livingwage2014.

This detailed, step-by-step guide explains how you can calculate the amount of a living wage for your community. This involves calculating family expenses, government transfers, and government taxes. You could proceed by making adjustments only to family expenses based on costs in your community (skipping Stages 2 and 3 as outlined in the next section), and hope that the government transfer and tax formulas do not change due to the income level of the family. However, as you read through the guide, you will appreciate that this hope may not be well founded, and it is prudent to work through the details of the government transfer and tax information as well.

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 it must be revised 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.

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

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: CCTB, UCCB, GST/HST credits, BCLICATC, RAP;

Stage 3: Calculating Government Deductions and Taxes;

Stage 4: Determining the Living Wage Amount;

Stage 5: 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/livingwage2014). 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 CCTB, the GST/HST credits 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.

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 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 H40 or H41 of the two parent two child Excel spreadsheet. If this is the case, after completing the following steps you will need to consult Appendix A on page 23 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.

$$\text{Annual family expenses} = \text{Income from employment (living wage)} + \text{Income from government transfers} - \text{EI and CPP premiums, federal and provincial taxes}$$

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 2014, we chose:

- Family expenses amounts at December of 2013;
- Government transfer amounts for the July 2013 to June 2014 time period; and
- Government deductions and taxes for the 2013 tax year.

THE MECHANICS OF THE EXCEL SPREADSHEET

The following explains the structure and components of the Excel spreadsheet and how the elements of the spreadsheet are integrated to calculate the living wage. The spreadsheet has the following five tables.

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 C33 in Table II is the total annual amount of government transfers received by the family.
- Cells B47 and C47 in Table IV are the hours per week of employment for each parent.
- Cells B48 and C48 in Table IV are the hourly wages for each parent. These are set to be equal.
- Cells B50 and C50 in Table IV are the annual incomes from employment for each parent.
- Cell D58 in Table IV is the total annual amount of employment income available for the family after government deductions and taxes have been subtracted.
- Cell C39 in Table III is the family's total annual income: the sum of government transfers and employment income after government deductions and taxes.
- Cell C40 in Table III reproduces the family's total annual expenses.
- Cell C41 in Table III indicates the gap between the family's annual income and its annual expenses.
- Cells I40, I41 and I42 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, total government transfers, and its annual net surplus.

The spreadsheet has two tabs:

- First time LW calculation; and
- Using last year's LW income.

Which tab you use depends on whether this is the first time the living wage for your community has been calculated, as explained in the spreadsheet.

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 2014 Calculation	
Family Characteristics	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 also for Transportation, data providing local amounts was used.

1. Food;
2. Clothing and Footwear;
3. Shelter;
4. Transportation;
5. Other;
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 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 EACH OF THE FAMILY EXPENSES

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

1. Food

INFORMATION NEEDED: 1. The report of the Dietitians of Canada, BC Region, *The Cost of Eating in BC* for the period at which you fix expenses, available at dietitians.ca/bccostofeating. We used *The Cost of Eating in BC 2011*. 2. CPI data for 2011 and 2013 for BC from Statistics Canada at statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ09k-eng.htm. The data used is for the "Food" amount.

The Cost of Eating in BC calculates the cost of food in each provincial health region based on a stratified 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 2007 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 food basket in BC 2011" table (Table 4 on page 8 of *The Cost of Eating in BC 2011*), based on the number, gender, and age of the parents and children.

Step 2: Consult the map (page 5 of *The Cost of Eating in BC 2011*) to determine the average monthly food expense for *The Cost of Eating in BC* sample family ("BC Average").

Step 3: Consult the map (page 5 of *The Cost of Eating in BC 2011*) to determine the average monthly food expense for *The Cost of Eating in BC* sample family for the health authority in which your community is located.

Step 4: Calculate the monthly food expense with the formula:

$$\frac{\text{Amount from Step 1}}{\text{Amount from Step 2}} \times \text{Amount from Step 3}$$

Step 5: Adjust 2011 food expenses to 2013 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. To reflect this, in Step 3 we used a weighted average of the sample family's food expense amounts for the Vancouver Coastal Health Authority (\$944.16 in 2011) and the Fraser Health Authority (\$851.07 in 2011), with each weighted by their respective populations. Population estimates by health authority for 2013 from BC Stats, bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx.

2. Clothing and Footwear

INFORMATION NEEDED: 1. Statistics Canada, CANSIM Table 202-0809 provides the amounts for this expense, <http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=2020809&paSer=&pattern=&stByVal=1&p1=-1&p2=50&tabMode=dataTable&csid=>. 2. CPI data for 2011 and 2013 for BC from Statistics Canada, statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ09k-eng.htm. The data used is for the “Clothing and Footwear” amount.

