

2008

Working for a Living Wage

Making Paid Work Meet Basic Family Needs in Vancouver and Victoria

Calculation Guide

A technical appendix to the report *Working for a Living Wage*, for those seeking to calculate the living wage in their own community

Note: While this guide is most appropriate for BC communities, its methodology should be fairly easily transferable to other Canadian communities.

The *Working for a Living Wage* full report is available from the CCPA, and at www.policyalternatives.ca

Prepared by
Tim Richards

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CCPA
CANADIAN CENTRE
for POLICY ALTERNATIVES
BC Office

- Introduction 2
- Calculating the Living Wage 3
- Stage 1: Family Expenses 6
- Stage 2: Government Transfers 12
- Stage 3: Government Deductions and Taxes 15
- Stage 4: Determining the Living Wage Amount 19
- Stage 5: BC Child Care Subsidy 19
- Stage 6: Verifying the Calculations 19
- Looking Ahead to Changes in the Data and Formulas 20
- Sources 21
- Appendix A: BC Child Care Subsidy 22

Introduction

THE PURPOSE OF THIS GUIDE is to assist others to calculate a living wage for their 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 a 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: Making Paid Work Meet Basic Family Needs in Vancouver and Victoria* (released in September 2008 by CCPA–BC, First Call, and the Community Council). *Working for a Living Wage* presents the amounts of the living wages (using data as of the end of 2007) for Vancouver and Victoria and summarizes the assumptions in the calculation, the formula that calculates the living wage, and how the family expenses were calculated. Both the full report and a short summary can be downloaded at www.policyalternatives.ca/Reports/2008/09/bclivingwage/.

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 upon 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. However, the living wage was also calculated for a single-parent family with one child. This guide notes the changes to the calculation that this requires.

As a caution, the living wage amount is based upon 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 estimation based on the assumptions outlined below and summarized on pages 23 to 33 of *Working for a Living Wage*. 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 and learning which community you live in and the living wage amount.

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

Stage 3: Calculating Government Deductions and Taxes

Stage 4: Determining the Living Wage Amount

Stage 5: BC Child Care Subsidy

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 www.policyalternatives.ca/Reports/2008/09/bclivingwage/). 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 and the GST rebate 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 Cell I38 or I39 of the Excel spreadsheet. If this is the case, after completing the following steps you will need to consult Appendix A on page 22 of this guide.

BACKGROUND INFORMATION

The primary determinates 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.

Thus, 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 2008, we chose:

- Family expenses amounts at December of 2007;
- Government transfer amounts for the July 2007 to June 2008 time period; and
- Government deductions and taxes for the 2007 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

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 C31 in Table II is the total annual amount of government transfers received by the family.
- Cells B45 and C45 in Table IV are the hours per week of employment for each parent.
- Cells B46 and C46 in Table IV are the hourly wages for each parent. These are set to be equal.
- Cells B48 and C48 in Table IV are the annual incomes from employment for each parent.
- Cell D55 in Table IV is the total annual amount of employment income available for the family after government deductions and taxes have been subtracted.
- Cell C37 in Table III is the family's total annual income: the sum of government transfers and employment income after government deductions and taxes.
- Cell C38 in Table III reproduces the family's total annual expenses.
- Cell C39 in Table III indicates the gap between the family's annual income and its annual expenses.
- Cells I38, I39 and I40 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 IV summarizes the family's overall finances, presenting its income from employment, total government taxes, 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 and Victoria.

Table 1: Family Characteristics and Assumptions in the CCPA/First Call Living Wage Calculation		
Family Characteristics	Vancouver/Victoria Living Wage Assumptions	
	Model 1: Two-parent family	Model 2: Single-parent family
Parents		
Number	2	1
Gender	1 female, 1 male	female
Age	between 25 and 40	between 25 and 40
Number of parents in paid work	2	1
Hours of paid work for each parent	35 hours each	35
Hourly wage	equal for both	
Children		
Number	2	1
Gender	1 male, one female	not relevant because the child is 4
Age	boy aged 7, girl aged 4	4

THE CATEGORIES OF FAMILY EXPENSES

Family expenses are divided into ten categories. The first five categories are from the HRSDC 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, Childcare, 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. Childcare
7. MSP Premiums
8. Non-MSP Medical Expenses
9. Parent Education
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: 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 www.dietitians.ca/public/content/resource_centre/index.asp. The 2007 report is available at www.dietitians.ca/news/frm_resource/imageserver.asp?id=1009&document_type=document&popup=true&contentid=1944.

