

Working for a Living Wage

2011

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 2011, 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.

Introduction	2
Calculating the Living Wage	3
Stage 1: Family Expenses	6
Stage 2: Government Transfers	12
Stage 3: Government Deductions and Taxes	17
Stage 4: Determining the Living Wage Amount	21
Stage 5: BC Childcare Subsidy	21
Stage 6: Verifying the Calculations	21
Sources	22
Appendix A: BC Childcare Subsidy	23

The 2011 Living Wage update and original 2008 full report are available at www.policyalternatives.ca/livingwage2011

Prepared by
Iglika Ivanova
and Seth Klein

March 2011



CCPA
CANADIAN CENTRE
for POLICY ALTERNATIVES
BC Office

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 updates the guide provided in 2010 in order to calculate a living wage for 2011. 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 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/livingwage2008. A short summary of the updated 2011 living wage calculations can be downloaded at www.policyalternatives.ca/livingwage2011.

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 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 and learning about the living wage for your community.

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 Childcare 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/livingwage2011). 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 childcare 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 Victoria. 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.

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 2011, we chose:

- Family expenses amounts at December of 2010;
- Government transfer amounts for the July 2010 to June 2011 time period; and
- Government deductions and taxes for the 2010 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 C34 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 D57 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 childcare 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.

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 2010 Calculation		
Family Characteristics	Vancouver 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 31 and 50	between 19 and 30
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, 1 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: 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 www.dietitians.ca/bccostofeating; 2. CPI data for 2009 and 2010 for BC from Statistics Canada: www40.statcan.gc.ca/l01/cst01/econ156k-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 based 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 “Monthly Cost of Eating” table (page 10 of *The Cost of Eating in BC in 2009*), 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 2009*) 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:

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

Step 5: Adjust with Consumer Price Index

Note: For the Vancouver wage calculations, we used a weighted average of the amounts for the Vancouver Coastal Health Authority (\$919 in 2009) and the Fraser Health Authority (\$862 in 2009), with each weighted by their respective populations. 2009 food expenses were adjusted to 2010 prices using CPI for “Food.”

2. Clothing and Footwear

INFORMATION NEEDED: 1. *Income in Canada, 2008* from Statistics Canada – Table 202-0809 provides the amounts for this expense, www.statcan.gc.ca/pub/75-202-x/2008000/s8-eng.htm; 2. CPI data for 2008 and 2010 for BC from Statistics Canada, www40.statcan.gc.ca/l01/cst01/econ159k-eng.htm. The data used is for the “Clothing & 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 2010, www.cmhc.ca/en/inpr/afhoce/fias/upload/Criteria.pdf.

The calculation for Vancouver and Victoria was based on the median rent for three-bedroom plus 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/?lang=en&cat=59&itm=19>.

THE SINGLE-PARENT FAMILY: The rent amount for the single-parent family was based on median rents for two-bedroom apartments.

Utilities

INFORMATION NEEDED: 1. The Dietitians of Canada, BC Region, *The Cost of Eating in BC 2007*, www.dietitians.ca/bccostofeating; 2. CPI data for 2008 and 2010 for BC from Statistics Canada, www40.statcan.gc.ca/l01/cst01/econ157k-eng.htm. 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 2009 report is not used because this report did not provide updated utilities expenses.

Telephone

INFORMATION NEEDED: Telus phone plan rates. Note that at present phone rates are the same throughout BC. www.telus.com/portalWeb/inlineLink/CP_SCS/Product/Telephone/Residential_Line/Product_Equipment_Description/Residential_Line/?_region=BC.

Item	Monthly
Residence line	\$ 26.00
Voice mail	included
Long distance	\$ 6.00
Subtotal	\$ 32.00
HST (12%)	\$ 3.84
Total	\$ 35.84

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, and these amounts were used for the 2011 calculations.

4. Transportation

INFORMATION NEEDED: 1. *Income in Canada, 2008* from Statistics Canada – Table 202-0809 provides the amounts for this expense; 2. CPI data for 2008 and 2010 for BC, from Statistics Canada, www40.statcan.gc.ca/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 from the MBM (for rural communities in BC), adjusted by the CPI to 2010 prices.