3. Shelter

The Shelter expense uses the following formula:

$$\text{Shelter} = \text{Rent} + \text{Utilities} + \text{Telephone} + \text{Content Insurance on Possessions}$$

Rent

INFORMATION NEEDED: Canada Mortgage and Housing Corporation (CMHC) *Advanced Affordable Housing Solutions* report for Fall 2013, cmhc.ca/en/inpr/afhoce/fias/upload/Criteria.pdf.

The calculation for Vancouver was based on the median rent for three-plus bedroom apartments for the family of four.

Rent data may be difficult data to obtain for smaller communities. The CMHC produces the Rental Market Statistics report in the fall and spring of each year, and this report provides average rents for bachelor, one, two and three-plus bedroom apartments by selected municipalities (urban centers with a population over 10,000). The latest report can be found at <https://www03.cmhc-schl.gc.ca/catalog/productDetail.cfm?cat=124&itm=1&lang=en&fr=1396459485230>.

Utilities

INFORMATION NEEDED: 1. The Dietitians of Canada, BC Region, *The Cost of Eating in BC 2007*, dietitians.ca/bccostofeating. 2. CPI data for 2007 and 2013 for BC from Statistics Canada, CANSIM Table 326-0021, <http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3260021&paSer=&pattern=&stByVal=1&p1=-1&p2=-1&tabMode=dataTable&csid=>. The data used is for the “Water, fuel and electricity” amount.

The utilities amount was taken from page 12 of the 2007 report. It is based on a Statistics Canada Custom Tabulation, based on the following:

- 2001 Census, 20% Sample, for BC Urban Centre, 500,000 or more population;
- CPI adjusted to June 2007; and
- Couple with two children, three-bedroom apartment, at 25th percentile.

The Cost of Eating in BC 2011 report is not used because this report did not provide updated utilities expenses.

Telephone

INFORMATION NEEDED: Telus phone plan rates (unbundled, price after the first six months promotional rate). Note that at present phone rates are the same throughout BC. telus.com/content/home-phone/.

Item	Monthly
Residence line	\$30.00
Voice mail	included
Long distance	\$6.00
GST at 5% (applies to all charges)	\$1.80
PST at 7% (applies to long distance charges only)	\$0.42
Total	\$38.22

Contents Insurance

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

We phoned several insurers providing contents insurance. Quotes were approximately \$30 per month for Vancouver, and this amount was used for the 2014 calculations.

4. Transportation

INFORMATION NEEDED: 1. Statistics Canada, CANSIM Table 202-0809 provides the amounts for this expense, <http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=2020809&paSer=&pattern=&stByVal=1&p1=1&p2=50&tabMode=dataTable&csid=>. 2. CPI data for 2010 and 2013 for BC, from Statistics Canada, statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ160k-eng.htm. The data used is for the "Operation of passenger vehicles."

The formula for the transportation expense is as follows.

$$\text{Transportation} = \text{Vehicle} + \text{Public Transit}$$

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 2013 prices.

Public Transit: The 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 2014 calculation is based on eight months of U-Pass eligibility.

5. Other

INFORMATION NEEDED: Statistics Canada CANSIM Table 202-0809 (see top of page 8 of this guide).

The MBM calculates the Other expense at 75.4% of the combined expense for Food and Clothing and Footwear.

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, and one month and two weeks of 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 Vancouver was obtained from the Westcoast Child Care Resource Centre, wstcoast.org/parents/fees.html. The “city-wide” median value for child care fees was used.

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.

Premiums are based on family size. 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. Families with net adjusted income lower than \$30,000 are eligible for at least partial subsidy.

More information is available at policyalternatives.ca/livingwage2014. The Excel spreadsheet contains the formula for calculating the amount based on family income in Cell B17, so you will not need to modify this cell. At the living wage income the family pays the maximum of \$138.50/month.

8. Non-MSP Health Care Expenses

INFORMATION NEEDED: An online quote from Pacific Blue Cross (or an equivalent private health insurance plan provider): pac.bluecross.ca/pdf-bin/370/34-70-210_rates.pdf.

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 for the expense of purchasing Pacific Blue Cross insurance, under the following terms and circumstances.