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 based on the federal government's standardized food costing tool, the *National Nutritious Food Basket 1998*, 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 "Monthly Cost of Eating table" (page 11 of *The Cost of Eating in BC in 2007*), based on the number, gender, and age of the parents and children.

Step 2: Determine the amount for the "Family of four" (same table as Step 1).

Step 3: Consult the map (page 4 of *The Cost of Eating in BC in 2007*) to determine the monthly food expense for *The Cost of Eating in BC* sample family.

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

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

Note: For the Vancouver and Victoria wage calculations, we used a weighted average of the amounts for the Vancouver Coastal Health Authority (\$796 in 2007) and the Fraser Health Authority (\$687 in 2007), with each weighted by their respective populations.

2. Clothing and Footwear

INFORMATION NEEDED: *Low Income in Canada: 2000-2002 Using the Market Basket Measure* (www.hrsdc.gc.ca/en/cs/sp/sdc/pkrf/publications/research/2002-000662/SP-628-05-06e.pdf); and the Consumer Price Index (June 2007 was used for the Vancouver and Victoria living wage calculation).

The last page of the MBM report provides the estimate for this expense.

3. Shelter

The Shelter expense uses the following formula:

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

Rent

INFORMATION SOURCE: Canada Mortgage and Housing Corporation (CMHC) *Rental Market Statistics* report for the period at which you fix expenses, available at www03.cmhc-schl.gc.ca/b2c/b2c/init.do?language=en&z_category=0/0000000124. The fall 2007 report is available at www.cmhc-schl.gc.ca/odpub/esub/64725/64725_2007_B02.pdf.

The calculation for Vancouver and Victoria was based on a weighted average of median rents for three-bedroom apartments for the family of four, and two-bedroom apartments for the single-parent family. Both apartments and row housing were included in the number of units. This data was obtained through a custom tabulation from CMHC.

Rent data may be difficult data to obtain for smaller communities. The CMHC produces the Rental Market Statistics Guide 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.

THE SINGLE PARENT FAMILY: The rent amount for the single-parent family was based on a weighted average of the rents for two-bedroom apartments and row housing. The data used to calculate this for the Vancouver and Victoria living wage was obtained through a request for information that was not publicly available.

Utilities

INFORMATION NEEDED: The most recent annual report of the Dietitians of Canada, BC Region, *The Cost of Eating in BC* (see page 7 of this guide).

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, @ 25th percentile.

Telephone

INFORMATION NEEDED: Telus phone plan rates.

Item	Monthly	Comments
Residence line (GST, no PST)	\$ 23.44	Varies from \$22 to \$28
Voice mail (GST, no PST)	5.95	
911 levy (GST, no PST)	.13	
Long Distance (GST and PST)	4.95	200 minutes/month, Canada only
Subtotal	34.47	
PST (7%)	.35	
GST (6%)	2.07	
Total	\$ 36.89	

Contents Insurance

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

We phoned a credit union providing contents insurance quotes. The quotes were approximately \$30 per month for Vancouver and \$23 per month for Victoria.

4. Transportation

INFORMATION NEEDED: *Low Income in Canada: 2000-2002 Using the Market Basket Measure* (see page 8 of this guide); Consumer Price Index to the period at which you fix expenses (June 2007 was used for the Vancouver and Victoria living wage calculation; and local public transit expenses, if applicable.

The formula for the transportation expense is as follows.

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

The Vehicle: This amount is the amount from the MBM, adjusted by CPI.

Public Transit: The two-parent family also has the expense of one two-zone bus pass.

5. Other

INFORMATION NEEDED: *Low Income in Canada: 2000-2002 Using the Market Basket Measure* (see page 8 of this guide).