Public Transit: The Vancouver two-parent family also has the expense of one two-zone bus pass, available at www.translink.ca/en/Fares-and-Passes/Monthly-Pass.aspx. Note that in Victoria, the parent who takes a class at Camosun college qualifies for a discounted UPASS for the duration of the semester, which reduces the family’s public transit expenses considerably.

5. Other

INFORMATION NEEDED: *Income in Canada: 2008, Table 202-0809* (see top of page 8 of this guide).

The MBM calculates the Other expense at 74.9 per cent 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 one month and two weeks of summer care.

Estimates for childcare expenses for Vancouver were available from childcare referral centres, which conduct surveys of childcare providers. Fee survey information for Vancouver was obtained from the Westcoast Childcare Resource Centre, for example, is available at www.wstcoast.org/parents/fees.html. The “city” median value for childcare was used.

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#assistance. 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 \$121/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 plus one half of the family’s childcare expenses claimed as an expense on their income tax forms, less the Universal Childcare benefit reported on income tax returns.

8. Non-MSP Health Care Expenses

INFORMATION NEEDED: An online quote from Pacific Blue Cross (or an equivalent private health insurance plan provider): www.pbchbs.com/Corp/individual/IP-BlueChoiceRateCalc.aspx.

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; it had not changed for 2011.

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 \$71 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 Douglas College. For Vancouver this amount was estimated at \$1,072.20/year, based on the information in Table 3.

Expenses	Douglas College
Course tuition	\$97.35 / credit ¹
Incidental fees	\$94.85 / term
Books and other materials	\$150 / course
Note: ¹ Average between tuition fees for lower division courses and upper division courses, assumes one of each is taken during the year.	

For Victoria, the amount was estimated at \$1,050 per year based on tuition and fees from Camosun college.

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 Childcare Benefit (UCCB);
- GST Rebate;
- BC Low Income Climate Action Tax Credit (BCLICATC);
- Provincial Rental Assistance Program (RAP);
- Provincial Childcare Subsidy; and
- The new HST low-income credit (as of the 2011 update).

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.

In practice, 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 you have previously calculated the living wage for your community, we suggest that you use last year's living wage family income to determine the government transfers that the family would be eligible for and enter the correct amounts in Table II of the Spreadsheet. Use last year's family income to determine whether the family qualifies for MSP premium assistance, and enter the correct MSP premium cost to the family in Table I. This method was used to calculate the Vancouver and Victoria 2011 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 accompanying Living Wage Calculation 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 2010 to June 2011, www.cra-arc.gc.ca/E/pub/tg/t4114/t4114-10e.pdf; 2. the Canada Child Tax Benefit (CCTB) – Calculation sheet for the July 2010 to June 2011 payments (2009 tax year), www.cra-arc.gc.ca/bnfts/cctb/cctb09byclc-eng.html.

The 2011 living wage amounts are based on the CCTB formulas for the July 2010 to June 2011 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)
2 Children	=	# of dependents x \$1,348	–	(net income – UCCB – \$40,970) x <u>0.04</u>	+	= \$2,088 (first child) + \$1,848 (second child) – (net income – UCCB – \$23,855) x <u>0.23</u>
2 Children	=	2 x \$1,348	–	BR begins at: \$42,170 (1 child under 6): (= \$40,970 + \$1,200)	+	NCBS ceases at an income of \$42,168.04 (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 \$1,348	–	(net income – UCCB – \$40,970) x <u>0.02</u>	+	= \$2,088 – (net income – UCCB – \$23,855) x <u>0.122</u>
1 Child	=	This is in the Excel spreadsheet	–	This is not in the Excel spreadsheet	+	This is in the Excel spreadsheet

B. THE UNIVERSAL CHILDCARE 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 2010 to June 2011: www.cra-arc.gc.ca/E/pub/tg/t4114/t4114-10e.pdf.

THE SINGLE PARENT FAMILY: As of tax year 2010, the tax status of the UCCB for single-parent families has changed. Instead of having to declare the UCCB as part of their income for tax purposes, single parents are now given the option to declare the UCCB as income of their child (eligible dependent). This effectively makes the UCCB non-taxable for the single parent family in our calculation. For two-parent families, the UCCB remains taxable and must be declared as income by the parent with lower taxable income.