- Plan:
 - Blue Choice, Family
 - Age group of oldest person: 35 to 44
- Coverage:
 - Extended Health Care Plan: Yes
 - Prescription Drug Option: Yes
 - Dental Option: Yes

This amount was estimated at \$136/month for the Vancouver family of four in 2014.

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 Vancouver this amount was estimated at \$1,071.80,/year, based on the information in Table 3. This information was obtained on-line for Douglas College douglas.bc.ca/application-services/registration-guide/tuition-fees.html.

Expenses	Douglas College
Course tuition	\$103.30 / credit ¹
Incidental fees	\$101.00 / term
Books and other materials	\$125 / course

Note: ¹ 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. For each, it 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 are:

- Canada Child Tax Benefit (CCTB);
- Universal Child Care Benefit (UCCB);
- GST/HST Credit;
- BC Low Income Climate Action Tax Credit (BCLICATC);
- BC Rental Assistance Program (RAP); and
- BC Child Care Subsidy.

The CCTB and the GST/HST 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 Vancouver 2014 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.

A. THE CANADA CHILD TAX BENEFIT (CCTB)

INFORMATION SOURCES: 1. The Canada Revenue Agency guide “Canada Child Benefits,” for the period from July 2013 to June 2014, cra-arc.gc.ca/E/pub/tg/t41114/t41114-e.html.

The 2014 living wage amounts are based on the CCTB formulas for the July 2013 to June 2014 time period.

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

- Number of children; and
- Family’s net income.

The CCTB formula has the following three components:

- Basic Benefit, which is a monthly amount multiplied by the number of children;
- Benefit Reduction, by means of which the CCTB is reduced when a family’s net income reaches a specified amount; and
- National Child Benefit Supplement (NCBS), which provides an additional amount for families with low income, based on the number of children and the family’s net income.

Table 4 presents the CCTB formula—the numbers in bold and underlined vary with the number of children. All of the numbers, and the formula itself, can change each July.

Table 4: Canada Child Tax Benefit Formula						
CCTB	=	Basic Benefit (BB)	–	Benefit Reduction (BR)	+	National Child Benefit Supplement (NCBS)
CCTB	=	# of dependents x \$1,433	–	(net income – UCCB – \$43,561) x <u>0.04</u>	+	= \$2,221 (first child) + \$1,964 (second child) – (net income – UCCB – \$25,356) x <u>0.23</u>
2 Children	=	2 x \$1,433	–	(net income – UCCB – \$43,561) x <u>0.04</u>	+	= \$2,221 + \$1,964 – (net income – UCCB – \$25,356) x <u>0.23</u>
2 Parents & 2 Children	=	This is in the Excel spreadsheet	–	This is in the Excel spreadsheet	+	This is not in the Excel spreadsheet

The Canada Child Tax Benefit reduction begins at family net income of \$44,761. The National Child Benefit Supplement ceases at family net income of \$44,752. The spreadsheet does not include the NCBS formula in Cell C26 because the Vancouver family income is higher than the threshold at which the supplement ceases. If the living wage income in your community is lower, you may need to add this to the formula.

B. THE UNIVERSAL CHILD CARE BENEFIT (UCCB)

This benefit is \$100/month for each child under six years of age.

INFORMATION SOURCE: Universal Child Care Benefit for the period from July 2013 to June 2014, cra-arc.gc.ca/bnfts/uccb-puge/menu-eng.html.

C. GST/HST CREDIT

INFORMATION SOURCES: Canada Revenue Agency GST/HST Credit – Calculation sheet for the July 2013 to June 2014 payments (2012 tax year), cra-arc.gc.ca/E/pub/tg/rc4210/rc4210-e.html.

The 2014 living wage amounts are based on the GST/HST credit formulas for the July 2013 to June 2014 time period.

This 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 5 presents the GST/HST Credit formula. All of the numbers, and the formula itself, can change each July.

Table 5: GST/HST Credit Formula						
GST/HST Credit	=	Basic Credit	+	Additional Credits	–	Credit Reduction
GST Credit	=	\$265	+	spouse credit = \$265; children credits = \$139 for each child	–	= (net income – UCCB – \$34,561) x 0.05
2 parents and 2 children	=	\$265	+	= \$265 + \$139 + \$139	–	= (net income – UCCB – \$34,561) x 0.05

For a two-parent, two-child family, the GST/HST credit ceases at a family net income of \$51,921.

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. It is paid in the same cheque as 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 6: 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 – \$37,552) x 0.02
2 parents and 2 children	=	\$115.50	+	\$115.50 + \$34.50 + \$34.50	-	(net income – \$37,552) x 0.02

For a two-parent, two-child family, the BCLICATC ceases at a family net income of \$53,752.