The MBM calculates the Other expense at 67.5% of the combined expense for Food and Clothing and Footwear.

6. Childcare

INFORMATION NEEDED: Estimates of local childcare expenses.

Our assumptions:

- The four year old is in full-time day care.
- The seven year old is in before and after school care, and six weeks of summer care.

Estimates for childcare expenses for Vancouver and Victoria were available from child care referral centres, which conduct surveys of childcare providers. Fee survey information from the Westcoast Child Care Resource Centre, for example, is available at www.wstcoast.org/parents/choosing.html. Rates for December 2007 were accessed at www.wstcoast.org/pdf/feesurvey/2007feesurveyOOS.pdf.

7. MSP Premiums

MSP premiums are mandatory contributions (a tax/fee) to the provincial health program. (Note: BC is the only province that charges individual/household health care premiums.)

Premiums are based on family size and are also income tested. Information is available at www.health.gov.bc.ca/msp/infoben/premium.html. The Excel spreadsheet contains the formula for calculating the amount based on family income. At the living wage income the family pays the maximum of \$108/month.

The MSP premiums are 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 and less one half of the family’s child care expenses claimed as an expense on their income tax forms. However, the \$3,000 deduction is not available if this amount is being claimed for childcare expenses for income tax purposes.

8. Non-MSP Health Care Expenses

INFORMATION NEEDED: An online quote from Pacific Blue Cross (or an equivalent private health insurance plan provider). www.pac.bluecross.ca/individual/blue_choice/BCRateCalc.html.

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:
 - Family
 - Age: 40
- Coverage:
 - Extended Health Care Plan: Yes
 - Prescription Drug Option: Yes
 - Dental Option: Yes

The amount at the time of the Vancouver/Victoria calculation was \$133/month for the family of four.

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.

THE SINGLE PARENT FAMILY: The non-MSP health expense was calculated in the same manner, and was \$96.00 per month for the Vancouver/Victoria calculation.

9. Parent Education

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

- Tuition;
- Textbooks; and
- Student fees.

This information was obtained on-line for Capilano and Camosun Colleges. For Vancouver and Victoria this amount was estimated at \$1,000/year, based on the information in Table 3.

Table 3: Estimates for the Elements of the Parent Education Expense

Expenses	Capilano College	Camosun College
Course tuition	\$104 / credit	\$70 / credit
Student fees	\$88.10 / term	\$145.24 / term
Books and other materials	\$150 / course	\$150 / course

10. Contingency Amount

The Contingency Amount 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 Rebate; and
- Provincial Child Care Subsidy.

The CCTB and the GST Rebate are based on formulas set in July of each year and the amount remains the same until the following June.

THE CANADA CHILD TAX BENEFIT (CCTB)

INFORMATION SOURCES: Canada Child Benefits for the period from July 2008 to June 2009: www.cra-arc.gc.ca/E/pub/tg/t4114/t4114-08e.pdf; and Canada Child Tax Benefit (CCTB) – Calculation sheet for the July 2007 to June 2008 payments (2006 tax year): www.cra-arc.gc.ca/bnfts/cctb/cctb06byclc-eng.html.

The 2008 living wage amounts are based on the CCTB formulas for the July 2007 to June 2008 time period. There have been small adjustments to these formulas for the July 2008 to June 2009 time period.

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

- The number of children; and
- The family's net income.

The CCTB formula has the following three components:

- The Basic Benefit, which is a monthly amount multiplied by the number of children;
- The Benefit Reduction, by means of which the CCTB is reduced when a family's net income reaches a specified amount; and
- The 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)
2 Children	=	# of dependents x \$106.91/month x 12 months	-	(net income – UCCB – \$37,178) x <u>0.04</u>	+	= (\$165.66/month x 12 months (first child) + \$146.50/month x 12 months (second child)) – ((net income – UCCB – \$20,883) x <u>0.23</u>)
2 Children	=	2 x \$106.91 x 12	-	The BR begins at: \$38,378 (1 child under 6): (= \$37,178 + \$1,200)	-	The NCBS ceases at an income of \$38,377.43 (net income + UCCB) (1 child under 6)
2 Parents & 2 Children	=	This is in the Excel spreadsheet	-	This is in the Excel spreadsheet	-	This is not in the Excel spreadsheet
1 Child	=	# of dependents x \$106.91/month x 12 months	-	(net income – UCCB – \$37,178) x <u>0.02</u>	+	= (\$165.66/month x 12 months – ((net income – UCCB – \$20,883) x <u>0.122</u>)