To reflect this change, Table II in the Living Wage calculation spreadsheet for single-parent families includes two separate line items: UCCB-parent, the amount of the UCCB that the parent declares as their income, which should be set to 0, and UCCB-child, the amount of UCCB that is declared as the child’s income, which is set to \$100 per month for each child under the age of 6. The amount being declared as part of the parent’s income (UCCB-parent) should be used in all government benefit calculation formulas that refer to the UCCB.

C. GST/HST CREDIT

INFORMATION SOURCES: 1. GST/HST Credit for the period from July 2010 to June 2011, www.cra-arc.gc.ca/E/pub/tg/rc4210/rc4210-10e.pdf; and 2. GST/HST Credit – Calculation sheet for the July 2010 to June 2011 payments (2009 tax year), www.cra-arc.gc.ca/bnfts/gsthst/gstcclc09-eng.html.

The 2011 living wage amounts are based on the GST/HST rebate formulas for the July 2010 to June 2011 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	=	\$250	+	spouse credit = \$250; children credits = \$131 for each child	-	$=(\text{net income} - \text{UCCB} - \$32,506) \times 0.05$
2 parents and 2 children	=	\$250	+	$= \$250 + \$131 + \$131$	-	$=(\text{net income} - \text{UCCB} - \$32,506) \times 0.05$
1 parent and 1 child	=	\$250	+	$= \$250 + \131	-	$=(\text{net income} - \text{UCCB} - \$32,506) \times 0.05$

For the two-parent, two-child family, the GST rebate ceases at a family net income of \$48,946.

D. THE BC HST CREDIT (BCHSTC)

Starting in July 2010, the BC HST credit is a non-taxable refundable payment similar to the GST Credit that was introduced to help lower income individuals and families offset the impact of the sales tax they pay. The BC HST Credit payment is combined with the quarterly payment of the federal GST/HST credit.

Similar to the GST/HST credit, the payment depends on these three factors:

- Whether the parent has a spouse;
- Number of children; and
- Family's net income.

Table 6 presents the BC HST Credit formula. All of the numbers, and the formula itself, can change each July.

Table 6: BC HST Credit Formula						
BC HST Credit	=	Basic Credit	+	Additional Credits	-	Credit Reduction
BC HST Credit	=	\$230	+	spouse credit = \$230; children credits = \$230 for each child	-	$=(\text{net income} - \text{UCCB} - \$25,000) \times 0.04$
2 parents and 2 children	=	\$230	+	$= \$230 + \$230 + \$230$	-	$=(\text{net income} - \text{UCCB} - \$25,000) \times 0.04$
1 parent and 1 child	=	\$230	+	$= \$230$	-	$=(\text{net income} - \text{UCCB} - \$25,000) \times 0.04$

INFORMATION SOURCE: BC Ministry of Finance, Personal Income Tax, BCHST Credit, www.sbr.gov.bc.ca/individuals/Income_Taxes/Personal_Income_Tax/tax_credits/hstc.htm.

E. 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 Rebate.

INFORMATION SOURCE: BC Ministry of Finance, Tax Credits, Personal Income Tax – Low Income Climate Action Tax Credit, www.sbr.gov.bc.ca/individuals/income_taxes/personal_income_tax/tax_credits/low_income_climate_action.htm.

The spreadsheet for the two-parent, two-child family does not include the formula for the BCLICATC because the income of the family is too great to receive this payment.

The spreadsheet for the single-parent family includes only the credit portion of the formula and not the formula for the credit reduction as the family income is less than the threshold at which the reduction commences.

Table 7: BCLICATC Formula						
BCLICATC	=	Basic Credit	+	Additional Credits	-	Credit Reduction
BCLICATC	=	\$105	+	spouse credit = \$105; children credits = \$31.50 for each child	-	(net income – \$35,843) x 0.02
2 parents and 2 children	=	\$105	+	\$105 + \$31.50 + \$31.50	-	(net income – \$35,843) x 0.02
1 parent and 1 child	=	\$105	+	\$105	-	(net income – \$35,843) x 0.02

For the two-parent, two-child family, the BCLICATC ceases at a family net income of \$49,493.