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 total 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:

$$\text{RAP} = (\text{Adjusted Rent Amount} - 30\% \text{ of Total Income}) \times (0.35 + 0.01 \times (\$35,000 - (\text{Employment Income} + \text{UCCB})) / \$25,000 / 55)$$

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

Table 7: Rental Assistance Calculation		
	Metro Vancouver	Other areas of BC
Family of 3 or less	\$975	\$900
Family of 4 or more	\$1,100	\$940

Total income is employment income plus the UCCB. If the family is eligible for a RAP payment and amount calculated under the formula is less than \$50, the program pays the family \$50.

F. BC CHILD CARE SUBSIDY

Consult Stage 5 on page 21 and Appendix A on page 23 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 2013: cra-arc.gc.ca/E/pub/tg/5000-g/5000-g-01-13e.html
- Income Tax Forms (2013):
 - T1 General Income Tax and Benefit Return: cra-arc.gc.ca/E/pbg/tf/5000-r/5000-r-13e.pdf
 - Federal Worksheet: cra-arc.gc.ca/E/pbg/tf/5000-d1/5000-d1-13e.pdf
 - Provincial Worksheet: cra-arc.gc.ca/E/pbg/tf/5010-d/5010-d-13e.pdf
 - Schedule 11 (Tuition, Education and Textbook Amounts): cra-arc.gc.ca/E/pbg/tf/5005-s11/5005-s11-13e.pdf
 - T778 (Child Care Expenses Deduction): cra-arc.gc.ca/E/pbg/tf/t778/t778-13e.pdf
 - British Columbia Tax (Form BC428): cra-arc.gc.ca/E/pbg/tf/5010-c/5010-c-13e.pdf

To complete Table IV you will need the following information:

- EI Premiums: the EI 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
 - EI Premiums
 - CPP Premiums
 - Child Tax Credit
 - Employment Tax Credit
 - Public Transit Credit (if applicable)
 - Tuition, education and textbook amount
 - Medical expenses
- Provincial taxes:
 - Basic personal amount
 - Tax rates
 - Tax brackets and corresponding tax rates
 - Tax credits
 - EI Premiums
 - CPP Premiums
 - Tuition, education and textbook amount
 - Medical expenses
 - BC Tax Reduction

In addition, you will need to allocate federal and provincial tax credits between the parents in the way that is most advantageous to the family. The formulas in the Excel spreadsheet indicate how these credits have been assigned for the living wage calculations for Vancouver.

Note that the formulas may lead to the result that the amount payable is less than \$0 or negative. In this situation, where tax rules permit, transfer tax credits to the spouse that is paying income tax. If this is done and the result is still negative, then enter \$0 as the tax payable.

Table 8 explains the lines in Table IV of the Excel spreadsheet.

Table 8: Tax Calculations	
Line	Explanation
Hours / Week	This is determined by your assumptions (the calculation for Vancouver and 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	= the UCCB amount – child care expenses claimed These amounts must be claimed by the spouse with the lower income
Net Income	= “Employment Income” plus “Adjustments”
EI Premiums	= “Employment Income” x premium rate (2013: premium rate = 0.0188)
CPP Premiums	= (“Employment Income” – \$3,500) x premium rate (2013: 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” – EI 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 two adjustments are made in calculating Taxable Income from Total or Employment Income.

- The UCCB amount is added to Employment Income; and
- Child care expenses are deducted from Employment Income.

Therefore:

$$\text{Net (taxable) Income} = \text{Employment Income} + \text{UCCB} - \text{Child care Expenses}$$

Regarding this calculation, there are two relevant tax rules (2013):

- The spouse with the lower income must claim the UCCB and Child care Expenses.
- The amount of child care expenses that can be claimed is limited as follows:
 - For children born 2007 or later, \$7,000.
 - For children born between 1997 and 2006, \$4,000.

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:

$$\text{Tax} = (\text{Taxable Income} \times \text{tax rate}) - (\text{Non-refundable Tax Credits} \times \text{tax credit rate}) - (\text{Refundable Tax Credits} \times \text{Tax credit rate})$$

Table 9: Federal Non-refundable Tax Credits (2013)		
Tax Credits	Comments	Claimed by Parent
Basic Personal Amount	= \$11,038 in 2013	Both
EI Premiums	= B53 or C53 in the Excel spreadsheet	Both
CPP Premiums	= B54 or C54 in the Excel spreadsheet	Both
Canada Employment Amount	= \$1,117 in 2013	Both
Child Tax Credit	= \$2,234 per child	"2"
Public Transit Credit	= Amount of monthly bus passes and/or U-Pass costs	"2"
Tuition, education and textbook amount	= 103.30 x 3 x 2 (= \$103.30 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 (B52 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 includes 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 low cost of living will qualify for the federal non-refundable tax credits.