THE UNIVERSAL CHILD CARE BENEFIT (UCCB)

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

INFORMATION SOURCE: Canada Child Benefits for the period from July 2008 to June 2009: www.cra-arc.gc.ca/E/pub/tg/t4114/t4114-08e.pdf.

GST REBATE

INFORMATION SOURCES: GST/HST Credit for the period from July 2008 to June 2009: www.cra-arc.gc.ca/E/pub/tg/rc4210/rc4210-08e.pdf; and GST/HST Credit – Calculation sheet for the July 2007 to June 2008 payments (2006 tax year): www.cra-arc.gc.ca/bnfts/gsthst/gstclc06-eng.html.

The 2008 living wage amounts are based on the GST rebate formulas for the July 2007 to June 2008 time period. There have been minor adjustments to these formulas for the July 2008 to June 2009 time period.

This is an income-tested benefit and is affected by three factors:

- Whether the parent has a spouse;
- The number of children; and
- The family's net income.

Table 5 presents the GST Rebate formula. All of the numbers, and the formula itself, can change each July.

Table 5: GST Rebate Formula						
GST	=	Basic Credit	+	Additional Credits	-	Credit Reduction
GST	=	\$237	+	spouse credit = \$237; children credits = \$125 for each child	-	= (net income – UCCB – \$30,936) x 0.05
2 parents and 2 children	=	\$237	+	= \$237 + \$125 + \$125	-	The GST rebate ceases at \$46,616.00
1 parent and 1 child	=	\$237	+	= \$237 + \$125	-	= (net income – UCCB – \$30,936) x 0.05

4. PROVINCIAL CHILD CARE SUBSIDY

Consult Stage 5 on page 19 and Appendix A 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: www.cra-arc.gc.ca.
- The General Income Tax and Benefit Guide: (2007) www.cra-arc.gc.ca/E/pub/tg/5000-g/README.html.
- Income Tax Forms (2007):
 - www.cra-arc.gc.ca/E/pbg/tf/5000-r/5000-r-07e.pdf.
 - www.cra-arc.gc.ca/E/pbg/tf/5000-d1/5000-d1-07e.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
 - The B.C. Tax Reduction

In addition, for two-parent families 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 and Victoria.

Note that the formulas may lead to the result that the amount payable is less than \$0.00 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 \$0.00 as the tax payable.

Table 6 explains the lines in Table IV of the Excel spreadsheet.

Table 6: 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
Taxable Income	= "Employment Income" plus "Adjustments"
EI Premiums	= "Employment Income" x premium rate (2007: premium rate = 0.018)
CPP Premiums	= ("Employment Income" – \$3,500) x premium rate (2007: premium rate = 0.0495)
Federal Income Tax	See below
Provincial Income Tax	See below
After Tax Income	= "Employment Income" – EI Premiums – CPP Premiums – Federal Income Tax – Provincial Income Tax

To calculate the living wage, you need to determine both employment income and 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.
- Childcare expenses are deducted from Employment Income.

Therefore:

$$\text{Taxable Income} = \text{Employment Income} + \text{UCCB} - \text{Childcare Expenses}$$

Regarding this calculation, there are two relevant tax rules (2007):

- The spouse with the lower income must claim the UCCB and Childcare Expenses.
- The amount of childcare expenses that can be claimed is limited as follows.
 - For children born 2001 or later, \$7,000.
 - For children born between 1991 and 2000, \$4,000.

Note that in the Excel spreadsheet the maximum amount of the child care expense is claimed, because the actual expense is greater than the \$4,000 and \$7,000 amounts. If your actual amounts are less, you will need to adjust Cell B49 accordingly.