F. PROVINCIAL RENTAL ASSISTANCE PROGRAM

The provincial rental assistance program provides a monthly payment to families who qualify based upon the amount of their rent and the amount of their income. It reimburses between 90 and 35 per cent of the difference between 30 per cent of the family's total income and its adjusted rent amount.

The spreadsheet for the two-parent family does not contain the formula because its level of income precludes eligibility. The spreadsheet for the single-parent family includes the formula.

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.

	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. Note that the spreadsheet for the single-parent family contains the RAP formula even though it yields a result that is less than \$50. This is based on the assumption that the single parent living wage family in your community will receive more than \$50 from the RAP program. If the family would receive more than \$0 and the formula yields less than \$50, then substitute \$50 in Cell B30.

G. PROVINCIAL CHILDCARE SUBSIDY

Consult Stage 5 on page 21 and Appendix A on page 23 to determine whether the family is eligible for the provincial childcare 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/menu-eng.html
- General Income Tax and Benefit Guide (2010): www.cra-arc.gc.ca/E/pub/tg/5000-g/5000g-10e.pdf
- Income Tax Forms (2010):
 - T1 General 2010: Income Tax and Benefit Return: www.cra-arc.gc.ca/E/pbg/tf/5010-r/5010-r-10e.pdf
 - Federal Worksheet: www.cra-arc.gc.ca/E/pbg/tf/5010-r/5010-r-10e.pdf
 - Provincial Worksheet: www.cra-arc.gc.ca/E/pbg/tf/5010-d/README.html
 - Schedule 11 (Tuition, Education and Textbook Amounts): www.cra-arc.gc.ca/E/pbg/tf/5000-s11/5000-s11-10e.pdf
 - T778 (Childcare Expenses Deduction): www.cra-arc.gc.ca/E/pbg/tf/t778/t778-10e.pdf
 - British Columbia Personal Tax Credits Return www.cra-arc.gc.ca/E/pbg/tf/td1bc/td1bc-11e.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, 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.

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 – childcare 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 (2010: premium rate = 0.0173)
CPP Premiums	= (“Employment Income” – \$3,500) x premium rate (2010: 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 (2010):

- 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 2004 or later, \$7,000.
 - For children born between 1994 and 2003, \$4,000.

Note that in the Excel spreadsheet the maximum amount of the childcare 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 B51 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 8: Federal Tax Credits (2010)		
Tax Credits	Comments	Claimed by Parent
Basic Personal Amount	= \$10,382 in 2010	Both
EI Premiums	= B53 or C53 in the Excel spreadsheet	Both
CPP Premiums	= B54 or C54 in the Excel spreadsheet	Both
Canada Employment Amount	= \$1,051 in 2010	Both
Child Tax Credit	= \$2,101 per child	"2"
Public Transit Credit	= Amount of monthly bus passes	"2"
Tuition, education and textbook amount	= 109 x 3 x 2 (= \$109/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"

Federal Tax Brackets

For 2010, the tax rate on taxable income less than \$40,970 is 15 per cent. For taxable income between \$40,970 and \$81,941, it is 22 per cent. Therefore, if the taxable income of either parent increases above \$40,970, the formula for "Taxable Income x tax rate" becomes:

$$\text{Taxable Income} \times \text{tax rate} = (\$40,970 \times 0.15) + ((\text{Taxable income} - \$40,970) \times 0.22)$$

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 9: BC Provincial Tax Credits (2010)

Tax Credits		Comments	Claimed by Parent
Basic Personal Amount	= \$11,000 in 2010		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	= 109 x 3 x 2 (= \$109/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 – 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"

The BC Tax Reduction

The BC Tax Reduction reduces the provincial income tax that people earning less than \$29,542 must pay.