Federal Refundable Tax Credits

Table 10: Federal Refundable Tax Credits (2013)		
Tax Credits	Comments	Claimed by Parent
Working Income Tax Benefit	$= 1,952 - (\text{Family Net income} - \text{UCCB} - 16,579) \times 0.17$ Note: To be eligible for the Working Income Tax Benefit, the family's net income minus UCCB must be less than 28,062.	"2"
Refundable Medical Expense Supplement	$= 0.25 \times [\text{Family medical expenses (C16 in the Excel spreadsheet)} - \text{Net income (B52 in the Excel spreadsheet)} \times 0.03] - 0.05 \times [\text{Family Net Income} - \text{UCCB} - 25,278]$ 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 (excluding the UCCB) must be lower than 48,118.	"1"

Federal Tax Brackets

For 2013, the tax rate on taxable income less than \$43,561 is 15 per cent. For taxable income between \$43,561 and \$87,123 it is 22 per cent. Therefore, if the taxable income of either parent increases above \$43,561, the formula for "Taxable Income x tax rate" becomes:

$$\text{Taxable Income} \times \text{tax rate} = (\$43,561 \times 0.15) + ((\text{Taxable income} - \$43,561) \times 0.22)$$

Provincial Income Tax

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

$$\text{Tax} = (\text{Taxable Income} \times \text{tax rate}) - (\text{Tax Credits} \times \text{tax credit rate}) + \text{BC Tax Reduction (If available)}$$

Table 11: BC Provincial Tax Credits (2013)		
Tax Credits	Comments	Claimed by Parent
Basic Personal Amount	= \$10,276 in 2013	Both
EI Premiums	= B53 or C53 in the Excel spreadsheet	Both
CPP Premiums	= B54 or C54 in the Excel spreadsheet	Both
Tuition, education and textbook amount	$103.30 \times 3 \times 2 (= 103.230 \text{ average/credit} \times 3 \text{ credits/course} \times 2 \text{ courses})$ $+ 60 \times 8 (= \$60/\text{month} \times 8 \text{ months in school})$	"2"
Medical expenses	$= \text{Family medical expenses: C16 in the Excel spreadsheet} - \text{Net Income (B52 in the Excel spreadsheet)} \times 0.03$ 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"

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 \$30,962. 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 (2013):

$$\text{BC Tax Reduction} = \$409 - (\text{Taxable Income} - \$18,181) \times 0.032$$

In the Vancouver calculation, only Parent "1" is eligible for the BC Tax Reduction. However, if the living wage in your community is below \$17.01, Parent "2" may also be eligible.

Provincial Tax Brackets

For 2013, the tax rate on taxable income less than \$37,568 is 5.06 per cent. For taxable income between \$37,568 and \$75,138, it is 7.7 per cent. Therefore, if the taxable income of either parent increases above \$37,568, the formula for "Taxable Income x tax rate" becomes:

$$\text{Taxable Income} \times \text{tax rate} = (\$37,568 \times 0.0506) + ((\text{Taxable income} - \$37,568) \times 0.077)$$

Stage 4: Determining the Living Wage Amount

This step is the easiest. Examine Table III in the Excel spreadsheet. Cell C41 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 B48. If the gap line is positive, reduce the Living Wage amount in Cell B48 until the gap is negative, and then increase it until the gap line has its lowest possible positive amount.

Stage 5: BC Child Care Subsidy

If the values in Cells H40 or H41 are positive, the family is eligible for the provincial child care subsidy. If this is the case, consult Appendix A. The 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 on-line calculators.

- CCTB: The Canada Revenue Agency provides a CCTB benefits calculator online at:
cra-arc.gc.ca/bnfts/clcltr/cctb_clcltr-eng.html
- GST/HST and BCLICATC: The Canada Revenue Agency provides a GST/HST credit and related provincial programs calculator online at:
cra-arc.gc.ca/bnfts/clcltr/gstc_clcltr-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 Vancouver.