FEDERAL INCOME TAX

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

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

Table 7: Federal Tax Credits (2007)		
Tax Credits	Comments	Claimed By Parent
Basic Personal Amount	= \$9,600 in 2007	Both
EI Premiums	= B48 or C48 in the Excel spreadsheet	Both
CPP Premiums	= B49 or C49 in the Excel spreadsheet	Both
Canada Employment Amount	= \$1,000 in 2007	Both
Child Tax Credit	= \$2,000 per child	"2"
Public Transit Credit	= Amount of monthly bus passes	"2"
Tuition, education and textbook amount	= 104 x 3 x 2 (= \$104/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 – Taxable Income (B50 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 taxable income of the person claiming the expenses.	"1"

Federal Tax Brackets

For 2007, the tax rate on taxable income less than \$37,178 is 15%. For taxable income between \$37,178 and \$74,357, it is 22%. Therefore, if the taxable income of either parent increases above \$37,178, the formula for "Taxable Income x tax rate" becomes:

$$\text{Taxable Income} \times \text{tax rate} = (\$37,178 \times 0.15) + ((\text{Taxable income} - \$37,178) \times 0.22)$$

PROVINCIAL INCOME TAX

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

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

Table 8: BC Provincial Tax Credits (2007)		
Tax Credits	Comments	Claimed By Parent
Basic Personal Amount	= \$9,027 in 2007	Both
EI Premiums	= B48 or C48 in the Excel spreadsheet	Both
CPP Premiums	= B49 or C49 in the Excel spreadsheet	Both
Tuition, education and textbook amount	= 70 x 3 x 2 (= \$70/credit x 3 credits/course x 2 courses) + 60 x 8 (= \$60/month x 8 months in school)	"2"
Medical expenses	= Family medical expenses: C16 in the Excel spreadsheet – Taxable Income (B50 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 taxable income of the person claiming the expenses.	"1"

The B.C. Tax Reduction

The B.C. Tax Reduction reduces the provincial income tax that people earning less than \$27,675.41 (2007) must pay.

It is calculated according to the formula (2007):

$$\text{B.C. Tax Reduction} = \$375 - (\text{Taxable Income} - \$16,646) \times 0.034.$$

Provincial Tax Brackets

For 2007, the tax rate on taxable income less than \$34,397 is 5.7%. For taxable income between \$34,397 and \$67,794, it is 8.65%. Therefore, if the taxable income of either parent increases above \$34,397, the formula for "Taxable Income x tax rate" becomes:

$$\text{Taxable Income} \times \text{tax rate} = (\$34,397 \times 0.057) + ((\text{Taxable income} - \$34,397) \times 0.0865)$$

THE SINGLE PARENT FAMILY: The method of calculating the taxes for the single-parent family is the same as the two-parent family. The differences are that the parent has additional tax credits (2007): federal tax of \$9,600 per year; and provincial tax of \$8,502 per year.

Stage 4: Determining the Living Wage Amount

This step is the easiest. Examine Table III in the Excel spreadsheet. Cell C39 is the Gap between Available Annual Income and Annual Family Expenses. The Living Wage amount is the wage at which Gap is as small as possible while still being greater than \$0.00.

Therefore, if the Gap line is negative, increase the Living Wage amount in Cell B46. If the Gap line is positive, reduce the Living Wage amount in Cell B46 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 I38 or I39 are positive, the family is eligible for the provincial child care subsidy. If this is the case, consult Appendix A.

THE SINGLE PARENT FAMILY: The living wage in the Excel spreadsheet is calculated based on the single parent receiving the maximum child care subsidy of \$550 per month. If the actual amount of the provincial child care subsidy is less than \$550, substitute this amount for the \$550 amount in Cell B49.

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 CCRA provides a CCTB benefits calculator online at: www.cra-arc.gc.ca/bnfts/clcltr/menu-eng.html. Note however, that the calculation in the Excel spreadsheet uses the formula for the July 2007 to June 2008 period.

GST: The CCRA provides a GST rebate benefits calculator online at the same location: www.cra-arc.gc.ca/bnfts/clcltr/menu-eng.html.