It is calculated according to the formula (2010):

$$\text{BC Tax Reduction} = \$390 - (\text{Taxable Income} - \$17,354) \times 0.032$$

Provincial Tax Brackets

For 2010, the tax rate on taxable income less than \$35,859 is 5.06 per cent. For taxable income between \$35,859 and \$71,719, it is 7.7 per cent. Therefore, if the taxable income of either parent increases above \$35,859, the formula for "Taxable Income x tax rate" becomes:

$$\text{Taxable Income} \times \text{tax rate} = (\$35,859 \times 0.0506) + ((\text{Taxable income} - \$35,859) \times 0.077)$$

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 (2010): federal tax of \$10,382 per year; and provincial tax of \$9,653 per year.

The UCCB is non-taxable for the single parent family.

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 Childcare Subsidy

For the two-parent family, if the values in Cells H40 or H41 are positive, the family is eligible for the provincial childcare 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 childcare subsidy of \$550 per month. The amount of the provincial childcare subsidy will be less than \$550 if the income amount in Cell G41 is greater than the Child Threshold amount in Cell G40. In this case consult Appendix A.

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/clctr/cctb_clctr-eng.html
- GST/HST, BCCATC: The CCRA provides a GST/HST rebate benefits calculator online at:
www.cra-arc.gc.ca/bnfts/clctr/gstc_clctr-eng.html
- RAP: The BC government provides a Rental Assistance Program benefits calculator online at:
www.bchousing.org/programs/RAP/info_applicants/calculator

You are finished.

Sources

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

Canada Mortgage and Housing Corporation, *Advancing Affordable Housing Solutions: Affordability Criteria Tables*, Fall 2010. www.cmhc.ca/en/inpr/afhoce/fias/upload/Criteria.pdf

Canada Revenue Agency, 2010 Tax Forms: T1 General 2010, Federal Tax Schedule 1, Schedule 6, Schedule 11, T778 (Childcare expense deduction), British Columbia Tax BC428, Provincial Worksheet, BC Tax Schedule 11. www.cra-arc.gc.ca/formspubs/t1gnrl/bc-eng.html

Canada Revenue Agency, Canada Child Benefits, July 2010 to June 2011. www.cra-arc.gc.ca/E/pub/tg/t4114/t4114-e.html

Canada Revenue Agency, GST/HST Credit, July 2010 to June 2011. www.cra-arc.gc.ca/E/pub/tg/rc4210/rc4210-e.html

Canada Revenue Agency, *General Income Tax and Benefit Guide – 2010*. www.cra-arc.gc.ca/E/pub/tg/5000-g/5000-g-01-10e.html

Child Care Subsidy Act and the Child Care Subsidy Act Regulations, R.S.B.C. 1996, ch. 26. www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/10_74_97

Dietitians of Canada, BC Region, *The Cost of Eating in BC in 2007* and *The Cost of Eating in BC in 2009*, www.dietitians.ca/bccostofeating

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

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. Obtainable by email: MBM-MPC@hrsdcc.gc.ca

Pacific Blue Cross, website. www.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 and 2010.

Statistics Canada, *Income in Canada, 2008*. Table 202-0809. June 2010. www.statcan.gc.ca/pub/75-202-x/2008000/s8-eng.htm

Victoria, Child Care Resource & Referral. *Resources: Range of Fees*. December 2010. www.childcarevictoria.org/pdf/statistics_range_of_fees_dec_2010.pdf

Victoria Regional Transit System, Fare Payment.

Westcoast Child Care Resource Centre, Westcoast Family Information & Referral Fee Surveys, December 2010. www.wstcoast.org/parents/fees.html

BC Childcare Subsidy

An additional factor that may affect your living wage is the provincial childcare 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?

A. Two-parent, two-child family

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.

B. Single-parent family

The single-parent family does receive the PCCS. The living wage family in the spreadsheet receives the maximum childcare subsidy. However, this amount will be less than the program maximum if the amount in Cell G41 is greater than the threshold amount in Cell G40.

QUESTION 2: 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 childcare expenses equal to or greater than the maximum childcare 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.

A. Two-parent, two-child family

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: Delete the formula of Adjustments in Cell B51.

Step 3: 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 I40.
- If the family receives a subsidy for only the 7 year old, the amount is that in Cell I41.
- If the family receives a subsidy for both the 4 and 7 year old, the amount is that in Cell I42.

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

Step 4:

4.A Adjust the living wage amount in Cell B48 to equate Annual Family Income and Expenses (Cell C41).