Canada Mortgage and Housing Corporation, *Advancing Affordable Housing Solutions: Affordability Criteria Tables*, Fall 2013. cmhc.ca/en/inpr/afhoce/fias/upload/Criteria.pdf

Canada Revenue Agency, 2013 Tax Forms: T1 General 2013, 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 2013 to June 2014. cra-arc.gc.ca/E/pub/tg/t4114/t4114-e.html

Canada Revenue Agency, GST/HST Credit, July 2013 to June 2014. cra-arc.gc.ca/E/pub/tg/rc4210/rc4210-e.html

Canada Revenue Agency, *General Income Tax and Benefit Guide – 2013*. cra-arc.gc.ca/E/pub/tg/5000-g/5000-g-01-13e.html

Child Care Subsidy Act and the Child Care Subsidy Act Regulations, R.S.B.C. 1997 [includes amendments up to B.C. Reg. 56/2012, April 1, 2012]. bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/74_97

Dietitians of Canada, BC Region, *The Cost of Eating in BC 2007* and *The Cost of Eating in BC 2011*, dietitians.ca/bccostofeating

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

Quality of Life CHALLENGE, *The Calculation of a Living Wage for the Capital Regional District of BC*, May 2006.

Statistics Canada, Consumer Price Indexes, 2007, 2008, 2009, 2010, 2011, 2012 and 2013.

Statistics Canada, *Income in Canada 2010*. Table 202-0809. June 2012. statcan.gc.ca/pub/75-202-x/2010000/s8-eng.htm

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, 2013. 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 H40 or H41 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 H40 and Cell H41. If one of Cell H40 or Cell H41 has positive values, enter the positive value in Cell B32 (do not subtract the negative value). If both Cell H40 and Cell H41 have positive values, enter the sum of these positive values in Cell B32. If both cells have a negative value, the family does not qualify for the childcare subsidy, so Cell B32 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 can not calculate. Therefore, the following process should be followed.

The following 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 H40 or Cell H41 have positive values, enter the sum of the those with positive values in Cell B32.

Step 2: The formula in Cell B51 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 B48 to equate Annual Family Income and Expenses (Cell C41).

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 H40 and H41. If either or both of these cells have positive values, the sum of those positive values should be equal to the amount in Cell B32. Adjust Cell B32 accordingly.

3.C Repeat 3.A and 4.B until both:

- The gap between annual income and expenses in Cell C41 is the lowest possible positive value, and
- The amount of child care subsidy in the PCCS Table (the sum of positive values in Cell H40 and Cell H41) and Cell B32 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.

$$\text{PCCS} = A - B$$

A = the lesser of:

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

$$B = \frac{\text{Amount of A}}{\text{Amount of A for all children}} \times .5 \times (\text{family net income} - \text{that child's threshold})$$

In the PCCS Table in the Excel spreadsheet:

- The subsidy amount is set to the maximum because in Vancouver actual average monthly child care expenses are greater than the maximum subsidy;
- The four year old is in licenced 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 \$415.00 per month. The amount for "4 Hours or Less Daily" is \$207.50 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 EI and CPP contributions. The child's threshold is calculated based on information in section 10 of the *Child Care Subsidy Regulation*.



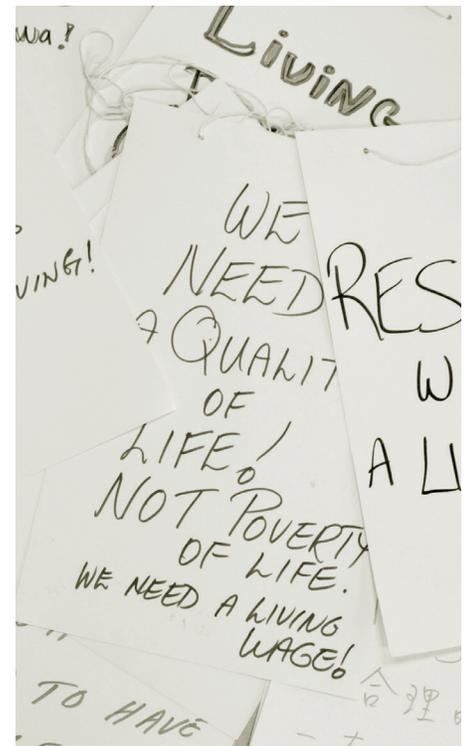
living wage for families campaign

The Living Wage for Families Campaign for Metro Vancouver 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, immigrant and community groups, as well as individual low-wage workers. 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 that pay a living wage. It has worked with local partners to encourage local municipalities to pass living wage bylaws.

Contact us at info@livingwageforfamilies.ca, or through First Call.

livingwageforfamilies.ca



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