You are finished.

Looking Ahead to Changes in the Data and Formulas

After the *Working for a Living Wage 2008* calculation was finalized, there were two changes to data and formulas that will affect subsequent living wage calculations.

- Human Resources and Social Development Canada (HRSDC) issued a report with revised data for the amounts of the Market Basket Measure expenses. Most significantly, the calculation of the “Other” expense is now 69.1% of the combined expenses for Food and Clothing and Footwear. This increased from 67.5%. The more recent report is available at www.hrsdc.gc.ca/en/publications_resources/research/categories/inclusion/2007/sp_682_10_07_e/page03.shtml.
- The CCTB formulas and GST Rebate formulas have changed. The changes are available through the links provided in this guide.

Sources

The following resources were referenced in the calculation of the living wages for Vancouver and Victoria.

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Canada Revenue Agency, *General Income Tax and Benefit Guide – 2007*.

Child Care Subsidy Act and the Child Care Subsidy Act Regulations, R.S.B.C. 1996, ch. 26.

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Greater Vancouver Transportation Authority, Fare Pricing: Cash, FareSaver Tickets and Monthly FareCards.

Human Resources and Social Development Canada, *Low Income in Canada: 2000-02, Using the Market Basket Measure*, June 2006.

Pacific Blue Cross, website.

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

SPARC BC (Social Planning and Research Council of BC), *Left Behind*, December 2005.

Statistics Canada, Consumer Price Indexes, 2002-07.

Victoria Child Care Resources and Referral Centre, Average Child Care Fees, June 2007.

Victoria Regional Transit System, Fare Payment.

Westcoast Child Care Resource Centre, Westcoast Family Information & Referral Fee Survey, December 2007.

The 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 reduces family expenses and thereby reduces the living wage. However, this reduction is lessened because the subsidy also increases taxable income.

Question: Do you need to incorporate PCCS into your living wage?

Answer: If both of the following two circumstances are met, the PCCS will affect the living wage.

1. If there are positive values for either subsidy in Cells H38 and H39 of the Excel spreadsheet. The total monthly subsidy would be the sum of any positive values in these cells.
2. If the amount of the Adjustment for Net Income in Table IV, found in Cells I38, I39 or I40 is greater than $-\$9,800$. If it is less, the PCCS subsidy will not affect the living wage.

If the amount of the subsidy a family receives (Cells H38 or H39) is less than $\$10.00$ per month and the Adjustments are greater than $-\$9,800$, the effect on the living wage is likely too small to bother with.

Question: How do you factor the PCCS into the living wage calculation?

This is a little more complex. 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 of the table in the spreadsheet.

Step 1: Delete the formula of Adjustments in cell B49.

Step 2: Enter the amount of the Adjustments for the family.

- If the family receives a subsidy for only the 4 year old, the amount is that in Cell I38.
- If the family receives a subsidy for only the 7 year old, the amount is that in Cell I39.
- If the family receives a subsidy for both the 4 and 7 year old, the amount is that in Cell I40.

Note: Due to tax rules, the Adjustment amount can not be less than $-\$9,800$. If it is, enter $-\$9,800$.

Step 3:

3.A Adjust the living wage amount in Cell B46 to equate Annual Family Income and Expenses (Cell C39).

3.B Changing the living wage amount will change the Adjustment amount. Enter the Adjustment amount in Cell B49 based upon Step 2.

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

- The gap between annual income and expenses is minimal, and
- The Adjustments amounts in the PCCS Table and Cell B49 are the same.