4.B Changing the living wage amount will change the Adjustment amount. Enter the Adjustment amount in Cell B51 based upon Step 3.

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

- The gap between annual income and expenses in Cell C41 is the lowest possible positive value, and
- The Adjustments amounts in the PCCS Table and Cell B51 are the same.

B. Single-parent family

Step 1: If the actual childcare expense is less than the maximum subsidy amount, enter the actual expense in Cell F40.

Step 2: Enter into Cell B32 the lesser of the amounts in Cell F40 and Cell H40.

Step 3: If the amount in Cell H40 is greater than the amount in Cell F40, then calculate the living wage by the process presented earlier in the report, by adjusting the living wage amount in Cell B48.

Step 4: If the amount in Cell H40 is less than the amount in Cell F40, enter the amount of the Adjustment in Cell I40 into Cell B51.

Step 5: Delete the formula of Adjustments in Cell B51.

Step 6: Enter the amount of the Adjustments for the family from Cell I40 into Cell B51.

Note: Due to tax rules, the Adjustment amount can not be less than $-\$7,000$. If it is, enter $-\$7,000$.

Step 7:

7.A Adjust the living wage amount in Cell B48 to equate Annual Family Income and Expenses (Cell C41).

7.B Changing the living wage amount will change the Adjustment amount. Enter the Adjustment amount in Cell B51 based upon Step 6.

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

- The gap between annual income and expenses is minimal, and
- The Adjustments amounts in the PCCS Table and Cell B51 are the same.

PCCS SUBSIDY FORMULA

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

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

A = the lesser of:

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

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

In the PCCS Table in the Excel spreadsheet:

- The subsidy amount is set to the maximum because in Victoria actual average monthly childcare expenses are greater than the maximum subsidy;
- The four year old is in licenced group childcare 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 "4 Hours or Less Daily," which is \$170 per month. The amount for "More than 4 Hours Daily" is \$200 per month.

The maximum childcare subsidies are found in Schedule A of the *Childcare 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 *Childcare Subsidy Regulation*.

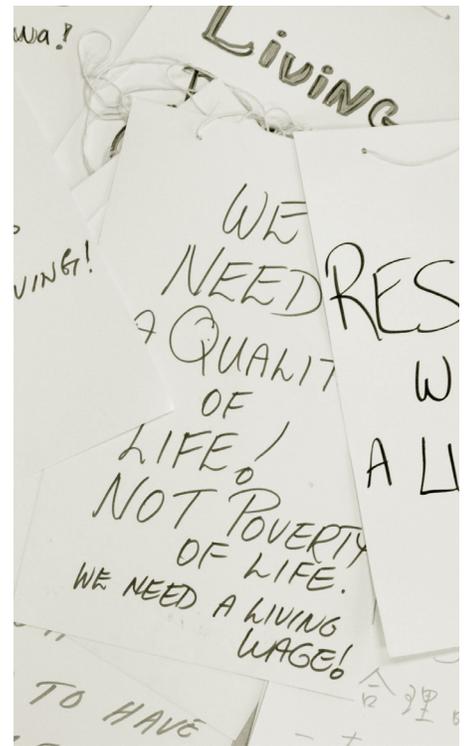


The Living Wage for Families Campaign for Metro Vancouver was formally launched in the fall of 2008 with the publication of *Working for a Living Wage* and is guided by an Advisory Committee made up of representatives from unions, businesses, parents, immigrant and

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 by-laws. It is undertaking a listening campaign with low wage workers and has undertaken training workshops on the living wage with a variety of agencies.

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

www.livingwageforfamilies.ca



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



The original living wage research was part of the Economic Security Project, a research alliance led by the Canadian Centre for Policy Alternatives – BC Office 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 also to the United Way of the Lower Mainland, the Human Early Learning Partnership, and the Hospital Employees' Union for their financial assistance of this project.

Thanks to Maria Lorenzi and Christina Beck for their research assistance. And thanks to Tim Richards, Michael Goldberg and Marcy Cohen for their advice and guidance.

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. Permission is required for all other uses.

Copyedit, design and photography:
Nadene Rehnby and Pete Tuepah,
www.handsonpublications.com

March 2011