THE 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 = $\frac{\text{Amount of A}}{\text{Amount of A for all children}} \times .5 \times (\text{Family Net Income} - \text{that Child's Threshold})$

In the PCCS Table in the Excel spreadsheet

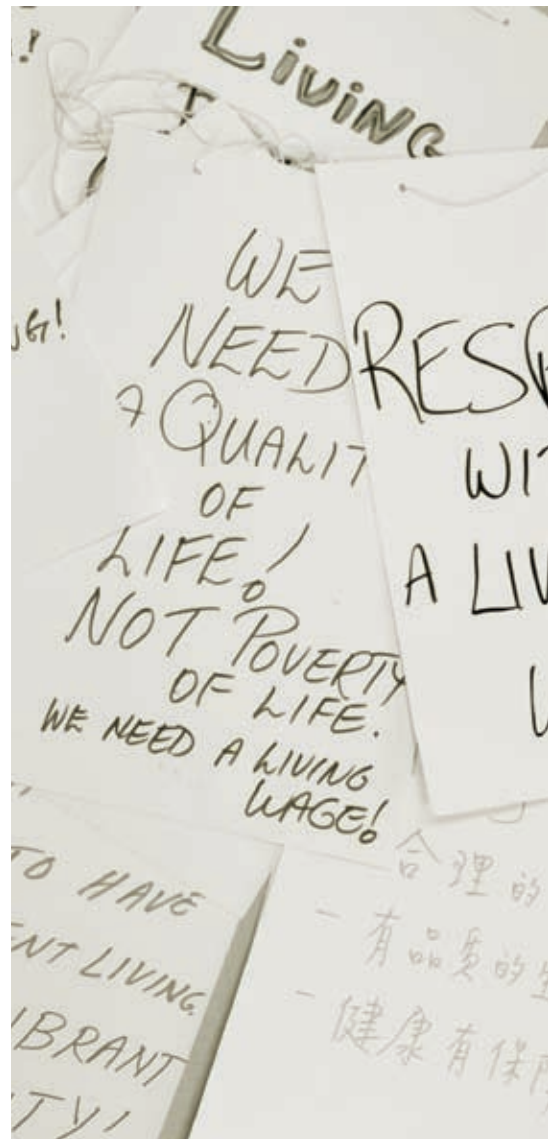
- The subsidy amount is set to the maximum because in Vancouver actual average monthly child care expenses are greater than the maximum subsidy;
- The four year old is in Licenced Group child care and based on his or her age has a maximum subsidy amount of \$550 per month; and
- The seven year old is in "Surrounding School Day" care, and the amount is that for "4 Hours or Less Daily," which is \$170.00 per month. The amount for "More than 4 Hours Daily" is \$200.00 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 EI and CPP contributions. The Child's Threshold is calculated based on information in section 10 of the *Child Care Subsidy Regulation*.

ECONOMIC SECURITY PROJECT

The Economic Security Project is a research alliance led by the CCPA's BC Office and Simon Fraser University, and includes 24 community organizations and four BC universities. It looks at how provincial policies affect the economic well-being of vulnerable people in BC, such as those who rely on social assistance, low-wage earners, recent immigrants, people with disabilities, seniors, youth and others. It also develops and promotes policy solutions that improve economic security.

www.policyalternatives.ca/economic_security



first call

BC Child and Youth Advocacy Coalition

First Call: BC Child and Youth Advocacy Coalition is a non-partisan, province-wide coalition of organizations and individuals committed to promoting child and youth rights and well-being. We focus on public policy, public awareness and mobilizing communities for BC's children.

www.firstcallbc.org

202 – 1193 Kingsway
Vancouver BC
V5V 3C9
604-873-8437
info@firstcall.org



CCPA

CANADIAN CENTRE
for POLICY ALTERNATIVES
BC Office

The Canadian Centre for Policy Alternatives is an independent, non-partisan research institute concerned with issues of social and economic justice. Founded in 1980, it is one of Canada's leading progressive voices in public policy debates. The CCPA is a registered non-profit charity and depends on the support of its more than 10,000 members across Canada.

1400 – 207 West Hastings Street
Vancouver BC V6B 1H7
604-801-5121
ccpabc@policyalternatives.ca

www.policyalternatives.ca



**COMMUNITY
COUNCIL**

The Community Social Planning Council of Greater Victoria is a registered charity whose mission is to provide leadership that brings the community together to create a sustainable quality of life for everyone in BC's Capital Region. The Community Council does this by convening and supporting collaborative initiatives, conducting community-based research and communicating reliable information.

3948 Quadra Street
Victoria BC V8X 1J6
250-383-6166
info@communitycouncil.ca

www.communitycouncil.ca